

2025 ENGINEERING MANUAL MODULAR PLASTIC BELTS

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Warning—Intralox products are made of plastic and can burn. If exposed to an open flame or to temperatures above Intralox specifications, these products may decompose and emit toxic fumes. Do not expose Intralox conveyor belting to extreme temperatures or open flame. Flame retardant belt products are available in some series. Contact Intralox Customer Service for more information.

Maintenance—Prior to installing, cleaning, lubricating, or performing maintenance on any conveyor belt, sprocket or system, consult the federal, state, and local regulations in your area regarding the control of hazardous/stored energy (lockout/tagout).

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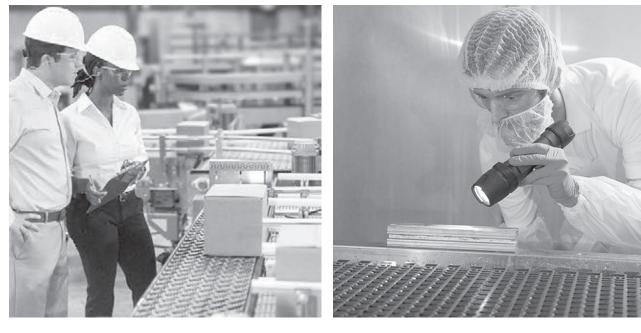
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With more than 50 years of experience, Intralox continues to lead the way in helping customers achieve their goals by offering comprehensive conveyance solutions that create significant economic value. Intralox delivers innovative, premium technology within a direct business model and a global, industry-specific structure. Our industry-specific teams have an in-depth knowledge of customer applications, and provide customer service and technical support all day, every day, year round. Working with Intralox allows you to experience our uncompromising commitment to providing solutions and solving problems for our customers.

We pushed past the boundaries of traditional conveying systems with the revolutionary invention of modular plastic belting, and continue to move beyond industry standards with new products, equipment, solutions, and services. Intralox's commitment to innovation has led to over 1500 patents currently in force around the world. When our customers have challenges, we invent smart solutions to meet them.



INTRALOX RESOURCES

For country- and industry-specific customer service, information about Intralox products, our company, or to access the resources listed below, visit <u>www.intralox.com</u>. For contact information for Intralox headquarters, see the back cover.

- Engineering Manual Download the latest version of this engineering manual.
- **CalcLab**—Intralox provides CalcLab[™] to help calculate and evaluate many aspects of conveyor design. CalcLab is an always up-to-date replacement for legacy engineering programs that runs in the browser and can be accessed from any internet-connected computer. To use CalcLab, go to <u>calclab.intralox.com</u>.
- **Evaluation Forms**—Our on-line evaluation forms are the first step to creating the best design for your application. After receiving your evaluation form, Intralox technical experts will contact you to provide engineering assistance and design reviews.
- **CAD Drawing Files**—DXF templates for all series are available. These templates have belt and molded sprocket details that can be used in CAD conveyor designs.
- **Product Literature and Technical Guides**—Downloadable technical guides include a preventive maintenance guide for modular plastic belts, a belt sanitation guide, and more. Intralox also offers technical and application-specific guidelines on most of the products listed in this manual.
- **Installation Instructions**—The *Installation, Maintenance & Troubleshooting Manual* provides general maintenance information and step-by-step installation instructions for most Intralox belts.
- How-To Videos—Address common belt challenges with our Performance Support Videos. Each video is designed to help you install, maintain, or troubleshoot your Intralox conveyor belts and components.
- Belt Identifier -- The belt identifier can help you select a replacement for your existing Intralox belt.

BELT CONSTRUCTION

All Intralox belts are constructed with injection molded plastic modules. These modules are assembled into interlocked units and joined by hinge rods.

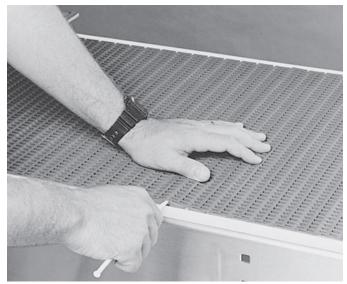


Figure 1: Plastic modules joined by hinge rods

Belts are either one module wide (for narrow or SeamFree[™] belts) or built in a bricklayed pattern from two or more modules. Bricklayed belts are built with the joints between modules staggered between the joints of adjacent rows. This bricklayed structure interlocks the modules, giving the belt inherent lateral strength. The hinge rods do not hold the belt together from side to side, but act only as pivot members in shear. The belt that results from this construction process is intrinsically strong, both laterally due to the bricklaying, and longitudinally due to the rods being placed in multiple shear.

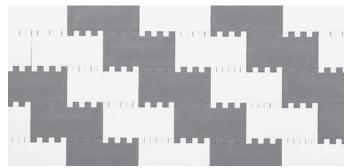


Figure 2: Bricklayed structure

Because of modular construction, Intralox belts can be made in almost any width, from three links wide.

Each belt style incorporates several distinguishing features. Surface, pitch, and drive features are described in detail in Belt Selection Process. Hinge and edge features are:

- Open hinges—the hinge rods are visible from either the top or bottom surface (or both) of the belt to aid in belt inspection.
- Closed hinges—the hinge rods are completely enclosed to protect them from abrasives or contaminants.
- Flush edges—flush edges ride snugly beside the conveyor frame rails without gaps or exposed rod heads. They reduce the possibility of product, or belt, snagging on the frame.

DRIVE METHOD

Intralox belts are positively driven by plastic or metal sprockets, not friction rollers. The sprockets, another part of the Intralox system, have square bores and are driven by matching square shafts.

NOTE: Round bore sprockets are available for certain belts.

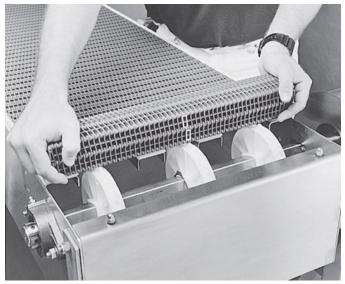


Figure 3: Sprocket-driven Intralox belt

Not only do square shafts transmit torque (rotational force) without the need for troublesome keys and keyways, they accommodate the lateral expansion differences of the plastic belt material and the metal shafts. Only one sprocket per shaft is retained. The others are allowed to float, moving along the shaft as the belt expands or contracts. Thus, the sprockets are always transmitting torque. Of all belt drive systems tested, the square shaft with square bore sprockets has proven to be the most effective, economical, reliable, trouble-free, and simple.

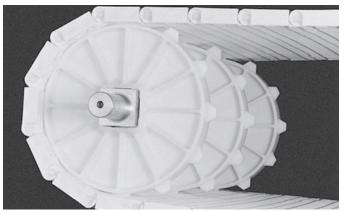


Figure 4: Square-bore sprockets on square shaft

DESIGN REQUIREMENTS

Intralox conveyor belts are available in various styles, materials, and colors, with many accessory options. To make the appropriate selections when designing for a particular application, reliable information about operating and environmental conditions is critical. Factors to evaluate include:

- Type of belt system: straight-running, radius, or spiral
- Overall dimensions of the installed belt:
 - Distance between drive and idle shafts
 - Belt width
 - Conveyor elevation changes
- Belt speed
- Product characteristics:
 - Density
 - Unit size and shape
 - Hardness, toughness, brittleness, rigidity
 - Texture (smooth, rough, granular, lumpy, spongy)
 - Corrosiveness
 - Moisture content
 - Temperature
 - Frictional nature
- Any process change during conveyance:
 - Heating
 - Cooling
 - Washing, rinsing, draining
 - Drying

- Cleaning and sanitation requirements and conditions:
 - USDA-FSIS approval
 - Harsh temperatures or chemicals
 - Continuous on-line cleaning
- · Product loading and removal methods: smooth or impact transfers
- Operating environment conditions:
 - Temperature
 - Moisture and humidity
 - Chemical nature (acid, base)
 - Abrasive materials (sand, grit)
 - Hazardous materials (dusts, vapors)
- Drive system type:
 - Motor driven
 - Chain driven

For more information, see Design Guidelines.

BELT SELECTION PROCESS

STEP 1: CHOOSE THE RIGHT TYPE OF BELT SYSTEM

Choose a straight-running, radius, or spiral belt system.

STEP 2: CHOOSE THE RIGHT MATERIAL FOR YOUR APPLICATION

Intralox belts and accessories are available in general and special application materials. For complete material descriptions, see General Application Belt Materials and Special Application Belt Materials.

Contact Intralox Customer Service for more information. Current telephone numbers are listed on the back cover.

For specific recommendations on chemical properties, see Chemical Resistance Guide.

STEP 3: SELECT THE BEST BELT SURFACE, PITCH, AND DRIVE METHOD

Next in the process of choosing the belt for your application is to determine the belt surface or style best suited for the product or material being conveyed.

NOTE: Unless otherwise noted, all belts have fully flush edges.

The pitch of the belt is the next differentiating feature. Smaller pitch reduces chordal action (over similar size sprockets) and the space required for product transfer. Intralox belts are available in the following belt pitches:

0.315 in (8.0 mm)	1.07 in (27.2 mm)	2.07 in (52.6 mm)
0.50 in (12.7 mm)	1.44 in (36.6 mm)	2.50 in (63.5 mm)
0.60 in (15.2 mm)	1.50 in (38.1 mm)	3.00 in (76.2 mm)
1.00 in (25.4 mm)	2.00 in (50.8 mm)	

Also consider the drive method. Where back tension is an important consideration, drive method plays a significant role. Intralox belts are either hinge-driven or center-driven.

STEP 4: SELECT A BELT OF SUFFICIENT STRENGTH FOR YOUR APPLICATION

After choosing the material and surface style to meet your needs, next determine if the selected belt is strong enough to meet your application requirements.

ANALYSIS FOR STRAIGHT RUNNING BELTS

After making a tentative series and style selection, see Belt Selection Instructions for instructions to determine the belt pull and adjusted belt pull for comparison with the allowable strength for that belt. To make the necessary calculations for belt pull, gather the following information:

- 1. The product load applied to the belt, in pound-force per square foot (or Newtons per square meter),
- 2. The length of the proposed conveyor, in feet (or meters),
- 3. Any elevation changes in the conveyor, in feet (or meters),
- 4. The desired operating speed, in feet per minute (or meters per minute),
- 5. The percentage of belt area with accumulated product,
- 6. The maximum belt operating temperature, in degrees Fahrenheit or Celsius,
- 7. The type of material upon which the belt will run in the conveyor frame. For example: stainless or carbon steel, UHMW-PE, HDPE, nylon, etc.,
- 8. The service duty, i.e., frequent startups under heavy load, an elevating or "pushing conveyor", etc.

ANALYSIS FOR RADIUS AND SPIRAL BELTS

These belts require a more complex analysis. The following additional information is required:

- 1. The length of each straight run,
- 2. The turning angle and direction of each turn, and
- 3. The inside turn radius, measured from the inside edge of the belt.

STEP 5: OTHER IMPORTANT CONSIDERATIONS

Consider the following factors before proceeding any further with belt selection.

ROD MATERIAL

Default rod materials for each belt style and material are listed in the belt data tables in the Product Line chapter. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Contact Intralox Customer Service for more information.

BELT MATERIAL GROWTH

Belt materials, especially nylon, can expand or contract depending on storage and use conditions. In hightemperature and high-humidity environments, belts can expand in width and length over time. In cooler, drier conditions, belts can contract. Intralox provides belt widths and tolerances that account for potential expansion and contraction during the belt assembly process. Operating conditions are not accounted for. Once a belt leaves our assembly facility, environmental conditions can cause the belt width to change. Contact Intralox Customer Service for more information.

BELT SPEED

The belt speed affects the wear and life expectancy in these ways:

- 1. Hinge and sprocket wear: The frequency of module rotation about the hinge rods (as the belt engages and disengages the sprockets) is directly proportional to speed. The rotary motion can cause wear to both rods and modules. This wear rate, however, is inversely proportional to the belt's length, i.e., a shorter conveyor can wear faster than a longer one if both are running at the same speed. It follows that sprocket/tooth wear is directly proportional to speed. Sprockets with more teeth cause less module/hinge rotation, and so less wear than sprockets with fewer teeth.
- 2. Belt surface wear: As belts slide over carryways, returnways, shoes, and other fixed members, some wear is to be expected. The most destructive conditions are high speed, heavy loads, abrasive materials, and dry or non lubricated operation.
- 3. Dynamic effects of high-speed operation: Two effects of high-speed conditions are belt *whipping* or oscillating in unsupported sections, and *load surges* as heavy, stationary products are suddenly accelerated to belt speed. Where possible, avoid both of these conditions.

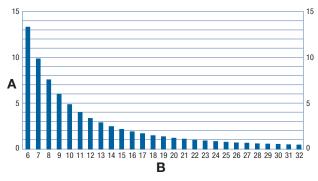
ABRASIVE CONDITIONS AND FRICTION EFFECTS

In order to extend belt life, abrasives in a conveying application must be identified, the best combination of materials chosen, and protective features included. Abrasives will wear away any material, but the correct material choice can significantly increase belt life. In highly abrasive applications, the hinge rods and sprockets are usually the first elements to be affected. Hinge rod wear typically results in excessive belt-pitch elongation. This can prevent proper tooth engagement, increasing the wear on sprocket teeth. Intralox offers stainless steel split sprockets and abrasion resistant rods that work to increase belt life.

CHORDAL ACTION AND SPROCKET SELECTION

As the modules of belts engage their driving sprockets, a pulsation occurs in the linear velocity of the belt. This pulsation is due to chordal action, which is the rise and fall of a module as it rotates around a shaft centerline. It is characteristic of all sprocket-driven belts and chains. The variation in speed is inversely proportional to the number of teeth on the sprocket. For example, a belt driven by a six-tooth sprocket has a pulsating speed variation of 13.4%, while a belt driven by a 19-tooth sprocket has a variation of only 1.36%.

• In applications where product tipping is a concern, or where smooth, even speed is critical, use sprockets with the maximum number of teeth available.



A Percent of speed variation

B Number of sprocket teeth

Figure 5: Pulsating speed variation

SHAFTS

Intralox, LLC USA can supply square shafts, machined to your specification, in standard sizes of 5/8 in, 1 in, 1.5 in, 2.5 in, 3.5 in, 40 mm and 60 mm. Available materials are carbon steel (C-1018) (not available in 40 mm and 60 mm) and stainless steel (303, 304 and 316). Contact Intralox Customer Service for more information.

Intralox, LLC Europe offers square shafts in standard sizes of 25 mm, 40 mm, 60 mm, 65 mm, and 90 mm. Available materials are carbon steel (KG-37) and stainless steel (304).

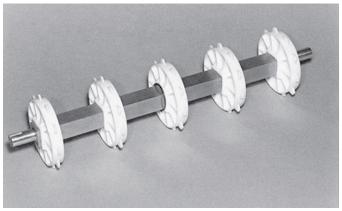


Figure 6: Square shaft

Square shafts need turning of bearing journals only. No keyways for sprockets are required. Only one sprocket per shaft must be retained to prevent lateral belt movement and to provide positive tracking. Sprocket retention is usually accomplished by placing retainer rings on opposite sides of the center sprocket. Some retainer rings rest in grooves cut into the four corners of the shaft. These grooves introduce stress concentration zones on the shaft. Under high load conditions, the grooves can lead to a premature fatigue failure of the shaft. Self-set retainer rings and split collar retainer rings are available which do not require grooves.

SHAFT STRENGTH

The two primary concerns regarding the strength of the conveyor drive shafts are 1) the ability to pull the belt without excessive shaft deflection, and 2) the strength to transmit the torque for driving the belt. In the first case, the shaft acts as a beam, supported by bearings and stressed by the belt's tension through the sprockets. In the second case, the shaft is being rotated by the drive motor. Resistance from the belt's tension introduces torsional (twisting) stresses. These two types of stresses, maximum deflection and maximum allowable torque, are analyzed separately. Simple formulas are provided for selecting appropriate shafts.

Maximum deflection is governed by adequate belt and sprocket tooth engagement. If the shaft deflects more than 0.10 in (2.5 mm) the sprockets may not engage properly, resulting in "jumping". On bi-directional conveyors with center-drive, the limit is increased to 0.22 in (5.6 mm) because the return side tension is greater and the tooth loading is more uniformly distributed.

WEARSTRIPS

Wearstrips are added to a conveyor frame to increase the useful life of the conveyor frame and belt, and to reduce the sliding friction forces. Proper choice of wearstrip design and material, yielding the best coefficient of friction, reduces belt and frame wear, and power requirements.

Any clean liquid, such as oil or water, will act as a coolant and as a separation film between the belt and the carryway, usually reducing the coefficient of friction. Abrasives such as salt, broken glass, soil and vegetable fibers will embed in softer materials and wear on harder materials. In such applications harder wearstrips will prolong belt life.

STATIC ELECTRICITY

Plastic belts can produce a static discharge or spark when used in a dry environment. If static electricity is a potential problem in your application, electrical grounding is recommended. Lubricating or adding moisture to the conveyor running surfaces is also recommended. Some belt styles are available in electrically conductive (EC) acetal. Contact Intralox Customer Service for more information.

2 PRODUCT LINE GENERAL APPLICATION BELT MATERIALS

ACETAL

This material is a thermoplastic that is considerably stronger than polypropylene and polyethylene. Acetal has a good balance of mechanical and thermal properties.

- Temperature range: -50°F to 200°F (-46°C to 93°C).
- Thermal expansion coefficient: 0.00072 in/ft/°F (0.11 mm/m/°C).
- Low coefficient of friction, making it a good choice for container handling and transport.
- High-strength electrically conductive (HSEC) acetal is available for applications where a slow static buildup has to be dissipated. With HSEC acetal, dissipation is slow and improves in a humid environment. HSEC acetal is available in Series 400 Non Skid.
- Good fatigue endurance and resilience.
- Relatively impact, cut, and scratch resistant.
- Specific gravity: 1.40. Not buoyant in water.

POLYETHYLENE (PE)

PE is a lightweight thermoplastic with superior flexibility and high impact strength. Intralox recommends black polyethylene for low-temperature applications exposed to direct sunlight.

- Temperature range: -100°F to 150°F (-73°C to 66°C). For exact temperatures, see the belt data table for the selected belt style.
- Thermal expansion coefficient:
 - S100 and S400 Raised Rib: 0.0015 in/ft/°F (0.23 mm/m/°C).
 - All other belts: 0.0011 in/ft/°F (0.17 mm/m/°C).
- Excellent performance at low temperatures.
- Excellent product release characteristics.
- Resistant to many acids, bases, and hydrocarbons.
- Specific gravity: 0.95. Buoyant in water.

POLYPROPYLENE (PP)

A standard material for use in general applications and where chemical resistance is required.

- Temperature range: 34°F (1°C) to 220°F (104°C).
- Thermal expansion coefficient:
 - In operating temperatures greater than 100°F (38°C): 0.0010 in/ft/°F (0.15 mm/m/°C)
 - In operating temperatures less than 100°F (38°C): 0.0008 in/ft/°F (0.12 mm/m/°C)
- A relatively strong material in normal use, polypropylene becomes somewhat brittle at low temperatures.
- Good balance between moderate strength and lightweight.
- Good chemical resistance to many acids, bases, salts, and alcohols.
- Specific gravity of 0.90. Buoyant in water.
- Not recommended in high-impact conditions below 45°F (7°C).
- Use black polypropylene for applications exposed to direct sunlight.

SPECIAL APPLICATION BELT MATERIALS

ABRASION RESISTANT (AR) NYLON

This material is recommended for wet or dry abrasive, heavy-duty applications.

- FDA-compliant material is available in black and white.
- Temperature range: -50°F to 240°F (-46°C to 116°C).
- Nylon can expand or contract depending on storage and use conditions. Contact Intralox Customer Service for more information.
- Uses the same temperature factor table as regular nylon.
- Heat stabilized for superior outdoor wear.
- Specific gravity: 1.06. Not buoyant in water.

CHEMBLOX

ChemBlox[™] is an engineered material optimized for food processing, where a high degree of chemical resistance is required. This material is recommended for continuous-use antimicrobial dip tanks that use peracetic acid (PAA) or similar chemicals.

- Temperature range: 0°F to 150°F (-18°C to 66°C).
- Thermal expansion coefficient: 0.00087 in/ft/°F (0.13 mm/m/°C).
- UL 94 flammability rating: V-0 at 1/32 in (0.8 mm). For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Exceptional resistance to strong acids.
- Highly resistant to other sanitation chemicals, salts, alcohols, and oxidants.
- Resistant to UVA and UVB light, ozone, and radiation.
- Specific gravity: 1.77-1.79. Not buoyant in water.
- Tough and durable, even after continuous chemical exposure.
- Extremely hydrophobic compared to other plastics or metals.

DETECTABLE ACETAL

This material was developed for applications in the food processing industry where foreign material contamination is a concern. Detectable acetal is optimized for detection by a metal detector. Under certain conditions, it may also be detected by an X-ray detector. If only X-ray detection is used, Intralox recommends selecting the X-ray detectable materials developed specifically for X-ray detection. Testing the material in a metal detector in the production environment is the best method for determining detection sensitivity.

- Temperature range: -50°F to 200°F (-46°C to 93°C).
- Thermal expansion coefficient: 0.00072 in/ft/°F (0.11 mm/m/°C).
- Good impact resistance in temperatures above 34°F (1°C).
- Specially formulated for enhanced impact resistance.
- Metal-filled material does not rust or expose hazardous sharp fibers.
- Specific gravity: 1.61. Not buoyant in water.
- Available in select styles across a wide range of belt series. Contact Intralox Customer Service for more information.

DETECTABLE MX

This material was developed for applications in the food processing industry where foreign material contamination is a concern. Detectable MX is optimized for detection by a metal detector. Under certain conditions, it may also be detected by an X-ray detector. If only X-ray detection is used, Intralox recommends selecting the X-ray detectable materials developed specifically for X-ray detection. Testing the material in a metal detector in the production environment is the best method for determining detection sensitivity.

- Temperature range: -50°F to 200°F (-46°C to 93°C).
- Detection package will not rust and contains only food-safe additives.
- Not buoyant in water.
- For series and accessory availability, contact Intralox Customer Service.

DETECTABLE NYLON

This material was developed for applications in the food processing industry where foreign material contamination is a concern. Detectable nylon is optimized for detection by a metal detector. Under certain conditions, it may also be detected by an X-ray detector. If only X-ray detection is used, Intralox recommends selecting the X-ray detectable materials developed specifically for X-ray detection. Testing the material in a metal detector in the production environment is the best method for determining detection sensitivity.

- Temperature range: -50°F to 180°F (-46°C to 82°C).
- Thermal expansion coefficient: 0.00072 in/ft/°F (0.11 mm/m/°C).
- Nylon can expand or contract depending on storage and use conditions. Contact Intralox Customer Service for more information.
- Uses the same temperature factor table as regular nylon.
- Metal-filled material does not rust or expose hazardous sharp fibers.
- Specific gravity: 1.06. Not buoyant in water.
- For wet-abrasive or dry-abrasive, heavy-duty applications.
- Available for S1700 belts.

DETECTABLE POLYPROPYLENE A22

This material was developed for applications in the food processing industry where foreign material contamination is a concern. Detectable polypropylene A22 is optimized for detection by a metal detector. Under certain conditions, it may also be detected by an X-ray detector. If only X-ray detection is used, Intralox recommends selecting the X-ray detectable materials developed specifically for X-ray detection. Testing the material in a metal detector in the production environment is the best method for determining detection sensitivity.

- Temperature range: 0°F to 150°F (-18°C to 66°C).
- Good impact resistance in temperatures above 34°F (1°C).
- Thermal expansion coefficient: 0.0011 in/ft/°F (0.17 mm/m/°C).
- Specially formulated for enhanced impact resistance.
- Specific gravity: 1.13. Not buoyant in water.
- Metal-filled material does not rust or expose hazardous additives.
- Available in select styles across a wide range of belt series. Contact Intralox Customer Service for more information.

EASY RELEASE PLUS

This material resists rubber sticking and maintains dimensional stability in the presence of oils and high temperatures. Easy Release PLUS is appropriate for tire industry applications.

- Temperature range: 34°F to 220°F (1°C to 104°C).
- Thermal expansion coefficient: 0.0004 in/ft/°F (0.06 mm/m/°C).
- Not buoyant in water.
- Easy Release PLUS is available in S1400 Flat Top.

EASY RELEASE TRACEABLE POLYPROPYLENE

This material was developed to resist rubber sticking and offer metal detectability for tire applications where stickiness and product contamination can be problematic.

- Temperature range: 34°F to 220°F (1°C to 104°C).
- Buoyant in water.
- Available in S1400 Flat Top.

ENDURALOX POLYPROPYLENE

A specially formulated material designed to maximize the life of Intralox belts in a pasteurizer environment. Enduralox[™] polypropylene protects the molecular structure of polypropylene from environmental factors such as temperature cycling, bromine, and chlorine.

- Temperature range: 34°F to 220°F (1°C to 104°C).
- A relatively strong material in normal use, Enduralox polypropylene becomes somewhat brittle at low temperatures.
- Not recommended in high-impact conditions below 45°F (7°C).
- Same physical properties as standard polypropylene.
- Good chemical resistance to many acids, bases, salts, and alcohols.
- Specific gravity: 0.90. Buoyant in water.

FLAME RETARDANT THERMOPLASTIC POLYESTER (FR TPES)

This material is UL94 V-0 rated and does not sustain a flame. Though the material does not actively burn, it does blacken and melt in the presence of flame. FR TPES is stronger than polypropylene, but not as strong as acetal.

- Temperature range: 40°F to 150°F (4°C to 66°C).
- UL 94 flammability rating: V-0 at 1/32 in (0.8 mm). For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Specific gravity: 1.45. Not buoyant in water.

HEAT RESISTANT (HR) NYLON

This material is available for dry, elevated-temperature applications. It complies with FDA regulations for use in food processing and packaging applications.

- Temperature range:
 - Continuous exposure: -50°F to 240°F (-46°C to 116°C).
 - Intermittent exposure upper limit: 270°F (132°C).
- Nylon can expand or contract depending on storage and use conditions. Contact Intralox Customer Service for more information.
- UL 94 flammability rating: V-2. For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Specific gravity: 1.13. Not buoyant in water.

HI-IMPACT

This material is available only for S800 Tough Flat Top. Hi-Impact was developed for applications in the food-processing industry where extreme impacts are a concern.

- Temperature range: 0°F to 120°F (-18°C to 49°C).
- Thermal expansion coefficient: 0.001 in/ft/°F (0.156 mm/m/°C).
- Greater impact resistance than acetal and polypropylene.
- Specific gravity: 1.18. Not buoyant in water.

HIGH HEAT RESISTANT (HHR) NYLON

HHR nylon is appropriate for dry, elevated-temperature applications. This material complies with FDA regulations for use in food processing and packaging applications and is USDA-FSIS accepted (meat and poultry).

- Temperature range:
 - Continuous exposure: -50°F to 310°F (-46°C to 154°C).
 - Intermittent exposure upper limit: 360°F (182°C).
- Nylon can expand or contract depending on storage and use conditions. Contact Intralox Customer Service for more information.
- UL 94 flammability rating: V-2. For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Specific gravity: 1.13. Not buoyant in water.

HIGH STRENGTH ELECTRICALLY CONDUCTIVE (HSEC) ACETAL

This material can be used to help dissipate static charges that can build up, especially when moving cans or other conductive objects. A metal rail or carryway can be used to ground the belt, dissipating any charge build-up in the product. Entire belts can be made from HSEC acetal, although HSEC acetal is usually spliced into regular acetal belt sections. For example, three rows of HSEC acetal for every 2 ft (0.61 m) of S100 or S900 belt, or five rows for every 2 ft (0.61 m) of S1100 belt).

- HSEC acetal has a surface resistivity of 10⁵ ohm/square according to IEC 62631.
- Has the same chemical resistance and friction factors as regular acetal.
- Specific gravity: 1.40. Not buoyant in water.

LOW MOISTURE ABRASION RESISTANT (LMAR)

- Temperature range: -50°F to 290°F (-46°C to 143°C).
- Thermal expansion coefficient: 0.00096 in/ft/°F (0.14 mm/m/°C).
- UL 94 flammability rating: V-2 at 0.236 in (6 mm). For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- High heat resistance.
- Abrasion resistant.
- Bio-based polymer.
- · Low moisture absorption provides dimensional stability.
- Not buoyant in water.

LOW WEAR PLUS

Low Wear Plus is available for applications in the fruit and vegetable industry, where highly abrasive dewatering applications are a concern.

- Temperature range: 0°F to 120°F (-18°C to 49°C).
- Thermal expansion coefficient: 0.001 in/ft/°F (0.156 mm/M/°C).
- Better wear properties than nylon.
- Specific gravity: 1.18. Not buoyant in water.

NYLON

This material is appropriate for applications that require good dry abrasion and chemical resistance. The two limitations to nylon are that it absorbs water and is more susceptible than acetal to cuts and gouges. Because of material expansion caused by water absorption, nylon is not recommended for very wet applications.

- Temperature range: -50°F to 180°F (-46°C to 82°C).
- Nylon can expand or contract depending on storage and use conditions. Contact Intralox Customer Service for more information.
- Good chemical resistance and low temperature performance.
- Abrasion resistant in dry applications.
- Good fatigue resistance.
- Specific gravity: 1.13. Not buoyant in water.
- Stronger than polypropylene.

POLYPROPYLENE COMPOSITE

A standard material for use in applications where both high strength and chemical resistance are required.

- Temperature range: -20°F to 220°F (-29°C to 104°C).
- Thermal expansion coefficient: 0.0004 in/ft/°F (0.06 mm/m/°C).
- Excellent strength and stiffness.
- Good chemical resistance to acids, bases, salts, and alcohol.
- Specific gravity: 1.12. Not buoyant in water.
- An electrically conductive (EC) polypropylene (PP) composite can be used to help dissipate built-up static charges. The EC PP composite is available in S1200 Non Skid.

PK

PK has a good balance of positive mechanical and chemical resistance properties. This material has a similar strength to acetal, with improved toughness and chemical resistance. PK has the unique property of low hydrocarbon permeability. This property prevents oils from soaking into the belt, which results in improved product release and product yield.

- Temperature range: -40°F to 176°F (-40°C to 80°C).
- Thermal expansion coefficient: 0.00073 in/ft/°F (0.11 mm/m/°C).
- Tough.
- Abrasion resistant.
- Chemically resistant. For applications that require specific chemical resistance, contact Intralox Customer Service for a list of chemicals.
- Impact resistant.
- Specific gravity: 1.24. Not buoyant in water.

PVDF

A specialty material with excellent chemical resistance to a wide variety of acids and bases.

- Temperature range: 34°F to 200°F (1°C to 93°C).
- Thermal expansion coefficient: 0.00087 in/ft/°F (0.13 mm/m/°C).
- UL 94 flammability rating: V-0 at 1/32 in (0.8 mm). For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Excellent resistance to acids, bases, salts, and alcohol.
- Specific gravity: 1.78. Not buoyant in water.
- Stronger than polypropylene.
- Available in S9000 Flush Grid.

SELF EXTINGUISHING LOW MOISTURE (SELM)

This material is a polymer engineered for use in spiral belts. Self-extinguishing characteristics are important to customers who want to reduce the risk of fires in their plants. Low moisture-absorption characteristics are particularly important to customers who want a material that performs in humid conditions and applications that require cleaning.

- Continuous temperature range: -50°F to 240°F (-46°C to 116°C).
- UL 94 flammability rating: V-2. For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Specific gravity: 1.06. Not buoyant in water.

UVFR

This material does not sustain a flame.

- Temperature range: 34°F to 200°F (1°C to 93°C).
- Thermal expansion coefficient: 0.00087 in/ft/°F (0.13 mm/m/°C).
- UL 94 flammability rating: V-0 at 1/32 in (0.8 mm). For information about fire behavior and safeguarding recommendations, contact Intralox Customer Service.
- Excellent resistance to ultraviolet radiation.
- Specific gravity: 1.78. Not buoyant in water.
- UVFR is available in S1100 Flush Grid and S900 Perforated Flat Top.

UV RESISTANT

UV-resistant acetal and black polypropylene are available for applications that require UV protection.

- Temperature range:
 - UV-resistant acetal: -50°F to 200°F (-46°C to 93°C).
 - UV-resistant polypropylene: 34°F to 220°F (1°C to 104°C).
 - Not buoyant in water.

X-RAY DETECTABLE ACETAL

This material is specifically designed for detection by X-ray machines and is recommended for applications in the food-processing industry where foreign material contamination is a concern. Testing the material in an X-ray detector in the production environment is the best method for determining detection sensitivity. X-ray detectable materials are heavier in weight and require special design considerations. Intralox encourages the use of regular (unfilled) materials combined with conveyor design and preventive maintenance to mitigate the risk of foreign material contamination. Contact Intralox Customer Service for more information.

- Temperature range: -50°F to 200°F (-46°C to 93°C).
- Thermal expansion coefficient: 0.0007 in/ft/°F (0.10 mm/m/°C).
- To be used upline from an X-ray detector.
- Detectable materials use additives that respond to metal detectors, X-ray detectors, or both.
- Detectable materials perform differently than materials that do not contain these additives. Dry or abrasive environments can cause increased wear to detectable materials. Increased wear creates additional dust throughout the conveyor system.
- When detectable materials must be used, always use Intralox conveyor design guidelines for decreasing wear and reducing the risk of dust.
- Has the same chemical resistance as regular acetal.
- Specific gravity: 1.73–1.70. Not buoyant in water.

X-RAY DETECTABLE PK

This material is specifically designed for detection by X-ray machines and is recommended for applications in the food-processing industry where foreign material contamination is a concern. Testing the material in an X-ray detector in the production environment is the best method for determining detection sensitivity. X-ray detectable materials are heavier in weight and require special design considerations. Intralox encourages the use of regular (unfilled) materials combined with conveyor design and preventive maintenance to mitigate the risk of foreign material contamination. Contact Intralox Customer Service for more information.

- Temperature range: -40°F to 176°F (-40°C to 80°C).
- Thermal expansion coefficient: 0.00070 in/ft/°F (0.105 mm/m/°C).
- To be used upline from an X-ray detector.
- Detectable materials use additives that respond to metal detectors, X-ray detectors, or both.
- Detectable materials perform differently than materials that do not contain these additives. Dry or abrasive environments can cause increased wear to detectable materials. Increased wear creates additional dust throughout the conveyor system.
- In dry environments, use PK rods or acetal rods rather than X-ray detectable PK rods.
- When detectable materials must be used, always use Intralox conveyor design guidelines for decreasing wear and reducing the risk of dust.
- Abrasion resistant.
- Tough and impact resistant above 32°F (0°C).
- Specific gravity: 1.51. Not buoyant in water.

BELT MATERIAL PROPERTIES

SPECIFIC GRAVITY

This value is the ratio of the material density to the density of water at normal pressures and temperatures. A specific gravity greater than 1.0 means the material is heavier than water. A specific gravity less than 1.0 means the material is buoyant in water. For the specific gravity for each belt material, see General Application Belt Materials and Special Application Belt Materials.

FRICTION FACTORS

Friction factors determine the amount of drag induced by the belt sliding on the conveyor frame or sliding under the conveyed product. Lower friction factors lead to lower line pressures, less product marring, and lower belt pull and power requirements. Higher friction is sometimes required for gradual inclines or declines, or for higher line pressures necessary to feed other equipment.

Friction factor values are highly dependent on environmental conditions. The low value of the friction factor range is an experimentally derived friction factor for new belts on new wearstrips. Only use this value in the cleanest environments, or where water or other lubricating agents are present. Most friction factors must be adjusted based on the environmental conditions surrounding the conveyor.

For a conveyor belt strength analysis, use a higher friction factor than normal if any abrasive material, such as flour, sand, cardboard dust, glass, or similar are present. Very abrasive conditions can require friction factors that are two to three times higher than recommended for clean conditions. Use either the *Intralox Engineering Program* or the manual calculations provided in Belt Selection Instructions to perform a conveyor belt strength analysis.

	F	riction	Betwee Belt M		strip an	d	Friction Between Product and Belt Material (used in Product Accumulation) ^a									
	UHM	W-PE	Nyla	tron	CS & S	S Steel	Glass Steel			Plastic		Cardboard		Aluminum		
Belt Material (Conditions)	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry
Condition	ons: (S)	= smoo	th, clea	n cond	itions. (A) = abı	rasive, o	dirty con	nditions	. NR = 1	not reco	mmend	led.			
Acetal (S)	0.10	0.10	0.13	0.15	0.18	0.19	0.13	0.14	0.13	0.13	0.13	0.16	-	0.18	0.33	0.27
AR nylon max. temp (A)	-	0.32	-	0.36	-	0.30	-	-	-	-	-	-	-	0.22	-	0.31
AR nylon max. temp (S)	-	0.19	-	0.24	-	0.31	-	-	-	-	-	-	-	0.22	-	0.31
Detectable nylon max. temp (A)	-	0.32	-	0.36	-	0.30	-	-	-	-	-	-	-	0.22	-	0.31
Detectable nylon max. temp (S)	-	0.19	-	0.24	-	0.31	-	-	-	-	-	-	-	0.22	-	0.31
Detectable polypropylene A22	0.24	0.27	0.28	0.29	0.26	0.30	0.18	0.20	0.26	0.30	0.26	0.29	-	0.37	0.40	0.40
Easy Release PLUS (S)	0.11	0.13	0.24	0.25	0.26	0.26	-	-	-	-	-	-	-	-	-	-
FR TPES (S)	-	0.13	-	-	-	-	-	-	-	0.18	-		-		-	0.30
Hi-Impact	0.23	0.21	-	-	0.31	0.33	-	-	-	0.64	-	-	-	-	-	-
HR nylon 72°F (22°C) (A)	-	0.30	-	0.26	-	0.26	-	0.16	-	0.27	-	0.16	-	0.19	-	0.28
HR nylon 72°F (22°C) (S)	-	0.18	-	0.17	-	0.27	-	0.16	-	0.27	-	0.16	-	0.19	-	0.28
HHR Nylon max. temp. (A)	NR	NR	-	0.32	-	0.39	-	0.19	-	0.27	-	0.47	-	0.23	-	0.25
HHR Nylon max. temp. (S)	NR	NR	-	0.18	-	0.27	-	0.19	-	0.27	-	0.47	-	0.23	-	0.25
HSEC acetal (S)	0.10	0.10	0.13	0.15	0.18	0.19	0.13	0.14	0.19	0.20	0.13	0.16	-	0.18	0.33	0.27
LMAR (A)	-	0.32	-	0.36	-	0.30	-	-	-	-	-	-	-	0.22	-	0.31
LMAR (S)	-	0.19	-	0.24	-	0.31	-	-	-	-	-	-	-	0.22	-	0.31
РК	0.10	0.21	-	-	0.21	0.24	-	-	-	-	-	-	-	-	-	-
Polyethylene ^b (S)	0.24	0.32	0.14	0.13	0.14	0.15	0.08	0.09	0.10	0.13	0.08	0.08	-	0.15	0.20	0.24
Polypropylene (A)	NR	NR	0.29	0.30	0.31	0.31	0.18	0.19	0.26	0.32	0.11	0.17	-	0.21	0.40	0.40
Polypropylene (S)	0.11	0.13	0.24	0.25	0.26	0.26	0.18	0.19	0.26	0.32	0.11	0.17	-	0.21	0.40	0.40

	F	riction		n Wears aterial	strip an	d	Friction Between Product and Belt Material (used in Product Accumulation) ^a									
	UHM	W-PE	Nyla	itron	CS & S	S Steel	Gla	ass	St	eel	Pla	stic	Cardboard		Alum	inum
Belt Material (Conditions)	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry	Wet	Dry
Conditions: (S) = smooth, clean conditions. (A) = abrasive, dirty conditions. NR = not recommended.																
Polypropylene composite (S)	0.30	0.35	_	-	0.31	0.37	0.24	0.23	0.36	0.32	0.17	0.21	-	-	0.55	0.45
PVDF	-	-	-	-	0.20	0.20	-	-	0.20	0.20	-	-	-	-	0.15	0.15
SELM (A)	-	0.32	-	0.36	-	0.30	-	-	-	-	-	-	-	0.22	-	0.31
SELM (S)	-	0.19	-	0.24	-	0.31	-	-	-	-	-	-	-	0.22	-	0.31
UV-resistant polypropylene	0.11	0.13	0.24	0.25	0.26	0.26	0.18	0.19	0.26	0.32	0.11	0.17	-	0.21	0.40	0.40
^a Friction factors for friction betwee	en produ	ct and b	elt only	apply fo	r Flat To	n. Perfor	ated Fla	at Top. N	lesh Tor	Flush	Grid and	Raised	Rib belt	S.		

^a Friction factors for friction between product and belt only apply for Flat Top, Perforated Flat Top, Mesh Top, Flush Grid and Raised Ri ^b Polyethylene is not recommended for container handling.

TEMPERATURE

Temperature affects the physical properties of thermoplastic materials. Generally, as the operating temperature increases, belts weaken in strength, but become tougher and more impact-resistant. In colder applications, belts become stiffer and sometimes become brittle.

For temperature factors for Intralox belt materials, see Table 2: Temperature Factors.

THERMAL EXPANSION AND CONTRACTION

With few exceptions, the dimensions of all substances increase as their temperature is increased and contract as their temperature is decreased. Since plastics expand and contract rather significantly, this factor must be considered in the conveyor design whenever operating temperatures differ from ambient temperature. For more information, see Dimension Changes in the Design Guidelines chapter.

To calculate expected dimension changes due to thermal expansion or contraction, use <u>CalcLab</u> or the following formula.

Formula 1:

 $\Delta = L \text{ or } W \times (T_2 - T_1) \times e$

- Δ change in dimension, in (mm)
- L or W total belt length or width at ambient temperature, ft. (m)
 - T₁ ambient temperature
 - T₂ operating temperature
 - e coefficient of thermal expansion, in/ft/°F (mm/m/°C), provide in the following table.

The following table provides coefficients of thermal expansion for belt and conveyor component materials.

Coefficients of TI	hermal Expansion	
Materials	in/ft/°F	mm/m/°C
Belts		
Acetal, HSEC acetal	0.00072	0.11
Composite polypropylene	0.0004	0.06
ChemBlox	0.00087	0.13
Detectable acetal	0.00072	0.11
Detectable MX	0.00072	0.11
Detectable nylon	0.00072	0.11
Detectable PP A22	0.0011	0.17
Easy Release PLUS	0.0004	0.06
Easy Release Traceable PP (greater than 100°F [38°C])	0.001	0.15
Easy Release Traceable PP (less than 100°F [38°C])	0.0008	0.12
Enduralox PP	0.0004	0.06

Coefficients of	Thermal Expansion	
Materials	in/ft/°F	mm/m/°C
Belts		
Flame retardant	0.0008	0.12
Hi-Impact	0.0010	0.156
LMAR	0.00096	0.15
Low Wear Plus	0.001	0.15
Nylon (HR, HHR, AR)	0.0005	0.07
РК	0.00073	0.11
Polyethylene: S100 belts	0.0015	0.23
Polyethylene: S400 Raised Rib belts	0.0015	0.23
Polyethylene: all other belts	0.0011	0.17
Polypropylene (greater than 100°F [38°C])	0.0010	0.15
Polypropylene (less than 100°F [38°C])	0.0008	0.12
PVDF	0.00087	0.13
SELM	0.0005	0.07
UVFR	0.00087	0.13
UV-resistant acetal	0.00072	0.11
UV-resistant polypropylene (greater than 100°F [38°C])	0.001	0.15
UV-resistant polypropylene (less than 100°F [38°C])	0.0008	0.12
X-ray detectable	0.00072	0.10
Wearstrips		
HDPE and UHMW-PE -100°F to 86°F (-73°C to 30°C)	0.0009	0.14
HDPE and UHMW-PE 86°F to 210°F (30°C to 99°C)	0.0012	0.18
Nylatron	0.0004	0.06
Teflon	0.0008	0.12
Metals		
Aluminum	0.00014	0.02
Steel (carbon and stainless)	0.00007	0.01

BELT MATERIAL COMPLIANCE

FDA COMPLIANT

The material meets the FDA requirements described in the applicable Code of Federal Regulations, Chapter 21, Part 177 as noted. The material is chemically acceptable to the USDA for repeat use applications in slaughtering, processing, transporting, and storage areas in direct contact with meat or poultry products.

EU COMPLIANT

The material complies with the framework regulation 1935/2004/EC. The monomers and additives used to make the plastic are listed in the Union List. When tested to the criteria described in EU Regulation 10/2011, the finished article did not exceed the overall migration limit (OML) and any applicable specific migration limits (SML).

3A DAIRY TESTED

This test is based on materials, not product design. In accelerated use testing, the materials show that when they are cleaned and sanitized they maintain essential functional properties and surface finish.

Belt Material Compliance ^a											
Material Name	FDA Compliant	EU Compliant	3-A Dairy Tested								
Acetal	FCN 1892	1935/2004/EC Regulation 10/2011	20-27								
AR nylon	21 CFR 177.1500	1935/2004/EC Regulation 10/2011	20-27 (white)								
ChemBlox [™]	21 CFR 177.2510	1935/2004/EC Regulation 10/2011	Not tested								
Detectable acetal	21 CFR 177.2470	1935/2004/EC Regulation 10/2011	20-25								
Detectable MX A25	21 CFR 177.2480	1935/2004/EC Regulation 10/2011	20-27								
Detectable nylon	21 CFR 177.1500	Not compliant due to sizing agent	Not tested								
Detectable polypropylene A22	21 CFR 177.1520	1935/2004/EC Regulation 10/2011	20-27								
Enduralox polypropylene	21 CFR 177.1520	1935/2004/EC Regulation 10/2011	Not tested								
HR nylon	21 CFR 177.1500	1935/2004/EC Regulation 10/2011	20-27 (white)								
HHR nylon	21 CFR 177.1500	1935/2004/EC Regulation 10/2011	Not tested								
Hi-Impact	21 CFR 177.2600	1935/2004/EC Regulation 10/2011	Not tested								
Hi-Temp	21 CFR 177.2415	1935/2004/EC Regulation 10/2011	Not tested								
LMAR	FCN 1573	1935/2004/EC Regulation 10/2011	Not tested								
Low Wear Plus	21 CFR 177.2600	1935/2004/EC Regulation 10/2011	Not tested								
Nylon	21 CFR 177.1500	1935/2004/EC Regulation 10/2011	Not tested								
Polyethylene	21 CFR 177.1520	1935/2004/EC Regulation 10/2011	20-23 (blue, natural, red)								
Polypropylene	21 CFR 177.1520	1935/2004/EC Regulation 10/2011	20-25 (blue, white, natural)								
Polypropylene composite	21 CFR 177.1520	1935/2004/EC Regulation 10/2011	Not tested								
РК	FCN 1847	1935/2004/EC Regulation 10/2011	Not tested								
PVDF	21 CFR 177.2510	1935/2004/EC Regulation 10/2011	Not tested								
SELM	21 CFR 177.1500	1935/2004/EC Regulation 10/2011	Not tested								
UVFR	21 CFR 177.2510	1935/2004/EC Regulation 10/2011	Not tested								
X-ray detectable acetal	21 CFR 177.2470	1935/2004/EC Regulation 10/2011	Not tested								
X-ray detectable PK	FCN 1847	1935/2004/EC Regulation 10/2011	Not tested								
^a Contact Intralox Customer Service	to verify compliance for specific	belt series, styles, and material color combinations.	·								

GENERAL APPLICATION SPROCKET MATERIAL

ACETAL

These sprockets are used for most general-purpose applications. This material is considerably stronger than polypropylene and polyurethane, and has a good balance of mechanical, thermal, and chemical properties.

- Acetal has good fatigue endurance and resilience.
- Acetal is resistant to wear caused by abrasive applications.
- Temperature range: -50°F to 200°F (-46°C to 93°C).
- This material complies with FDA regulations for use in food processing and packaging applications.

SPECIAL APPLICATION SPROCKET MATERIALS

Not all sprocket pitch diameters, bore sizes, and material combinations are available in all series. Certain sprockets are made to order, and are not stocked. Some sprockets have long lead time items. Contact Intralox Customer Service for more information.

GLASS-FILLED NYLON

This material is more abrasion resistant than acetal but not as abrasion resistant as stainless steel. Glassfilled nylon is not chemical resistant.

- Also available as a two-material split sprocket with a polypropylene joining plate and a glass-filled nylon tooth plate.
- Temperature range for split sprockets with polypropylene joining plates: 45°F to 220°F (7°C to 104°C).
- Temperature range for all other glass-filled nylon sprockets: -51°F to 240°F (-46°C to 116°C).

NYLON

These sprockets are used in abrasive applications.

• Temperature range is -50°F to 240°F (-46°C to 116°C).

POLYPROPYLENE

These sprockets are used for applications where chemical resistance can be required.

- Polypropylene (PP) has good chemical resistance to many acids, bases, salts, and alcohols.
- The temperature range of PP is 34°F to 220°F (1°C to 104°C).
- A relatively strong material in normal use, PP exhibits a somewhat brittle quality at low temperatures. It is not recommended in high impact conditions below 45°F (7°C).
- This material complies with FDA regulations for use in food processing and packaging applications.
- Contact Intralox Customer Service for PP sprocket availability.

POLYPROPYLENE COMPOSITE

Polypropylene composite is a standard material for use in applications where both high strength and chemical resistance are required.

- Excellent strength and stiffness.
- Good chemical resistance to acids, bases, salts, and alcohol.
- Specific gravity: 1.12.
- Temperature range: -20°F to 220°F (-29°C to 104°C).
- The thermal expansion coefficient: 0.0004 in/ft/°F (0.06 mm/m/°C).

POLYURETHANE

These sprockets are used for applications where abrasive wear is common.

• The temperature range of polyurethane is 0°F to 120°F (-18°C to 49°C). Polyurethane becomes soft and flexible at high temperatures and has good chemical resistance.

POLYURETHANE COMPOSITE

This material is extremely rigid and can handle a large range of chemicals and temperatures.

- The temperature range is -50°F to 240°F (-46°C to 116°C).
- Avoid polyurethane composite split sprockets in high impact conditions below 45°F (7°C).
- Polyurethane composite split sprockets are recommended for drive shafts only.
- Some polyurethane composite split sprockets consist of one polyurethane composite tooth plate assembled between polypropylene joining plates that form the hub of the sprocket. Other polyurethane composite split sprockets do not use joining plates.

STAINLESS STEEL

These split sprockets are used in applications with abrasive wear, or when shaft removal is not practical. There are two types of stainless steel sprockets. The all-metal abrasion resistant sprockets are available in a many series and pitch diameters. The stainless steel split consists of one to three stainless steel tooth plates assembled between polypropylene joining plates that form the hub of the sprocket.

- The sprocket is split into two pieces for easy assembly on and off a shaft.
- Stainless steel split sprockets have good chemical resistance.
- The temperature range for polypropylene is 34°F to 220°F (1°C to 104°C).
- A relatively strong material in normal use, polypropylene exhibits a somewhat brittle quality at low temperatures. It is not recommended in high impact conditions below 45°F (7°C).
- These materials are FDA-compliant for use in food processing and packaging applications.
- These sprockets are built standard with 304 stainless steel plates and can be specially ordered with 316 stainless steel plates.
- Contact Intralox Customer Service for availability.

ULTRA ABRASION RESISTANT POLYURETHANE

- For abrasive, heavy-duty applications.
- For non-FDA applications.
- Temperature range -40°F to 160°F (-40°C to 70°C).
- Series 400 has a lower rating when using ultra abrasion resistant polyurethane sprockets.

ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE (UHMW-PE)

• Temperature range: -100°F to 150°F (-73°C to 66°C).

SPROCKET MATERIAL AVAILABILITY

The following table lists the materials available for each Intralox sprocket by series and pitch diameter. Not all sprockets of each pitch diameter are available in all listed materials. A material available for one bore type or bore size is not always available for other bore types or bore sizes of the same series and pitch diameter sprocket. Sprockets are either stocked or made-to-order, and can have long lead times. Lead times vary by sprocket. Some make-to-order sprockets also have set up charges. Contact Intralox Customer Service for specific lead times and availability.

							Sprock	et Mater	ials ^a			
Pitch Diameter in (mm)	Number of Teeth	Acetal	Poly- propylene	Split Metal	AR ^b Metal	Nylon	Poly- urethane	Glass- Filled Nylon	Poly- ethylene	Poly- urethane Composite	Ultra AR ^b Polyurethane	Poly- propylene Composite
Symbol legend: • =	available.											
S100												
2.0 (51)	6	•	•									
3.5 (89)	11	•	•	•			•					
6.1 (155)	19	•	•	٠			•					
S200								•	<u> </u>	<u>.</u>		
4.0 (102)	6	•	•				•					
6.4 (163)	10	•	•		•		•					
10.1 (257)	16	•	•		•							

							Sprock	ket Mater	ials ^a			
Pitch Diameter in (mm)	Number of Teeth	Acetal	Poly- propylene	Split Metal	AR ^b Metal	Nylon	Poly- urethane	Glass- Filled Nylon	Poly- ethylene	Poly- urethane Composite	Ultra AR ^b Polyurethane	Poly- propylene Composite
Symbol legend: • =			,		I	-		-				
S400												
4.0 (102)	6	•	•	٠		•	•					
5.2 (132)	8	•	•	•								
5.8 (147)	9			•C								
6.4 (163)	10	•	•	•	•	•				•	•	
7.8 (198)	12	•	•	•	•	•				•	•	
8.4 (213)	13			•C								
10.1 (257)	16	•	•	•	•	•				•	•	
S560	1	1						1			1	1
1.8 (46)	18	•										
2.4 (61)	24	•										
3.2 (81)	32	•										
3.6 (91)	36	•										
S570	1										1	
4.6 (117)	46					•						
S800	1		I				F	1	Γ	1	Т	1
4.0 (102)	6	•	•				•					
5.2 (132)	8	•	•	•			•					
6.5 (165)	10	•	•	●d			•				•	
7.7 (196)	12	•	•	●d			•				•	
10.3 (262)	16	•	•	₀d							•	
S850		I			1					1		
4.0 (102)	6	•	•				•					
5.2 (132)	8	•	•	₀d			٠					
6.5 (165)	10	•	•	₀d			•					
7.7 (196)	12	•	•	●d			•					
10.3 (262)	16	•	•	•d								
	10		•	●u								
S888	10							1		1		1
6.5 (165)	10	•				•						
7.7 (196) S900	12	•				•						
2.1 (53)	6	•	•									
3.1 (79)	9	•	•									
3.5 (89)	10	•	•	•								
4.1 (104)	12	•	•	•	•		•					
5.1 (130)	15			•				•				
5.8 (147)	17	•	•	•	•			•				
6.1 (155)	18	•	•	•	•		•	•				
6.8 (173)	20	•	•	•	•		•	•				
9.7 (246)	28			•								
S1000												
3.1 (7.9)	16	•				•						
4.6 (117)	24	•				•		•				•
5.8 (147)	30	•				•		•				
6.1 (155)	32	•				•		•				•

		Sprocket Materials ^a													
							Oproor	Glass-		Poly-		Poly-			
Pitch Diameter	Number		Poly-	Split	ARb		Poly-	Filled	Poly-	urethane	Ultra AR ^b	propylene			
in (mm)	of Teeth	Acetal	propylene		Metal	Nylon	urethane	Nylon	ethylene	Composite	Polyurethane				
Symbol legend: • =	available		•							•					
S1100															
1.6 (41)	8				•										
2.3 (58)	12	•			•										
3.1 (79)	16	•	•												
3.5 (89)	18	•	•	•											
3.8 (97)	20	•	•												
4.6 (117)	24	•	•	•				•							
5.1 (130)	26	•	•	•											
6.1 (155)	32	•	•	•				•							
S1200			•							•					
5.6 (142)	12			•											
6.5(165)	14			•						•					
7.4 (188)	16									•					
7.9 (201)	17									•					
10.2 (258)	22			•						•					
S1400	1				,					1	1				
3.9 (99)	12	•				•									
4.9 (124)	15	•													
5.1 (130)	16					•		•							
5.7 (145)	18	•				•		•				•			
6.7 (170)	21							•				•			
7.7 (196)	24	•				•									
9.9 (251)	31									•		•			
S1500	1	1			1			1			1	1			
1.9 (48)	12	•													
2.3 (58)	14	•													
2.7 (69)	17	•													
3.8 (97)	24	•				•									
5.7 (145)	36	•				•									
S1600		1						1				1			
2.0 (51)	6	•													
3.2 (81)	10	•					•								
3.9 (99)	12	•					•								
6.4 (163)	20	•					•								
S1650	1 *		1	1	1			1	L	1	1	1			
2.0 (51)	6	•													
3.2 (81)	10	•													
3.9 (99)	12	•										+			
6.4 (163)	20	•										+			
S1700			1	1							1	l			
5.8 (147)	12										•				
6.7 (170)	14										•				
7.7 (196)	16										•				
10.5 (267)	22										•				
S1750											-	<u> </u>			
6.8 (173)	14										•				
7.8 (198)	14										•				
10.6 (269)	22										•				
10.0 (203)	22										-				

		Sprocket Materials ^a											
								Glass-		Poly-		Poly-	
Pitch Diameter in (mm)	Number of Teeth	Acetal	Poly- propylene	Split Metal	AR ^b Metal	Nylon	Poly- urethane	Filled Nylon	Poly- ethylene	urethane Composite	Ultra AR ^b Polyurethane	propylene Composite	
Symbol legend: • =	available.							1			1		
S1800													
5.0 (127)	6	•											
6.5 (165)	8	•											
8.1 (206)	10	•											
10.5 (267)	13	•											
S1900								•		<u>.</u>			
6.7 (170)	10			٠									
10.0 (254)	15			٠									
10.6 (269)	16			٠									
S2100													
2.3-6.9 (58-175)	12					•							
S2200										<u>.</u>			
3.9 (99)	8	•	•										
5.3 (135)	11	•	•				•						
6.3 (160)	13	•	•										
7.7 (196)	16	•	•										
S2300													
3.9 (99)	12					•							
5.1 (130)	16					•							
5.8 (147)	18					•							
6.4 (163)	20					•							
S2400	1									1	I		
2.0 (51)	6	•											
2.9 (74)	9	•											
3.9 (99)	12	•	•				•	•					
5.1 (130)	16	•	•			•	•	•			•		
6.4 (163)	20	•	•					•			•		
S2600			•										
5.2 (132)	8	•							٠				
6.5 (165)	10	•							٠				
S2700													
5.2 (132)	8	•											
6.5 (165)	10	•											
S2800													
6.3 (160)	13	•											
S2850										<u>.</u>			
6.2 (157)	13	•											
S2900													
6.2 (157)	13	•											
S2950													
6.2 (157)	13	•											
S3000		•											
5.2 (132)	8								•				
6.5 (165)	10								٠				
7.7 (196)	12								•				

Pitch Diameter in (mm)	Number of Teeth	Sprocket Materials ^a											
		Acetal	Poly- propylene	Split Metal	AR ^b Metal	Nylon	Poly- urethane	Glass- Filled Nylon	Poly- ethylene	Poly- urethane Composite	Ultra AR ^b Polyurethane	Poly- propylene Composite	
Symbol legend: • =	available.												
S4000													
3.9 (99)	12	٠											
4.9 (124)	15	•											
5.1 (130)	16							•					
5.7 (145)	18	٠						•					
6.7 (170)	21							•					
9.9 (251)	31									•		•	
S4400	1				1	1 1		1 1		1	1	1	
4.0 (102)	6					•							
5.3 (135)	8					•							
6.5 (165)	10							•					
7.8 (198)	12							•					
10.3 (262)	16					•		•					
\$4500	1				1	<u> </u>		11		1			
6.5 (165)	10							•				•	
7.8 (198)	12							•				•	
10.3 (262)	16					•		•				•	
S9000	1					<u> </u>		11		1		1	
3.3 (84)	10					•							
4.2 (107)	13					•							
6.1 (155)	19					•							
6.5 (165)	20	•		•								•	
8.1 (206)	25			•								•	
12.9 (328)	40								٠			•	
S10000	I											1	
9.9 (251)	10					•							
11.8 (300)	12					•							
13.7 (348)	14					•							
15.7 (399)	16					•							

^a All Intralox sprockets can be classified either as stock items or as make-to-order items. Some make-to-order items incur special setup charges. Contact Intralox Customer Service for pricing, lead times, and availability.

^bAbrasion resistant.

 $^{\rm C}$ For use with Series 400 Flush Grid acetal and HSEC acetal only.

^dAvailable in three-plate, abrasion resistant split design.

BELT SELECTION INSTRUCTIONS

To determine if a belt is suitable for a particular application, the operating load versus operating strength must be identified. Use the following steps to calculate this comparison:

STEP 1: CALCULATE BELT PULL

BP is the belt tension when the belt is under load.

Formula 2:

 $\mathsf{BP} = [(\mathsf{M} + 2\mathsf{W}) \times \mathsf{Fw} + \mathsf{M}_\mathsf{p}] \times \mathsf{L} + (\mathsf{M} \times \mathsf{H})$

where:

BP = belt pull (belt tension load in lbf/ft (N/m)

 $M = product load, lbf/ft^2 (N/m^2)$

 $W = belt weight, lbf/ft^2 (N/m^2)$. See Note.

L =length of conveyor, ft (m), centerline

H = elevation change of conveyor, ft (m)

 F_w = wearstrip to belt friction coefficient. See Note.

 $M_p = M \times (F_p \times \%$ belt backed-up), load due to product accumulation. See Note.

NOTE: Obtain belt mass from the belt data table for each belt and convert belt mass to belt weight (W). Obtain F_w and F_p from the belt data table for each belt. If product accumulation is not expected, ignore M_p .

STEP 2: ADJUST CALCULATED BELT PULL FOR ACTUAL SERVICE CONDITIONS

Since the belt can experience various conditions, adjust the BP by applying an appropriate service factor (SF).

1. Use the following table to determine SF:

Operating Conditions	Add
Starts under no load, with load applied gradually	1.0
Frequent starts under load (more than once per hour)	0.2
Operation at speeds greater than 100 fpm (30 m/ min)	0.2
Elevating conveyor	0.4
Pusher conveyor	0.2
Service factor (SF)	total

NOTE: At speeds greater than 50 fpm (15 m/min) on conveyors that are started with backed-up lines, consider soft-start motors.

2. Use one of the following formulas to determine the adjusted belt pull (ABP):

 $ABP = BP \times SF$

where: ABP = adjusted belt pull, lbf/ft (N/m) of belt width BP = belt pull SF = service factor

Formula 4:

ABP for bi-directional and pusher conveyors = $BP \times SF \times 2.2$

where:

ABP = adjusted belt pull, lbf/ft (N/m) of belt width

 $\mathsf{BP} = \mathsf{belt} \mathsf{pull}$

SF = service factor

STEP 3: CALCULATE ALLOWABLE BELT STRENGTH

Due to specific operating conditions, allowable belt strength (ABS) is sometimes less than the rated belt strength. Use the following formula to calculate the ABS.

Formula 5:

 $\mathsf{ABS}=\mathsf{BS}\times\mathsf{T}\times\mathsf{S}$

where:

ABS = allowable belt strength

BS = belt strength from the belt data table for the selected belt. See Product Line.

T = temperature factor from Table 2: Temperature Factors.

S = strength factor from the belt data table for the selected belt. See Product Line.

The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. To get the speed/length ratio, divide the belt speed (ft/min) by the shaft centerline distance (ft). The strength factor adjusts the belt rating to account for wear caused by the combination of high speed, short conveyor lengths, and small sprocket sizes.

STEP 4: COMPARE ABP WITH ABS

If the ABS exceeds ABP, this belt is strong enough for your application. Proceed to the next steps to determine drive shaft sprocket spacing, shaft strength, and horsepower required.

If the ABS is less than ABP, consider changing some application parameters (for example, product load distribution or belt speed), until the recalculated ABP is acceptable.

STEP 5: DETERMINE MAXIMUM SPACING OF DRIVE SHAFT SPROCKETS

First, determine the percentage of allowable belt strength utilized (ABSU):

Formula 6: ABSU = (ABP ÷ ABS) × 100%

where:

 $\label{eq:ABSU} \begin{array}{l} \text{ABSU} = \text{allowable belt strength utilized} \\ \text{ABP} = \text{adjusted belt pull, lbf/ft (N/m) of belt width} \\ \text{ABS} = \text{allowable belt strength} \end{array}$

If the calculated ABSU is above 75%, contact Intralox Customer Service to run the *Intralox Engineering Program* and verify your results.

Using the ABSU, find the maximum sprocket spacing from the *Sprocket Spacing as a Function of Belt Strength Utilized* graph for the series you are considering. See Product Line.

NOTE: Sprocket spacing on idle shafts can sometimes be greater than the spacing required on drive shafts. Do not exceed 6.0 in (152 mm) sprocket spacing on idle shafts for all series except S200, where the maximum spacing can never exceed 7.5 in (191 mm).

STEP 6: CONFIRM DRIVE SHAFT STRENGTH

Drive shafts must be stiff enough to resist excessive bending or deflecting under the belt pull, and strong enough to transmit the required torque from the driver. To ensure adequate shaft selection, determine both the drive shaft deflection and torque.

1. Select a shaft size which fits your sprocket of choice from the sprocket data page.

NOTE: Most sprockets have more than one available bore size.

2. The shaft deflects under the combined loads of the adjusted belt pull and the shaft weight. Use the following formula to calculate the total shaft load:

```
\label{eq:product} \begin{array}{l} \mbox{Formula 7:} \\ w = (ABP + Q) \times B \end{array} where: 
 w = total shaft load 
 ABP = adjusted belt pull, lbf/ft (N/m) of belt width 
 Q = shaft weight, lbf/ft (N/m), from Table 3: Shaft Data. 
 B = belt width, ft (m)
```

 For shafts supported by two bearings, use the following formula to calculate shaft deflection. Use <u>CalcLab</u> to calculate deflection when using more than two bearings.

Formula 8:

$$\mathsf{D} = \frac{5}{384} \times \frac{\mathsf{W} \times \mathsf{L}_{\mathsf{S}}^3}{\mathsf{E} \times \mathsf{I}}$$

where:

 $\begin{array}{l} \mathsf{D} = \text{shaft deflection} \\ \mathsf{w} = \text{total shaft load} \\ \mathsf{L}_{\mathsf{s}} = \text{length of shaft between bearings, in (mm)} \\ \mathsf{E} = \text{modulus of elasticity from Table 3: Shaft Data} \\ \mathsf{I} = \text{moment of inertia from Table 3: Shaft Data} \end{array}$

4. If the calculated deflection is less than the recommended maximum of 0.10 in (2.5 mm) for standard conveyors or 0.22 in (5.6 mm) for bi-directional conveyors, use the following formula to calculate the required torque. If the calculated deflection is at or above the recommended maximum, select a larger size shaft, a stronger material, or a shorter span between bearings, and recalculate the deflection.

Formula 9:

$$T_o = ABP \times B \times \frac{PD}{2}$$

where:

 $\begin{array}{l} \mathsf{ABP} = \text{transmitted torque} \\ \mathsf{ABP} = \text{adjusted belt pull, lbf/ft (N/m) of belt width} \\ \mathsf{B} = \text{belt width, ft (m)} \\ \mathsf{PD} = \text{sprocket pitch diameter of the selected sprocket. See Product Line.} \end{array}$

5. Compare T_o with the maximum recommended torque on the drive shaft for the shaft journal sizes shown. See Table 4: Maximum Recommended Torque on Drive Shaft. Using a journal diameter which can be machined on the selected shaft, determine the maximum recommended torque. Ensure this value does not exceed T_o. If it does exceed T_o, select a stronger material or larger shaft.

STEP 7: DETERMINE THE POWER NEEDED TO DRIVE THE BELT

Use the following formulas to determine the required horsepower and power in watts.

Formula 10:

 $HP = \frac{ABP \times B \times V}{33000}$

where: HP = drive horsepower ABP = adjusted belt pull, lbf/ft of belt width B = belt width, ftV = belt speed, ft/min

Formula 11:

$$W = \frac{ABP \times B \times V}{6.12}$$
$$1 HP = 445.7 W$$

where:

W = watts ABP = adjusted belt pull, lbf/ft of belt width B = belt width, ft V = belt speed, ft/min HP = drive horsepower

To obtain the required motor power, add expected power losses in the drive train between drive shaft and motor to the calculated power. See Power Requirements for recommendations.

Having determined the suitability of the belt, the sprocket spacing, the drive shaft size, and the power requirements, you are now ready to select accessories and design the conveyor assembly.

STRAIGHT-RUNNING BELTS

2025 Engineering Manual-Modular Plastic Belts

	F	lush (Grid				
		mm					80.
Pitch		25.4					110.
Minimum Width		38	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
Width Increments		6.4		~~~			
Opening Size (approximate)		× 5			S		
Open Area	31%	-			100		TTTT I
Hinge Style	Open				L'and		
Rod Retention; Rod Type	Snap-lock; heade	ed					
Produc	t Notes						5 A.S.
 before designing equipment or of Lightweight, relatively strong belt Smaller pitch reduces chordal acti Each belt material has a default ro available. Intralox can help identify combination for your application. Detailed material information is pr For more material selections and s S900, S1000, and S1100. 	als are rial ee S560,				1.00° NOM. (25.4 mm)		
		Belt Da	ta				
	Default Rod Material, Diameter	Bel	t Strength	-	ure Range nuous)	Belt	Mass
Belt Material	0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²
Polypropylene	Polypropylene	300	4,380	34 to 220	1 to 104	0.54	2.64
Polyethylene	Polyethylene	200	2,920	-50 to 150	-46 to 66	0.58	2.83
Acetal	Polypropylene	600	8,760	34 to 200	1 to 93	0.78	3.81
						0.00	

400

550

5,840

8,030

34 to 200

-50 to 70

1 to 93

-46 to 21

0.78

0.78

3.81

3.81

^a Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.

Polypropylene

Polyethylene

HSEC acetal

Acetala

		Raised	l Rib
	in	mm	
Pitch	1.00	25.4	5333333 2 [°]
Minimum Width	1.5	38	200000 million 100
Width Increments	0.25	6.4	
Opening Size (approximate)	0.2 × 0.2	5×5	and a state of the
Open Area	31	%	A DECEMBER OF THE OWNER OF
Product Contact Area	28	%	
Hinge Style	Оро	en	
Rod Retention; Rod Type	Snap-lock	; headed	and the second sec
Product	Notes		
 before designing equipment or or Smooth upper surface with closely se Each belt material has a default rod available. Intralox can help identify to combination for your application. Detailed material information is proved to the second sec	spaced ribs. material. Other rod the best belt and ro vided in Product Lin ites to eliminate pro	1.00° NOM. (25.4 mm) (25.4 mm) (25.4 mm) (25.4 mm)	
			0,391" (9,9 mm) (9,9 mm) (14,3 mm)

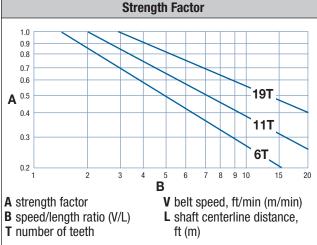
Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	trength	Temperat (conti	ure Range 1uous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Polypropylene	Polypropylene	300	4,380	34 to 220	1 to 104	0.82	4.00				
Polyethylene	Polyethylene	200	2,920	-50 to 150	-46 to 66	0.88	4.29				
Acetal	Polypropylene	600	8,760	34 to 200	1 to 93	1.20	5.86				
Acetal ^a	Polyethylene	550	8,030	-50 to 70	-46 to 21	1.20	5.86				
^a Polyethylene rods can be used in cold ap	plications when impacts or suc	Iden starts/stop	os occur. Please	e note lower rating	•						

Sprocket and Support Quantity Reference										
Belt Wi	dth Range ^a	Minimum Number of	Wear	strips						
in	mm	Sprockets Per Shaft ^b	Carryway	Returnway						
2	51	1	2	2						
4	102	1	2	2						
6	152	2	2	2						
7	178	2	3	2						
8	203	2	3	2						
10	254	2	3	2						
12	305	3	3	2						
14	356	3	4	3						
15	381	3	4	3						
16	406	3	4	3						
18	457	3	4	3						
20	508	5	5	3						
24	610	5	5	3						
30	762	5	6	4						
32	813	7	7	4						
36	914	7	7	4						
42	1,067	7	8	5						
48	1,219	9	9	5						
54	1,372	9	10	6						
60	1,524	11	11	6						
72	1,829	13	13	7						
84	2,134	15	15	8						
96	2,438	17	17	9						
120	3,048	21	21	11						
144	3,658	25	25	13						
For other wid	ths, use an odd num (152 mm) cente	ber of sprockets at maximum 6 in erline spacing. ^c	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing						

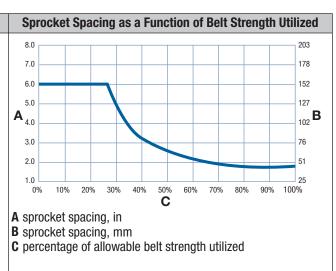
^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.25 in (6.4 mm) increments beginning with minimum width of 1.5 in (38 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



To determine the speed/length ratio, divide the belt speed by the shaft centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.



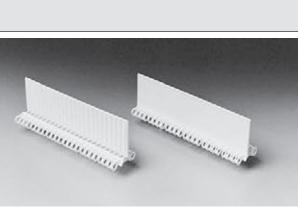
	Molded Sprockets											
Number of Teeth		Pitch neter	-	Outer neter	-	Nom. Hub Width						
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
6 (13.40%)	2.0	51	2.1	53	0.75	19		1.0				
11 (4.05%)	3.5	89	3.7	94	0.75	19		1.0, 1.5		40		
19 (1.36%)	6.1	155	6.3	160	1.25	32		1.5, 2.5		40, 60, 65		

	Split Metal Sprockets											
Number of Teeth			Available Bore Sizes									
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
11 (4.05%)	3.5	89	3.7	94	1.5	38		1.5		40		
19 (1.36%)	6.1	155	6.3	160	1.5	38		1.5, 2.5		40, 60, 65		

Streamline/No-Cling Flights

	Available F	light Height		
in mm		mm	Available Materials	
	1.5	38	Polypropylene, polyethylene, acetal	

- No fasteners are required.
- Streamline/No-Cling flights are smooth on one side and vertically ribbed on one side.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Available in linear increments of 1 in (25 mm).
- Minimum indent without sideguards: 0.5 in (13 mm).



Sideguards

Available Sizes			
in mm		mm	Available Materials
	2	51	Polypropylene, polyethylene, acetal

- Standard overlap design ensures product containment.
- · Fastens to belt with hinge rods. No other fasteners required.
- Sideguards are installed with the back ends angled inward, toward the product. This is called a product-friendly orientation. On request, the back ends can be angled outward, toward the conveyor sides.
- When going around the 6- and 11-tooth sprockets, the sideguards fan out, opening a gap at the top that can allow small products to fall out. The sideguards stay completely closed when wrapping around the 19tooth sprocket.
- Standard gap between sideguards and flight edge: 0.06 in (2 mm)
- Minimum indent: 0.75 in (19 mm)



Finger Transfer Plates

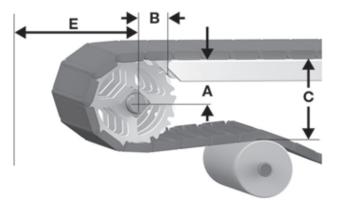
- 1				-		
	Availabl	ble Widths Number of		f		
	in	mm	Fingers	Available Materials		
ſ	4	102	16	Acetal		
		use with Series tipping problems		elts, to eliminate product		
		xtend between the transformer to the second se	6			
	Easily installe	ed on the convey	**********	10		
					111111111111111111111111111	in the second



				Dimensional Requirements for S100 Finger Transfer Plate Installation
		in	mm	
F		2.38	61	Н
G		0.19	5	
Η		5.83	148	
I		3.96	101	
J		2.50	64	
Κ		0.74	19	
L		2.00	51	
М	PP	3.979	101.1	
IVI	AC	3.976	101.0	
				F F L- G G G G G G G G G G G G G G G G G G G

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 8: A, B, C, and E drive dimensions

S100 Conveyor Frame Dimensions											
Spro	cket Descri	iption	1	4	1	3	()	E		
Pitch D	iameter	Number	Range (Bott	om to Top) ^a							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
Flush Grid											
2.0	51	6	0.69–0.83	18–21	1.30	33	2.10	53	1.24	31	
3.5	89	11	1.53–1.60	39–41	1.70	43	3.60	91	2.01	51	
6.1	155	19	2.82-2.87	72–73	2.20	56	6.20	157	3.30	84	
				Rais	ed Rib						
2.0	51	6	0.69–0.83	18–21	1.30	33	2.10	53	1.45	37	
3.5	89	11	1.53–1.60	39–41	1.70	43	3.60	91	2.23	57	
6.1	155	19	2.82-2.87	72–73	2.20	56	6.20	157	3.52	89	

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S100 Dead Plate Gap									
	Sprocket Description	Minimum Gap							
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
2.0	51	6	0.134	3.4					
3.5	89	11	0.073	1.9					
6.1	155	19	0.041	1.0					

		Open	Grid				
Pitch Minimum Width Width Increments Opening Size (approximate) Open Area Hinge Style Rod Retention; Rod Type	in 2.00 2 0.36 0.23 × 0.48 33 Clos Second head	ed	50.8 51 9.1 8 × 12.3				
 Contact Intralox for precise belt in before designing equipment or o Large, open area allows excellent of Has double-headed hinge rods, so Low-profile, transverse ridges help Each belt material has a default root available. Intralox can help identify combination for your application. Detailed material information is profiles and sideguards are available. 	measurements and rdering a belt. Irainage. the belt edge is not t move products up o I material. Other rod the best belt and roo vided in Product Lin	fully flush. r down incline materials are d material					
		Belt	Data				
	Default Rod Mat Diameter 0.24		Belt Strength	Temperature Range (continuous)	Belt Mass		

lbf/ft

1,400

900

N/m

20,400

13,100

°F

34 to 220

-100 to 150

°C

1 to 104

-73 to 66

lb/ft²

1.24

1.26

kg/m²

6.05

6.15

Belt Material

Polypropylene

Polyethylene

(6.1 mm)

Polypropylene

Polyethylene

		Flush	Grid
	in	mm	
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.36	9.1	
Opening Size (approximate)	0.22 × 0.49	5.5 × 12.5	
Open Area	33	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Second head		
• Contact Intralox for precise bel	ct Notes	d stock status	
before designing equipment or	ordering a belt.	1 3100K 318183	hhhhhnnnnnnndddd
 Flush Grid pattern with smooth up 	pper surface.		
 Provides excellent lateral movem 	ent of containers.		
 One of the strongest S200 belt st 	-		
Uses double-headed hinge rods,	-	-	
 Each belt material has a default r available. Intralox can help identi combination for your application. 	fy the best belt and ro		
Detailed material information is p		ne.	
 For more material selections, see S4500 belt styles. 			**********
• Flights and sideguards are availa	ble.		
			0.313" (7.9 mm) (7.9

Belt Data									
	Default Rod Material, Diameter 0.24 in		rength	•	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
Polypropylene	Polypropylene	1,800	26,300	34 to 220	1 to 104	1.40	6.83		
Polyethylene	Polyethylene	1,200	17,500	-100 to 150	-73 to 66	1.44	7.03		

		Open H	linge
	in	mm	
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.36	9.1	
Opening Size (approximate)	0.26 × 0.48	6.7 × 12.3	
Open Area	45	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Second head	led; headed	
Product	t Notes		
Contact Intralox for precise belt before designing equipment or o	rdering a belt.		7006000000000000
 Provides a smooth surface and a generation handling. 			
Uses double-headed hinge rods, so	-	-	
 Each belt material has a default roc available. Intralox can help identify combination for your application. 			
 Detailed material information is pro Ideal where air cooling, washing, or 		10.	
For stronger belt performance, seeFlights and sideguards are available		***********	
			2.00" NOM. (50.8 mm) 2.00" NOM. (50.8 mm) 2.00" NOM. (50.8 mm) 0.313" (7.9 mm) (15.9 mm) (15.9 mm)

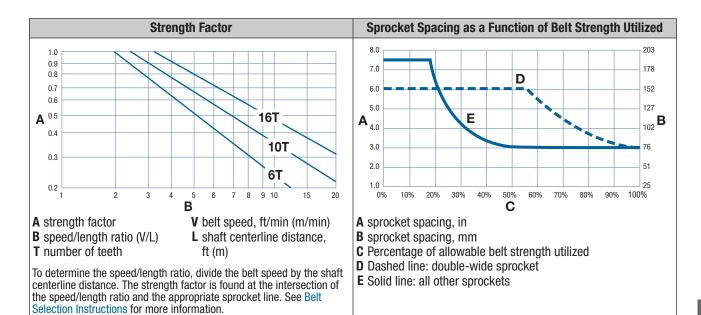
Belt Data										
Default Rod Material, Diameter 0.24 in		Belt St	rength		ure Range 1uous)	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene	Polypropylene	300	4,380	34 to 220	1 to 104	1.04	5.08			
Polyethylene	Polyethylene	200	2,920	-50 to 150	-46 to 66	1.12	5.47			

Belt Wi	dth Range ^a	Sprocket and Suppor Minimum Number of Sprockets		strips	
in	mm	Per Shaft ^b	Carryway	Returnway	
2	51	1	2	2	
4	102	1	2	2	
6	152	2	2	2	
7	178	2	2	2	
8	203	2	2	2	
10	254	2	3	2	
12	305	3	3	2	
14	356	3	3	3	
15	381	3	3	3	
16	406	406 3 3		3	
18	457	3	3	3	
20	508	3	4	3	
24	610	5	4	3	
30	762	5	5	4	
32	813	5	5	4	
36	914	5	5	4	
42	1,067	7	6	5	
48	1,219	7	7	5	
54	1,372	9	7	6	
60	1,524	9	8	6	
72	1,829	11	9	7	
84	2,134	13	11	8	
96	2,438	13	12	9	
120	3,048	17	15	11	
144	3,658	21	17	13	
other width	ns, use an odd num (191 mm) cen	ber of sprockets at maximum 7.5 in terline spacing. ^c	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 mm centerline spacing	

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.36 in (9.1 mm) increments beginning with minimum width of 2 in (51 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



							Molded Sprockets										
Number of Teeth		Nom. Pitch Diameter		Nom. Outer Diameter		Nom. Hub Width		vailable I	Bore Size	es							
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm							
6 (13.40%)	4.0	102	3.9	99	1.5	38		1.5		40							
10 (4.89%)	6.4	163	6.4	163	2.5	64		1.5, 2.5		40, 60							
16 (1.92%)	10.1	257	10.3	262	2.5	64		1.5, 2.5		40							

							Double \	Nide Rir	n Sproc	kets	
Number of Teeth				A	/ailable E	Bore Size	es				
(Chordal							1	Square		-	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
10 (4.89%)	6.4	163	6.4	163	2.5	64		1.5		40	

	Metal Abrasion Resistant Sprocke									
Number of Teeth		Pitch neter	-	Outer 1eter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.4	163	6.4	163	1.1	28		1.5, 2.5		40, 60
16 (1.92%)	10.1	257	10.3	262	1.1	28		1.5, 2.5		40, 60, 65

Streamline Flights

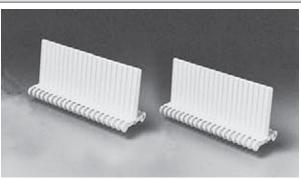
		ou ou ninno i	igino
Available F	light Height		
in	mm	Available Materials	
1	25		
2	51	Polypropylene, polyethylene	
3	76		
 Each flight ex No fasteners 		enter of the module, molded as one part.	
An ovtoncion	can be wolded a	t a 45 degree angle to greate a best flight	

- An extension can be welded at a 45-degree angle to create a bent flight. Contact Intralox Customer Service for availability.
- Can be enlarged to 6 in (152 mm) high with a welded extension.
- Minimum indent without sideguards: 0.7 in (18 mm).
- Custom flight heights are available. Contact Intralox Customer Service for more information.

Double No-Cling Flights

Available F	light Height					
in	mm	Available Materials				
3	3 76 Polypropylene, polyethylene					
Vertically ribbed for product release.						
 Each flight extends from the center of the module, molded as one part. No fasteners are required. 						
 An extension Contact Intra 	can be welded a lox Customer Ser	t a 45-degree angle to create a bent flight. vice for availability.				

- Can be enlarged to 6 in (152 mm) high with a welded extension.
- Minimum indent without sideguards is 0.7 in (18 mm).
- · Custom flight heights are available. Contact Intralox Customer Service for more information.



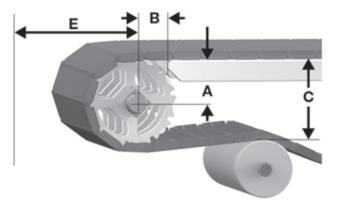
2025 Engineering Manual-Modular Plastic Belts

	Ribbed Flights									
Available F	light Height									
in	mm	Available Materials								
1.25	32	Polypropylona, polyothylona								
3	76	Polypropylene, polyethylene								
 Each flight ris buttress on the 	ses out of an Ope he back side. No	n Grid module and has a triangular-shaped fasteners are required.								
• Can be enlarg	ged to 6 in (152 r	nm) high with a welded extension.								
Minimum ind	ent without sideç	guards: 0.7 in (18 mm).	1/17							

		Sidegua	ds
Availa	ble Sizes		
in	mm	Available Materials	
2	51		
3	76	Polypropylene, polyethylene	
4	102		
6	152	1	
product. Th	is is called a produ	the back ends angled inward, toward the uct-friendly orientation. On request, the ward, toward the conveyor sides.	
	-	s. No other fasteners required.	
 Standard ga 	ap between sidegu	lards and flight edge: 0.3 in (8 mm)	• •
Minimum in	ident: 0.7 in (18 m	ım)	

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 9: A, B, C, and E drive dimensions

			S200 Conv	eyor Frame Di	mensions	5				
S	procket Des	scription A B C			I	E				
Pitch [Diameter	Number	Range (Bottom to Top) ^a in mm				in	mm		
in	mm	of Teeth			in	mm			in	mm
	•	Flush Grid, Open Grid, Open Hinge								
4.0	4.0 102 6 1.42–1.69 36-43 2.20 56 4.10 104 2.38 60								60	
6.4	163	10	2.77–2.92	70-74	3.00	76	6.50	165	3.61	92
10.1	257	16	4.72–4.81 120-122		3.20	81	10.20	259	5.50	140
^a For gener	al applications	and applications wh	ere end transfer of tin-sen	sitive product is po	t critical us	e the hottom	of the rang	۵		

For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

		S200 Dead Plate Gap			
	Sprocket Description	Minimum Gap			
Pitch D	iameter				
in	mm	Number of Teeth	in	mm	
4.0	102	6	0.268	6.8	
6.4	163	10	0.160	4.1	
10.1	257	16	0.100	2.5	

		Flush	Grid
	in	mm	
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.33	8.4	
Opening Size (approximate)	0.25 × 0.18	6.4 imes 4.6	
Open Area	17	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	See Produ	ict Notes.	Citizen Citation
Product	Notes		000000000000000000000000000000000000000
 Contact Intralox for precise belt m before designing equipment or ord Smooth upper surface and straightfo movement. Uses headed rods for belts without S unheaded rods for belts with Slidelox Slidelox rod retention is recommende and wider. Each belt material has a default rod r available. Intralox can help identify th combination for your application. Detailed material information is provi Flights and sideguards are available. 	lering a belt. rward design prov lidelox rod retention rod retention. ed for belts 6.0 ft (material. Other roc ne best belt and ro	ide free product on. Uses 1829mm) wide I materials are d material	2.00" NOM. (50.8 mm) 0.313* (7.9 mm) 0.625" (15.9 mm)

		Belt Data					
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperature Range (continuous)		Belt Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	2,400	35,000	34 to 220	1 to 104	1.82	8.89
Polyethylene	Polyethylene	1,800	26,300	-100 to 150	-73 to 66	1.90	9.28
Acetal	Polypropylene	3,200	46,700	34 to 200	1 to 93	2.77	13.51
Acetal ^a	Polyethylene	3,000	43,800	-50 to 70	-46 to 21	2.77	13.51
^a Polyethylene rods can be used in cold a	oplications when impacts or suc	lden starts/stop	s occur. Please	e note lower rating			

		Raise	l Rib		
	in	mm			11
Pitch	2.00	50.8			
Minimum Width	Coo Dro d				
Width Increments		ict Notes.			
Opening Size (approximate)	0.25 × 0.24	6.4 × 6.1	L'ALLAN		
Open Area	26	6%			Ale.
Product Contact Area	36	6%	1		6
Hinge Style	Clo	sed			
Rod Retention; Rod Type	See Produ	ict Notes.		37	5
				A CAL	6
Produc	et Notes				f
Contact Intralox for precise belt before designing equipment or	ordering a belt.				
All S400 Raised Rib polyethylene				hhh	4
 All S400 Raised Rib polypropylene system and unheaded rods. 					
 Slidelox are glass-reinforced poly resistance, Slidelox are also availa Endurated as advance battere 	propylene. For improvable in polyvinylidene	ved chemical e (PVDF) for			I
 Enduralox polypropylene belts. Each belt material has a default ro available. Intralox can help identif combination for your application. 				1000	
Detailed material information is pr	rovided in Product Li	ne.			
Use with finger transfer plates to i discharge.	reduce tippage at inf	eed and			-
For stronger belt performance, see				2.00" NOM. (50.8 mm)	
Raised ribs extend 0.25 in (6.4 mi	,				
 Custom-built in widths from 1.8 ir and 3.5 in (89 mm) and up for pol increments. 			0.563" (14.3 mm)		Ð

Belt Data								
	Default Rod Material, Diameter 0.24 in	Temperature Range Belt Strength (continuous)			0	Belt	Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²	
Polypropylene	Polypropylene	2,400	35,000	34 to 220	1 to 104	1.95	9.52	
Polyethylene	Polyethylene	1,800	26,300	-100 to 150	-73 to 66	1.98	9.67	
Enduralox polypropylene	Polypropylene	2,400	35,000	34 to 220	1 to 104	1.95	9.52	

		Open H	Hinge
211	in	mm	
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.25	6.4	
Opening Size (approximate)	0.47 × 0.18	11.9 × 4.6	Maximum (1997)
Open Area	30	%	The second
Product Contact Area	40	%	and the second sec
Hinge Style	Ор	en	
Rod Retention; Rod Type	Second head	ded; headed	
Product	Notes		
Contact Intralox for precise belt is before designing equipment or of the second	rdering a belt.		
 Large, open area improves airflow, Shares heavy-duty rating with othe Has double-headed hinge rods, so the Each belt material has a default root available. Intralox can help identify combination for your application. 	r belts in this series the belt edge is not material. Other roo	fully flush. I materials are	
Detailed material information is proFlights and sideguards are available		10.	
For more hygienic options, see S80	0 and \$1600.		Y S S S S S S S S S S S S S S S S S S S
			2.00" NOM. (50.8 mm) 2.00" NOM. (50.8 mm) 0.313" (7.9 mm) (7.9 mm) (7.9 mm) (15.9 mm)

		Belt Data					
	Default Rod Material, Diameter 0.24 in	Belt St	rength	•	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	1,550	22,600	34 to 220	1 to 104	1.16	5.66
Polyethylene	Polyethylene	950	13,900	-50 to 150	-46 to 66	1.24	6.06

		Flat 1	Гор
	in	mm	The second s
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.33	8.4	
Opening Size	-	-	
Open Area	00	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	See Produ	ict Notes.	
Produ	ict Notes		
 Contact Intralox for precise be before designing equipment of Smooth upper surface and straig movement. 	r ordering a belt.		าทากการที่สาวาร
 All S400 Flat Top with abrasion r Slidelox rod retention. 	resistant rods are avail	able with	
 Slidelox rod retention is recomm and wider. 	ended for belts 6.0 ft (1829 mm) wide	
 Use headed rods for belts withou rods with Slidelox rod retention. 			
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro	l materials are d material	าทานนนนนนนนน
Detailed material information is	provided in Product Lir	ie.	
Use abrasion resistant split spro	ckets with acetal S400	Flat Top.	2.00" NOM. (50.8 mm) 2.00" NOM. (50.8 mm)
 Flights and sideguards are available 			0.313"
 For stronger belt performance, s 	ee Series 4500 Flat To	р.	(7.9 mm) (0.625) (15.9 m) (15.9 m)
		Belt D	

		Belt Data						
Default Rod Ma Diameter 0.2		Belt S	trength	Temperati (contin	•	Belt	Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²	
Polypropylene	Polypropylene	2,400	35,000	34 to 220	1 to 104	1.81	8.82	
Polyethylene	Polyethylene	1,800	26,300	-100 to 150	-73 to 66	1.90	9.28	
Acetal	Polypropylene	3,200	46,700	34 to 200	1 to 93	2.74	13.38	
Acetal ^a	Polyethylene	3,000	43,800	-50 to 70	-46 to 21	2.74	13.38	
^a Polyethylene rods can be used in cold a	^a Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.							

	N	lon S	kid				
Pitch Minimum Width Width Increments Opening Size Open Area Hinge Style Rod Retention; Rod Type	in n 2.00 5 3.5 3	nm 0.8 89 3.4 -	skid				
 Product Contact Intralox for precise belt m before designing equipment or ore Among highest strength rating of all Slidelox are glass-reinforced polyprod Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov For stronger belt performance, see S Skid Raised Rib. Contact Intralox Customer Service for 	neasurements and stock dering a belt. Intralox belts. opylene. material. Other rod materia the best belt and rod mater vided in Product Line. S4500 Non Skid and S4500	als are ial	0.085" (2.2 mm)			0.625 (15.9 m	
		Belt Da	ita				
	Default Rod Material, Diameter 0.24 in		ita It Strength	-	ure Range nuous)	Belt	Mass

2,720

2,400

39,700

35,000

-50 to 200

-34 to 220

-46 to 93

1 to 104

Nylon

Nylon

HSEC acetal

Polypropylene

14.09

8.84

2.88

1.81

Pitch Minimum Width Nidth Increments Dpening Size Dpen Area Hinge Style Rod Retention; Rod Type Product No Contact Intralox for precise belt mea before designing equipment or order Flush edges. Uses acetal rollers.	Clo Slidelox; r		
 Contact Intralox for precise belt mea before designing equipment or order Flush edges. Uses acetal rollers. 	otes		
 Uses stainless steel axles. Slidelox are glass-reinforced polypropyl Each belt material has a default rod ma available. Intralox can help identify the l combination for your application. Detailed material information is provide Allows for low back pressure accumula Roller diameter: 0.70 in (17.8 mm). Roller length: 0.825 in (20.9 mm). Standard roller indent: 0.90 in (23 mm) Distance to centerline of first roller: 1.3 Spacing between first and second roller Spacing between all other rollers: 2 in (Asurements and ring a belt. /lene. aterial. Other roo best belt and ro ed in Product Lin ation.) 3 in (33 mm) er: 1.8 in (46 mn		

	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contir	0	Belt	Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene	Nylon	2,200	32,100	34 to 200	1 to 93	2.44	11.94			
Acetal	Nylon	3,000	43,800	-50 to 200	-46 to 93	3.36	16.41			

	Transve	rse Roll	er Top [™] (TRT [™])
	in	mm	A MARSHARE STREET
Pitch	2.00	50.8	
Minimum Width	6	152	
Width Increments	2.00	50.8	A SAN AND AND AND AND AND AND AND AND AND A
Opening Size (approximate)	-	-	
Open Area	18	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; u	unheaded	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or of Flush edges. Uses acetal rollers. Stainless steel axles provide durab Slidelox are glass-reinforced polyp Each belt material has a default ro available. Intralox can help identify combination for your application. Detailed material information is pro Designed for 90-degree transfers. For stronger belt performance, see Roller diameter: 0.70 in (17.8 mm) Roller length: 0.825 in (20.9 mm). 	ordering a belt. ility and long-lasting ropylene. d material. Other rod the best belt and ro ovided in Product Lir S4400 Transverse F) performance. I materials are d material ne.	
 Roller spacing: 2 in (50.8 mm). Standard roller indent: 0.90 in (23 Distance to centerline of first roller Spacing between first and second Spacing between all other rollers: 2 	: 1.3 in (33 mm). roller: 1.8 in (46 mm	1).	0.18" (4.6 mm) (4.6 mm) (4.6 mm) (5.8 mm) (15.9 mm)

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt St	rength	•	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Polypropylene	Nylon	2,200	32,100	34 to 200	1 to 93	2.44	11.94		

0.85-ii	n Diameter	Transv	erse Roller Top [™] (TRT [™])
	in	mm	
Pitch	2.00	50.8	
Minimum Width	6	152	
Width Increments	2.00	50.8	
Opening Size	-	-	
Open Area	18	3%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Slidelox;	unheaded	
Produ	ct Notes		
 Contact Intralox for precise be before designing equipment or Uses acetal rollers. Stainless steel axles provide dura Slidelox flush edges. Slidelox are glass-reinforced poly Each belt material has a default ravialable. Intralox can help identic combination for your application. Detailed material information is p Designed for 90-degree transfers For stronger belt performance, se Roller diameter: 0.85 in (21.6 mr Roller length: 0.825 in (20.9 mm) 	ordering a belt. ability and long-lasting rod material. Other rod fy the best belt and ro provided in Product Lin s. ee S4400 Transverse n).	g performance. d materials are od material ne.	
 Standard roller indent: 0.90 in (23 mm). Distance to centerline of first roller: 1.3 in (33 mm). Spacing between first and second roller: 1.8 in (46 mm). Spacing between all other rollers: 2 in (50.8 mm). 			0.55° (14.2 mm) 0.25° (6.3 mm) 0.25° (6.3 mm) 0.25° (6.3 mm) 0.25° (6.3 mm) 0.25° (5.3 mm) (5.3 mm) (5.
		Belt	Data

Belt Data										
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperature Range (continuous)		Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft²	kg/m²			
Polypropylene	Nylon	2,200	32,100	34 to 200	1 to 93	2.81	13.71			

	0-De	gree Ang	gled Roller [™]
	in	mm	
Pitch	2.00	50.8	11000
Minimum Width	6	152	A NO
Width Increments	2.00	50.8	
Opening Size (approximate)	-	-	19 19
Open Area	11	1%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Barn door;	; unheaded	
Product			
Contact Intralox for precise belt n before designing equipment or or	dering a belt.	d stock status	
Uses Activated Roller Belt [™] (ARB [™])	,		
Black or grey polyurethane rollers and			
 Black polyurethane rollers are not re accumulations. 	ecommended for p	roduct	
• All rollers have an acetal core.			
Axles are stainless steel.			
Rollers are inline with the direction of	or boilt traiton	1	Innfinenefinenafiaar
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
 Detailed material information is prov 	vided in Product Li	ne.	
 Designed to run on a flat, continuou not recommended. 			
 When belt rollers are in motion, proo of the belt. When belt rollers are not speed. 	duct moves faster in motion, produc	than the speed t travels at belt	
 Product behavior varies depending of conveyor design, and belt speed. 		•	DIOIOIC
 Intralox can help you reach a more a behavior based on product and conv Intralox Customer Service for more i 	veyor characteristic	of product cs. Contact	
 Custom belts with any combination degree, or 60-degree angled rollers also include rollers oriented in differ Customer Service for more informat 	are available. Cus ent directions. Cor	tom belts can	0.125" (3.2 mm)
• 2.0 in (50.8 mm) roller spacing.			
 Not compatible with the 4.0 in (102 or all 5.2 in (132 mm) pitch diamete square bores. 			2.00" NOM. (50.8 mm) (3.2 mm)

Belt Data										
	Default Rod Material, Diameter 0.24 in	Palt Olympic ath		Temperati (contir	ure Range 1uous)	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene/black polyurethane	Nylon	1,600	23,400	34 to 200	1 to 93	2.65	12.94			
Polypropylene/grey polyurethane	Nylon	1,600	23,400	34 to 120	1 to 49	2.73	13.33			

30-Degree Angled Roller [™]										
	in	mm								
Pitch	2.00	50.8								
Minimum Width	6	152	10000							
Width Increments	2.00	50.8								
Opening Size (approximate)		-	0.00							
Open Area	11	0/2	0.0000000000000000000000000000000000000							
•	Clos									
Hinge Style			200 2 201							
Rod Retention; Rod Type	Barn door;	unneaded	Nº ROA I							
Product	Notes									
 Contact Intralox for precise belt measurement equipment or ordering a belt. 	nts and stock status b	efore designing								
Uses Activated Roller Belt (ARB) technology.			\overline{a} 00)0000000000000000000000000000000000							
Rollers are skewed 30 degrees from the direction										
Grey polyurethane rollers with an acetal core are	e available.									
Uses stainless steel axles. Such bolt metarial has a default and metarial. At										
 Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. 										
Detailed material information is provided in Product Line.			~000000000000000000000000000							
 Polyethylene belts require ultra-abrasion resista Any sprocket can be used on the idle shaft, exce teeth. 	nt polyurethane sprock ept for sprockets with lo	et on the drive shaft. ow back-tension	R R R R R							
 When belt rollers are in motion, product moves rollers do not rotate, product travels at belt spee 	faster than the speed of ed.	f the belt. When belt								
 Product behavior varies depending on shape an belt speed. Intralox can help you estimate produ characteristics. Contact Intralox Customer Servi 	ict behavior based on p	roduct and conveyor								
 Centering configuration is possible using two be of the conveyor. 										
 Custom belts with any combination of 0-degree angled rollers are available. Custom belts can al directions. Contact Intralox Customer Service fo 	so include rollers orient	e, or 60-degree ted in different								
Designed to run on a flat, continuous carryway.	A chevron carryway is i	not recommended.								
 Belt can be supported using parallel wearstrips Intralox Customer Service for more information. 										
 Alignment belts on a flat, continuous carryway r run flush along this wearstrip. 	equire a side wearstrip	. Install the belt to	0.125"							
 2 in (50.8 mm) roller spacing. Minimum holt width for polyothylong is 8 in (20)))		(3.2 mm)							
 Minimum belt width for polyethylene is 8 in (203 Polyethylene belts between 8 in (203 mm) to 10 lbf/ft. (6,570 N/m). 	,	t be derated to 450								
 Not compatible with the 4.0 in (102 mm) pitch d 	liameter split sprocket.									
 Not compatible with all 5.2 in (132 mm) pitch di square bores. 		2.5 in or 60 mm								
 If any moisture is present, the low-temperature 	limit of the polyethylen	e belt is 34° F (1° C).	2.00" NOM. 0.125" (50.8 mm) (3.2 mm)							

Belt Data										
	Default Rod Material, Diameter 0.24 in			Temperat (contii	ure Range 1uous)	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene/grey polyurethane	Nylon	1,600	23,400	34 to 120	1 to 49	2.64	12.89			
Polyethylene/grey polyurethane	Nylon	500	7,300	17 to 150	-8 to 65	2.93	14.31			

SERIES 400

	90-De	egree An	gled Roller [™]
	in	mm	
Pitch	2.00	50.8	1900 90 90
Minimum Width	6	152	
Width Increments	2.00	50.8	
Opening Size	-	-	
Open Area	11	1%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Barn door	; unheaded	TO CA WIT
			and the second sec
Produ	ict Notes		
 Contact Intralox for precise be before designing equipment or 		d stock status	www.www.www.www.www.
Black polyurethane rollers with a	an acetal core are avai	ilable.	
 Black polyurethane rollers are no accumulation conditions. 	ot recommended for p	roduct	
Axles are stainless steel.			MMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMMM
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro		
Detailed material information is	provided in Product Li	ne.	177666666666666666666666666666666666666
 Do not allow black polyurethane carryways or chevron carryways 		continuous	
Belt can be supported using parallel wearstrips placed between belt rollers. Contact Intralox Customer Service for more information.			
• Not compatible with the 4.0 in (1	02 mm) pitch diamete	er split sprocket.	0.125" (3.2 mm)
• Not compatible with all 5.2 in (13 2.5 in and 60-mm square bores.		r sprockets with	0.625" (15.9 mm)
• Roller spacing: 2.0 in (50.8 mm)			(50.8 mm) (3.2 mm)

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperati (contin	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Polypropylene/black polyurethane	Nylon	1,600	23,400	34 to 200	1 to 93	2.65	12.94		

0.78-in Diameter 90-Degree Angled Roller[™] in mm Pitch 2.0 50.8 Minimum Width 152.4 6 Width Increments 2.0 50.8 **Opening Size** --Open Area 11% Hinge Style Closed Rod Retention; Rod Type Barn door; unheaded **Product Notes** · Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Black acetal rollers are available. • Axles are stainless steel. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material • combination for your application. • Detailed material information is provided in Product Line. • Not compatible with the 4.0 in (102 mm) pitch diameter split sprocket. Not compatible with all 5.2 in (132 mm) pitch diameter sprockets with • 2.5 in and (60 mm) square bores. • Roller spacing: 2.0 in (50.8 mm). 0.08 in (2.0 mm) 0.625 in (15.9 mm)

		Belt Data					
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperat (contii	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene/black acetal	Nylon	1,600	23,400	34 to 200	1 to 93	2.65	12.94

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SERIES 400

2.0 in

(50.8 mm)

0.0⁶ in

(2.0 mm)

		Ball B
	in	mm
Pitch	2.00	50.8
Minimum Width	10	254
Width Increments	2.00	50.8
Opening Size	-	-
Open Area	0	%
Hinge Style	Clo	sed
Rod Retention; Rod Type	Snap-loc	k; headed

Product Notes

- Contact Intralox for precise belt measurements and stock status • before designing equipment or ordering a belt.
- Acetal balls protrude beyond top and bottom of belt. Module does not ٠ contact carryway.
- Each belt material has a default rod material. Other rod materials are ٠ available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Product movement is controlled by driving balls with a perpendicular secondary conveyor, underneath the main belt. •
- · Product moves faster than belt speed.
- Product speed varies, depending on shape and weight of product.
- A flat continuous carryway is required.
- Designed for applications that require product redirection, alignment, • transfer, diverting, palletizing, orientation, accumulation, or iustification.
- Install alignment configurations to run flush along the side wearstrip.
- Self-set retaining rings for locking sprockets are not recommended.

Polypropylene

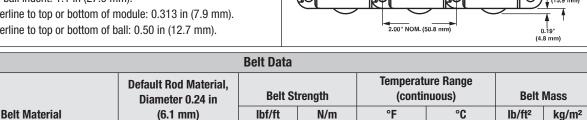
Polypropylene

• Ball diameter: 1.0 in (25.4 mm).

Acetal

Polypropylene

- Distance between balls: 2 in (50.8 mm).
- Standard ball indent: 1.1 in (27.9 mm).
- Rod centerline to top or bottom of module: 0.313 in (7.9 mm).
- Rod centerline to top or bottom of ball: 0.50 in (12.7 mm).



35,000

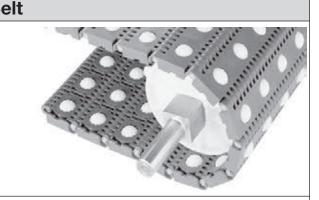
23.400

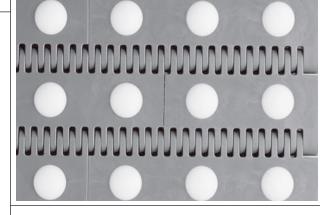
34 to 200

34 to 200

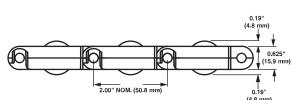
2,400

1.600









1 to 93

1 to 93

3.71

2.78

18.11

13.57

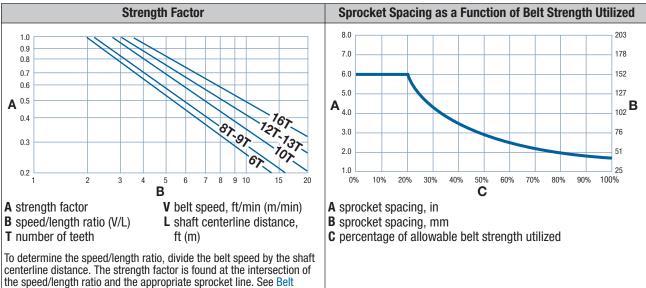
in		Minimum Number of Sprockets	wear	learstrips		
-	mm	Per Shaft ^b	Carryway	Returnway		
2	51	1	2	2		
4	102	1	2	2		
6	152	2	2	2		
7	178	2	2	2		
8	203	2	2	2		
10	254	2	3	2		
12	305	3	3	2		
14	356	3	3	3		
15	381	3	3	3		
16	406	3	3	3		
18	457	3	3	3		
20	508	5	4	3		
24	610	5	4	3		
30	762	5	5	4		
32	813	7	5	4		
36	914	7	5	4		
42	1,067	7	6	5		
48	1,219	9	7	5		
54	1,372	9	7	6		
60	1,524	11	8	6		
72	1,829	13	9	7		
84	2,134	15	11	8		
96	2,438	17	12	9		
120	3,048	21	15	11		
144	3,658	25	17	13		

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Flat Top, Flush Grid, and Raised Rib belts are available in 0.33 in (8.4 mm) increments beginning with a minimum width of 2 in (51 mm). The increment for Open Hinge belts is 0.25 in (6 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.

^d Ball Belt and some Angled Roller belts require a flat continuous carryway.



Selection Instructions for more information.

								lded Sp							
	This sprocket is compatible with all belts except Flus														
Number of Teeth		Pitch neter	-	Outer neter	. Hub dth	Available Bore Sizes									
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm					
6 (13.40%)	4.0	102	3.6	91	1.5	38		1.5		40					
8 (7.61%)	5.2	132	5.0	127	1.5	38		1.5, 2.5		40, 60					
10 (4.89%)	6.4	163	6.3	160	1.5	38	2.0	1.5, 2.5	82	40, 60, 70					
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5, 2.5		40, 60					
16 (1.92%)	10.1	257	10.2	259	1.5	38		1.5, 2.5, 3.5		40, 60, 90					

^a Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967(R1989) and metric key sizes are based on DIN standard 6885.

				Availabl	e for al	l belts e	except Fl	ush Grid	acetal, (Open Hing	
Number of Teeth	-	Pitch neter	-	Outer neter	-	. Hub dth	Available Bore Sizes				
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5, 2.5		40	
12 (3.41%)	7.8	198	7.7	196	1.5	38		2.5			
16 (1.92%)	10.1	257	10.2	259	1.5	38		2.5			

^aWhen using these sprockets, the maximum belt strength for all styles and materials is 1,000 lbf/ft (14,600 N/m). The sprocket temperature range is -40°F to 160°F (-40°C to 71°C).

Number	Nom.	Pitch	Nom.	Suter	-	tra Abı . Hub	rasion R	esistant	: Polyur	ethane \$	Sprockets ^a
of Teeth	Dian	neter	Dian	neter	Width		A	vailable E	Bore Size	es	
(Chordal							Round	Square	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5, 2.5		40	

			Molde	d Tootł	n Plate	Split L	ow Bacl	k Tensio	n Polyu	rethane					
	Available for all belts except Open Hinge and														
Number of Teeth		Pitch neter	-	Outer neter	. Hub dth	Available Bore Sizes									
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm					
10 (4.89%)	6.4	163	6.3	160	1.70	43		1.5, 2.5		40, 60					
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5, 2.5		40, 60					
16 (1.92%)	10.1	257	10.2	259	1.5	38	3.5	1.5, 2.5, 3.5		90					

^a Recommended for use on drive shafts only. There is very little belt tension when a belt engages the idle sprockets. In some applications, the belt does not have enough tension to engage the added low back tension teeth, causing the belt to disengage on the idle sprockets.

				Мо	lded To	oth Pla	ate Split	Polyure	ethane (Compos	ite Sprockets
Number of Teeth		Pitch neter	Nom. Dian	Outer 1eter	-	. Hub dth	A	/ailable E	Bore Size	es	
(Chordal					•					-	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
10 (4.89%)	6.4	163	6.3	160	1.7	43		1.5		40	
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5		40	A AND
16 (1.92%)	10.1	257	10.2	259	1.5	38	4.0	3.5		90	

		;	Split M	etal wi	th Poly	uretha	ne (FDA) Joinin	g Plates	s Reduc			
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	Available Bore Sizes					
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm			
8 (7.61%)	5.2	132	5.0	127	1.5	38		1.5		40			
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5, 2.5		40, 60			
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5, 2.5		40, 60			

Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	Available Bore Sizes		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
16 (1.92%)	10.1	257	10.2	196	2.0	51		2.5		60

^a For wet applications, contact Intralox Customer Service.

							HR N	lylon Sp	rockets	6	
Number of Teeth	-	Pitch neter	Nom. Dian	Outer 1eter	Nom. Wie		A	vailable E	Bore Size	es	
(Chordal							1	Square		-	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
10 (4.89%)	6.4	163	6.3	160	1.5	38		1.5, 2.5			
12 (3.41%)	7.8	198	7.7	196	1.5	38		1.5, 2.5		40, 60	
16 (1.92%)	10.1	257	10.2	259	1.5	38		1.5, 2.5, 3.5		60, 90	

							Split	Metal S	Sprocke	t	
Number of Teeth	Discussion Discussion Width						A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
6 (13.40%)	4.0	102	3.6	91	1.5	38		1.5		40	
8 (7.61%)	5.2	132	5.0	127	1.5	38	1, 1-3/16, 1-1/4, 1-7/16	1.5	20, 30, 40	40, 60	York more
10 (4.89%)	6.4	163	6.3	160	1.5	38	1, 1-3/16, 1-1/4, 1-3/8, 1-7/16, 1-1/2, 1-15/16	1.5, 2.5	20, 40	40, 60	
12 (3.41%)	7.8	198	7.7	196	1.5	38	1-7/16, 1-15/16	1.5, 2.5	40	40, 60	
16 (1.92%)	10.1	257	10.2	259	1.5	38	1-7/16, 1-15/16	1.5, 2.5, 3.5		40, 60, 90	

^a Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967(R1989) and metric key sizes are based on DIN standard 6885.

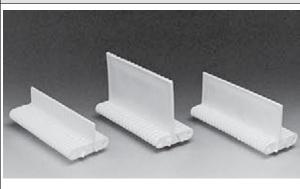
				Split Suppor	t Wheel	
Pitch Dia	meter		Available B	ore Sizes		
					Square	
in	mm	Round in	Square in	Round mm	mm	
6.4	163	1	1.5, 2.5			Interior Interi

Flush Grid Base Flights (Streamline/No-Cling)

Available F	light Height		
in	mm	Available Materials	
1	25		A DECEMBER OF STREET,
2	51	Polypropylene, polyethylene	
3	76		

• Each flight extends from the center of the module, molded as one part. No fasteners are required.

- The Streamline side of the flight is smooth and the No-Cling side is vertically ribbed.
- An extension can be welded at a 45-degree angle for a bent flight.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent without sideguards: 0.8 in (20 mm) and the minimum indent for a Slidelox edge (without sideguards) is 1.4 in (36 mm).



		Flush Grid Base Flights (Double No-Cling)
Available F	light Height		
in	mm	Available Materials	
6	152	Polypropylene, polyethylene	
 Each flight ex No fasteners 		enter of the module, molded as one part.	
Custom flight more informa		lable. Contact Intralox Customer Service for	
Minimum ind	ent without sideo	guards: 0.8 in (20 mm).	
Minimum ind	ent for a Slidelox	edge without sideguards: 1.4 in (36 mm).	
• 45-degree bent flights are available in polypropylene with a 3 in (76 mm) tall base and with a 1 in (25 mm) or 2 in (51 mm) extension.			

Open Hinge Base Flights (Streamline/No-Cling)				
Available F	light Height			
in	mm	Available Materials		
1	25			
2	51	Polypropylene, polyethylene		
3	76			
 Each flight ex No fasteners 		enter of the module, molded as one part.		
 Streamline/N on one side. 	o-Cling flights ar	e smooth on one side and vertically ribbed		
 Custom flight heights are available. Contact Intralox Customer Service for more information. 				

• Flights can be extended to 6 in (152 mm) high (welded extension). The extension can also be welded at a 45-degree angle for a bent flight.

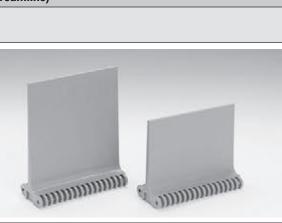
• Minimum indent without sideguards: 0.6 in (15 mm).

Flat Top Base Flights (Streamline)

	light Height	Available F
Available Materials	mm	in
Polypropylong, polyothylong, gootal	102	4
Polypropylene, polyethylene, acetal	152	6

• Streamline flights are smooth on both sides.

- Each flight extends from the center of the module, molded as one part. No fasteners are required.
- Flat Top base flights cannot be used with Flush Grid belts.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent without sideguards: 0.8 in (20 mm) Minimum indent for a Slidelox edge without sideguards: 1.4 in (36 mm).



		Sideguard	ls
Availab	le Sizes		
in	mm	Available Materials	
2	51		
3	76	Polypropylona, polyothylona	
4	102	Polypropylene, polyethylene	
6	152		
Standard ove	erlap design ensu	res product containment.	
Fastens to be	elt with hinge rod	s. No other fasteners required.	

- Sideguards are installed with the back ends angled inward, toward the product. This is called a product-friendly orientation. On request, the back ends can be angled outward, toward the conveyor sides.
- When going around the 6- and 8-tooth sprockets, sideguards fan out, opening a gap at the top that can allow small products to fall out. The sideguards stay completely closed when going around the 10-, 12- and 16-tooth sprockets.
- Standard gap between sideguards and flight edge: 0.4 in (10 mm)
- Minimum indent: 0.8 in (20 mm)



Hold Down Tabs

- Available on Non Skid and Flat Top belts.
- Carryway wearstrips or rollers that engage the tabs are only required at the transition between the horizontal sections and angled sections. This approach reduces initial system cost as well as ongoing maintenance cost and effort.
- Ensure that adequate lead-in radii and/or angles are used to prevent the possibility of snagging the tab on the frame.
- Design the conveyor with a carryway radius at the transition between horizontal sections and angled sections. This radius must be at least 48 in (1.22 m) for belts that are loaded near the belt strength rating. This radius is one of the most important factors to consider when designing highly loaded conveyors that utilize hold down tabs.
- Tabs can be spaced along the length of the belt at either4 in (101.6 mm) or 6 in (152.4 mm). Due to the potential for mistracking, avoid tab spacings greater than 6 in (152.4 mm).
- Strength rating for each hold down tab: 100 lbf (445 N) of force perpendicular to the hold down surface.

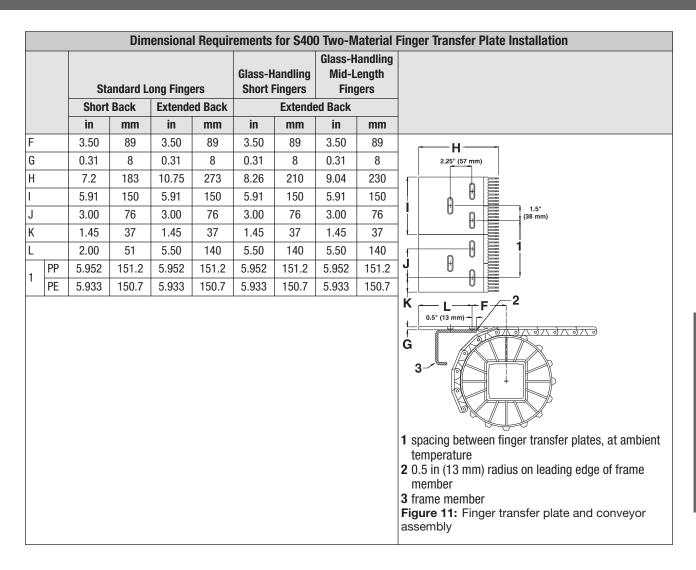


				Insert Nuts
Available E	Base Belt Style;	Material	Siz	es
Flat Top;	; acetal, polyprop	oylene	5/16 in–18 1.25	
	Maximum Fi	xture Weight	Fastener Specifi	
Belt Material	lb/nut ^a	kg/nut ^a	in-lbf	N-m
Acetal	200	91	120	13.5
Polypropylene	175	79	65	7.3
Insert nuts allow				
 Ensure attachm rotation around 		to more than one	e row do not pro	ohibit belt
 For attachment backbend is con 	bases that extern nsidered during		e rows, ensure	reduced
 Do not place sp 	rockets in-line v	vith insert nuts.		
 All nut placeme when placing a options available 		Intralox Custome		
 See S4500 Flat 				
	-	f the belt: 2 in (5	,	
 Minimal distance (34 mm). 	ce between nuts	across the width	of the belt: 1.3	33 in
Spacing along t	he length of the	belt: 2 in (50 mm	n) increments.	
^a Fixture weight only	y. Product weight r	need not be include	ed.	

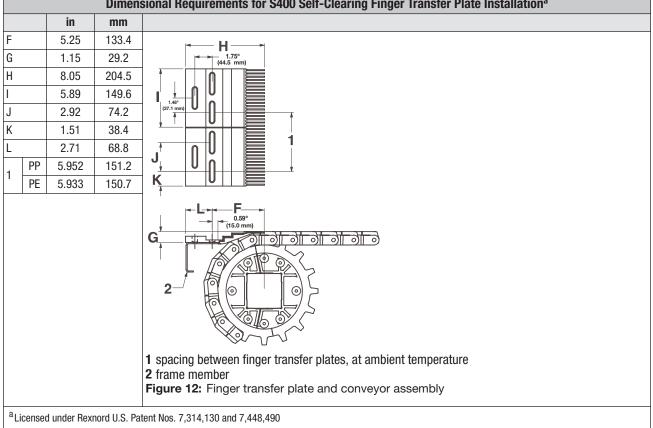
			Finger Transfei	Plates	
Availabl	e Widths	Number of			
in	mm	Fingers	Available Materials		
6	152	18	Polypropylene		
between the	oduct transfer an belt ribs, allowing 1gages the sproc	g a smooth contil	ns. The 18 fingers extend nuation of the product flow	11	
			supplied shoulder bolts. keep foreign materials out		
The finger tra	ansfer plates for S	Series 400 are th	e same for Series 1200.		

				Dimensional Requirements for S400 Finger Transfer Plate Installation
		in	mm	
F		3.50	89	رمــــــ H ــــــم
G		0.31	8	
Н		7.25	184	
Ι		5.91	150	
J		3.00	76	
Κ		1.45	37	
L		2.00	51	
М	PP	5.952	151.2	
IVI	PE	5.933	150.7	
				F F L- G G G G G G G G G G G G G G G G G G G

Av in 6 Standard Long fingers with a short packplate	railable Widths mm 152 Available Conf Standard Extended Back	No. of Fingers 18 igurations	Available Materials Glass-filled thermoplastic fingers, acetal backplate
6 Standard ong fingers with a short	152 Available Conf	18	Glass-filled thermoplastic
Standard .ong fingers vith a short	Available Conf		
_ong fingers with a short		igurations	•
_ong fingers with a short	Standard Extended Back		
with a short			Glass-Handling
vith a short		Short finge	rs with extended backplate
vith a short		Short fingers with extended backplate short fingers with short backplate ^a mid-length fingers with a short backplate mid-length fingers with extended backplate d with a low-friction backplate. problems. The 18 fingers extend continuous product flow as the belt	
Jaukpiale	Long fingers with an extended backplate	mid-ler	
		mid-lenç	
-			•
between the engages the	belt ribs, allowing smooth, c	ontinuous p	roduct flow as the belt
	lder bolts and bolt covers are I finger transfer plates (FTPs)		r installing the standard
Mounting ha	rdware for the glass-handlin rdware consists of stainless ecure fastening for tough, gla	steel oval w	ashers and bolts, which
material poly	ons that require better chem ypropylene standard FTP. Mor es plastic shoulder bolts and s	unting hardv	vare for this finger transfer
cans. Short f These finger	provide good support for un fingers are sturdy enough for are designed to resist brea lass, the individual fingers yi ge.	harsh, brok king, but if c	en-glass applications. confronted with deeply
 Short backpl attachment s 	late has two attachment slots slots.	s and the ex	tended backplate has three
 S400 and S1 	200 use the same FTPs.		
	duct transfer with the glass-h mm) PD, 16-tooth sprockets		jer transfer plates, use

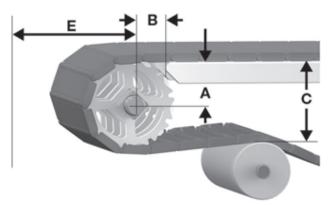


				Self-Cleari	ng Finger T
	Available	e Width	No. of		
i	in	mm	Fingers	Available M	laterials
6	6	152	18	Glass-filled the	ermoplastic
desig	gned to w	ork together.		nsfer edge belt tha	
loadi	ing applic	ations		the belt in heavy	
	, smooth to tainers.	op surface prov	ides excellent	lateral movement	t of
		jes, headed rod resistance.	retention syst	em, and nylon ro	ds for
plate	es. Transfe	need for a swe ers are smooth a ible for all conta	and 100% self	sher arm, or wide -clearing, making	e transfer g right angle
Ideal	l for warm	er/cooler applic	cations with fre	equent product ch	nangeovers.
		system allows s d transfers.	ame transfer	belt use for both l	left-hand
	npatible wi ed convey		nd style of Intra	alox belt on the di	ischarge and
 Capa 1200 	able of tra 0, and Ser	nsferring produ ies 1900 Raised	ct to and from d Rib belts.	Intralox Series 40	00, Series
Robu	ust design	for durability in	i tough, glass :	applications.	
stain	nless steel	d and secured to bolts and oval contraction.	o mounting pla washers that a	ates of any thickn allow movement v	ess with with the belt
Stain	nless steel	l hardware is so	ld separately.		
a ioono	ood undor F	Pownord II C. Doto	nt Noo. 7 214 19	30 and 7,448,490	
LICENS			111 1103. 7,514,13	50 anu 7,440,450	
		Dimensi	onal Require	ements for S40	00 Self-Cle
	in	mm			
F	5.25	133.4		H+	
C	1 1 5	20.2		1 75"	



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 13: A, B, C, and E drive dimensions

			S	400 Conveyor F	rame Dime	ensions				
Spro	cket Descri	iption		4	1	3	()	I	E
Pitch D	iameter	Number	Range (bot	tom to top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Flat Top, Flush	Grid, Open H	linge				
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.38	60
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	2.99	76
5.8	147	9	2.44-2.61	62-66	2.70	69	5.95	151	3.49	89
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.61	92
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.24	108
8.4	213	13 ¹	3.75-3.87	95-98	3.22	82	8.46	215	4.74	120
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.50	140
				Raise	ed Rib		1	1		1
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.75	70
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	3.24	82
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.99	101
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.49	114
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.88	149
				Non	Skid		1			
4.0	102	6	1.42-1.69	36-43	1.60	41	4.09	104	2.46	62
5.2	132	8	2.10-2.30	53-58	1.98	50	5.31	135	3.07	78
5.8	147	9	2.43-2.61	62-66	2.31	59	5.93	151	3.38	86
6.4	163	10	2.77-2.92	70-74	2.26	57	6.56	167	3.70	94
7.8	198	12	3.42-3.55	87-90	2.60	66	7.81	198	4.32	110
8.4	213	13	3.74-3.87	95-98	2.84	72	8.44	214	4.64	118
10.1	257	16	4.71-4.81	120-122	2.97	75	10.34	263	5.59	142

Spro	cket Descr	iption		Α	1	3	0	;		E
Pitch D	iameter	Number	Range (bot	tom to top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Roller Top, Tran	sverse Rolle	r Top				
4.0	102	6	1.42-1.69	36-43	2.20	56	4.10	104	2.56	65
5.2	132	8	2.10-2.30	53-58	2.60	66	5.30	135	3.17	81
6.4	163	10	2.77-2.92	70-74	2.77	70	6.50	165	3.79	96
7.8	198	12	3.42-3.55	87-90	3.00	76	7.90	201	4.42	112
10.1	257	16	4.72-4.81	120-122	3.20	81	10.20	259	5.68	144
			0.	85-in Diameter T	ransverse R	oller Top				
4.0	102	6	1.27-1.54	32-39	1.72	44	3.96	101	2.48	63
5.2	132	8	1.95-2.15	50-55	2.13	54	5.18	132	3.09	78
6.4	163	10	2.62-2.77	67-70	2.43	62	6.42	163	3.71	94
7.8	198	12	3.27-3.40	83-86	2.78	71	7.68	195	4.34	110
10.1	257	16	4.56-4.66	116-118	3.20	81	10.20	259	5.60	142
			Angled	l Roller (0-, 30-, 4	45-, 60-, and	90-degree	;) ^b			
4.0	102	6	1.29-1.56	33-40	1.70	43	4.00	102	2.50	64
5.2	132	8	1.98-2.18	50-55	2.11	53	5.23	133	3.11	79
6.4	163	10	2.64-2.80	67-71	2.40	61	6.47	164	3.74	95
7.8	198	12	3.29-3.43	84-87	2.75	70	7.73	196	4.36	111
10.1	257	16	4.59-4.69	117-119	3.16	80	10.25	260	5.63	143
				Ball	Belt ^b					
4.0	102	6	1.23-1.50	31-38	1.75	44	4.00	102	2.56	65
5.2	132	8	1.91-2.11	49-54	2.16	55	5.23	133	3.18	81
6.4	163	10	2.58-2.74	65-69	2.47	63	6.47	164	3.80	96
7.8	198	12	3.23-3.36	82-85	2.82	72	7.73	196	4.43	112
10.1	257	16	4.53-4.63	115-117	3.25	82	10.25	260	5.69	144

^b To establish dimensions, use the top of the roller as the top of the belt and the bottom of the roller as the bottom of the belt.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

		S400 Dead Plate Gap		
	Sprocket Description		Minimu	um Gap
Pitch D	iameter			
in	mm	Number of Teeth	in	mm
4.0	102	6	0.268	6.8
5.2	132	8	0.200	5.1
5.8	147	9	0.178	4.5
6.4	163	10	0.160	4.1
7.8	198	12	0.130	3.3
8.4	213	13	0.121	3.1
10.1	257	16	0.100	2.5

			Flat T	ор			
	in		mm				
Pitch	0.31	5	8.0		and the second s		A.
Minimum Width	4	-	101.6			Constant of the owner owner owner owner owner	Set 1
Maximum Width	62		1575			State-	
Width Increments	1.00)	25.4	The state of the s			
Open Area		0%	20.1				
Hinge Style		Open		(10		
Rod Retention; Rod Ty	pe Occlud	ded edge; un	headed		O	A.M.	
	Product Notes			and the second se		in West	Contractory of the local division of the loc
available. Intralox ca combination for youDetailed material intRod diameter: 0.140	formation is provided in Prod	and rod mat	erials are terial	A preferred run dire			0.24 in (6.0 mm)
				↓ 0.315 in (8.0 mm)			≥∕
			Belt Da	(8.0 mm)			
	Standard Rod Material	Belt St	Belt Da	(8.0 mm)		Belt V	Veight
Belt Material	Standard Rod Material Ø 0.14 in (3.6 mm)	Belt St Ib/ft		(8.0 mm)	nge (continuous) °C	Belt V Ib/ft²	Veight kg/m ²
Belt Material Acetal		Ib/ft 375	trength	(8.0 mm) ita Temperature Ran °F -50 to 200			
Acetal	Ø 0.14 in (3.6 mm)	lb/ft	trength kg/m	(8.0 mm) Ita Temperature Rai	°C	lb/ft ²	kg/m²
Acetal Acetal	Ø 0.14 in (3.6 mm) Acetal	Ib/ft 375	trength kg/m 560	(8.0 mm) ita Temperature Ran °F -50 to 200	° C -46 to 93	lb/ft² 1.08	kg/m² 5.27
Acetal Acetal LMAR	Ø 0.14 in (3.6 mm) Acetal LMAR	Ib/ft 375 325	trength kg/m 560 480	(8.0 mm) ita Temperature Ran °F -50 to 200 -50 to 200	° C -46 to 93 -46 to 93	Ib/ft² 1.08 0.91	kg/m² 5.27 4.4426
	Ø 0.14 in (3.6 mm) Acetal LMAR LMAR	lb/ft 375 325 275	kg/m 560 480 410	(8.0 mm) Ita Temperature Rat °F -50 to 200 -50 to 200 -50 to 290	°C -46 to 93 -46 to 93 -46 to 143	Ib/ft² 1.08 0.91 0.87	kg/m ² 5.27 4.4426 4.2473

		Flush	Grid	
	in	mm		999A
Pitch	0.315	8.0		
Minimum Width	4.0	101.6		E
Maximum Width	62	1575		
Width Increments	1.0	25.4		1
Opening Size (approximate)	0.4 x 0.14	10.2 x 3.5		
Open Area	32	2%		
Hinge Style	Ор	en	from / Sel	
Rod Retention; Rod Type	Occluded edg	ge; unheaded		
Produc	t Notes			
 available. Intralox can help identif combination for your application. Detailed material information is pi Designed for orientation-sensitive Rod diameter: 0.140 in (3.6 mm) Designed for 0.236 in (6 mm) diar 	rovided in Product Lin transfers.			JUDD
			0.12 in (3.0 mm) ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	

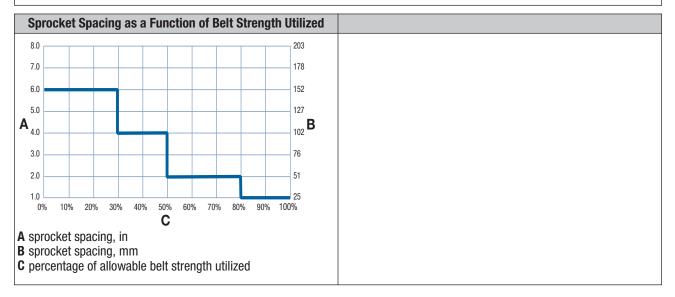
Belt Data										
	Default Rod Material, Diameter 0.14 in	Belt S	trength	Temperati (contin	ure Range 1uous)	Belt Mass				
Belt Material	(3.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal	Acetal	300	4,380	-50 to 200	-46 to 93	0.87	4.25			
Acetal	LMAR	250	3,650	-50 to 200	-46 to 93	0.84	4.10			
LMAR	LMAR	200	2,920	-50 to 290	-46 to 143	0.72	3.52			
РК	РК	200	2,920	-40 to 176	-40 to 80	0.71	3.4662			
РК	Acetal	275	4,010	-40 to 176	-40 to 80	0.74	3.6127			

Belt Wid	th Range ^a	Minimum Number of	Wear	strips	
in	mm	Sprockets per Shaft ^b	Carryway	Returnway	
4	102	2	2	2	
6	152	2	2	2	
8	203	3	3	3	
12	305	3	3	3	
18	457	4	4	4	
24	610	5	4	4	
30	762	6	5	5	
36	914	7	6	6	
42	1,067	8	7	7	
48	1,219	10	8	8	
54	1,372	11	9	9	
60	1,524	12	10	10	
other widths, use an) centerline spacing.	odd number of sprocke	Maximum 6 in (152 mm) centerline spacing	Maximum 6 ir (152 mm) center spacing		

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.0 in (25.4 mm) increments beginning with a minimum width of 4 in (101.6 mm). If the actual width is critical, contact Intralox Customer Service. ^b This number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.

^d For drive shafts, use an odd number of sprockets at maximum of 4.0 in (102 mm) centerline spacing.



	Molded Sprockets													
Number of Teeth		Nom. Pitch Diameter				Nom. Outer Diameter				. Hub dth	A	vailable I	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm				
24 (0.86%)	2.4	61	2.5	64	1	25	1	1	25	25				
32 (0.48%)	3.2	81	3.3	84	1	25		1.5		40				

	Machined Sprockets										
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Nom. Hub Diameter Width				Available Bore Sizes				
(Chordal								Square		-	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
18 (1.52%)	1.8	46	1.9	48	1	25	1	0.75	25	20	
36 (0.38%)	3.6	91	3.7	94	1	25		1.5		40	

	Nylon 6-mm Diameter 20-Degree Nosebar										
	Standar	rd Width									
	in	mm									
	12	25									
•	 Nosebar in low-wear material des conveyance with S560 and S570 l 	igned for dead plate-free empty can belts.									
•	 Available in 12 in (25 mm) increm for wider belts. 	ents. Combine multiple nosebars	-								
•	Can be used on any S560 and S57 degree transfer.	70 conveyor for end-to-end or 90-	~								
	Made of FDA-compliant, blue nylo	n.									
•	Nosebar diameter: 0.236 in (6 mm	n).									

S560/570 Nosebar Transfer Unit

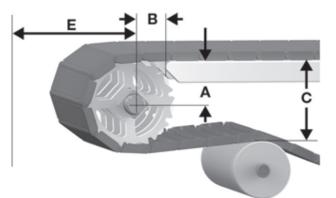
	2200/210 M02CD								
Nominal Belt Width									
in	mm								
24	610								
36	914								
48	1,219								

- Pre-assembled nosebar transfer unit ensures optimal end-to-end product transfer for S560 and S570 belts.
- Designed to provide smooth transfer of empty cans without the need for a dead plate.
- Standard-width nosebars are included in the transfer unit and also sold separately.
- Made of FDA-compliant, blue nylon nosebars and an aluminum mounting frame.
- Nosebar diameter: 0.236 in (6 mm).



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components
- Figure 14: A, B, C, and E drive dimensions

	S560 Conveyor Frame Dimensions										
Spro	cket Descr	iption		4		В	(C	E		
Pitch D	iameter	Number	Range (Bot	tom to Top) ^a							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
	Flat Top, Flush Grid										
1.8	46	18	0.78	20	1.15	29	1.81	46	1.09	28	
2.4	61	24	1.08	27	1.35	34	2.41	61	1.39	35	
3.2	81	32	1.48	38	1.57	40	3.21	82	1.79	45	
3.6	91	36	1.68	43	1.67	42	3.61	92	1.99	51	
^a For genera	l applications	and applicatio	ns where end transf	er of tip-sensitive p	roduct is not c	ritical, use the	bottom of the	range.			

DEAD PLATE GAP

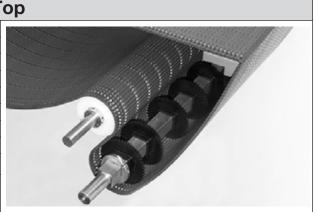
Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

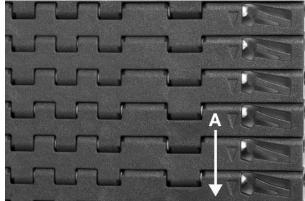
S560 Dead Plate Gap									
	Sprocket Description	Minimum Gap							
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
1.8	46	18	0.014	0.4					
2.4	61	24	0.010	0.3					
3.2	81	32	0.008	0.2					
3.6	91	36	0.007	0.2					

		Flat T			
	in	mm			
Pitch	0.315	8.0			
Minimum Width	10.0	254			
Maximum Width	62	1,575			
Width Increments	1.0	25.4			
Open Area	0	%			
Hinge Style	Clo	Closed			
Rod Retention; Rod Type	Barn door;	Barn door; unheaded			

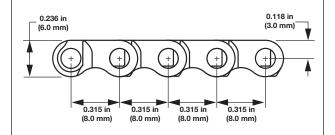
Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Smooth, closed upper surface with fully flush edges
- Small pitch reduces the gap required at the transfer.
- Detailed material information is provided in Product Line.
- The preferred run direction for the belt is indicated by the triangle on the top surface of the flush edge.
- Belt strength depends on the run direction. When the belt is not running in the preferred run direction, the belt strength rating is reduced to 125 lbf/ft (1,824 N/m).
- Optimized for 0.236 in (6 mm) diameter nosebars and the Intralox Nosebar Transfer Unit.





A preferred run direction

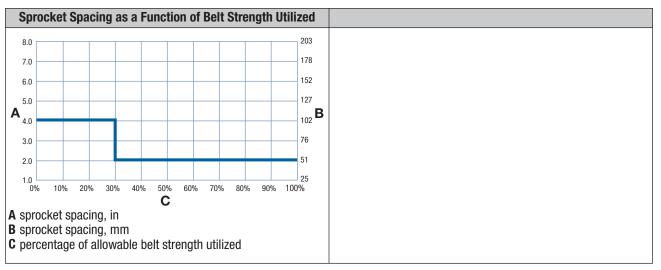


Belt Data										
	Default Rod Material,	Belt St	rength	· ·	ure Range 1uous)	Belt Mass				
Belt Material	Diameter 0.12 in (3 mm)	lbf/ft	N/m	°F	0°	lb/ft ²	kg/m²			
Acetal	Acetal	600	8,760	-50 to 200	-46 to 93	1.22	5.96			
HSEC acetal	Acetal	370	5,400	-50 to 200	-46 to 93	1.25	6.10			

	Molded Sprockets										
Number of Teeth			Nom. Outer Diameter			. Hub dth	Available Bore Sizes			es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
46 (0.23%)	4.6	117	4.7	119	1	25		1.5		40	

SPROCKET AND SUPPORT QUANTITY REFERENCE

- Ensure the proper sprocket quantity and spacing for the application. Use <u>CalcLab</u> or contact Intralox Customer Service for assistance.
- Ensure the carryway wearstrips are properly spaced to support the belt. Use a maximum 6 in (152 mm) centerline spacing.



	20-Degree Nosebar	
Standar	d Width	
in	mm	
12	25	
Nosebar in low-wear material desi conveyance with S560 and S570 b	igned for dead plate-free empty can pelts.	
• Available in 12 in (25 mm) increme for wider belts.	ents. Combine multiple nosebars	
Can be used on any S560 and S57 degree transfer.	70 conveyor for end-to-end or 90-	-
Made of FDA-compliant, blue nylo	n.	
Nosebar diameter: 0.236 in (6 mm	1).	

S560/570 Nosebar Transfer Unit

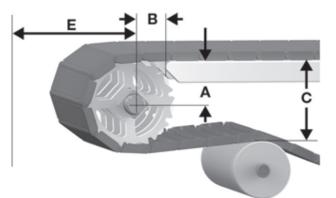
	2200/210 M02CD
Nominal B	Belt Width
in	mm
24	610
36	914
48	1,219

- Pre-assembled nosebar transfer unit ensures optimal end-to-end product transfer for S560 and S570 belts.
- Designed to provide smooth transfer of empty cans without the need for a dead plate.
- Standard-width nosebars are included in the transfer unit and also sold separately.
- Made of FDA-compliant, blue nylon nosebars and an aluminum mounting frame.
- Nosebar diameter: 0.236 in (6 mm).



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components
- Figure 15: A, B, C, and E drive dimensions

	S570 Conveyor Frame Dimensions										
Spro	cket Descr	iption		A		В		C			
Pitch Diameter Number		Number	Range (Bot	tom to Top) ^b							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
	Flat Top										
1.8	46	18	0.78	20	1.15	29	1.81	46	1.09	28	
2.4	61	24	1.08	27	1.35	34	2.41	61	1.39	35	
3.2	81	32	1.48	38	1.57	40	3.21	82	1.79	45	
3.6	91	36	1.68	43	1.67	42	3.61	92	1.99	51	
^b For genera	l applications	and applicatio	ns where end transf	er of tip-sensitive p	roduct is not c	ritical, use the	bottom of the	e range.			

	1	Flat T	ор				
	in r	mm	2 12-	x x 2		- 62	1.4 F
Pitch	2.00 5	50.8	5 5		1		3
Minimum Width	2	51	me me	6 8 8	1 1	3 9	
Width Increments		6.8	24	a second	1. 18		1
Opening Size	-	-		A	Carl		1
Open Area	0%			E.C.		1	-
Hinge Style	Open			E A	Arres Al		
Rod Retention; Rod Type	Snap-lock; heade	h		STEVA		1	
nou neteniion, nou rype		,	8	CAR S		/	
				2.84	C. B.L.		
Drodu	ict Notes						
		-					
 Contact Intralox for precise be before designing equipment o 	r ordering a belt.	status					
 Smooth, closed upper surface w 							
 Impact-resistant belt designed f 							
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and rod mater	als are rial					
 Detailed material information is 							
 Flights and sideguards are available 	-						
						<u> </u>	and it
							0.625"
			2.	.00" NOM. (50.8 mm)	2.00" NOM. (5	50.8 mm)	(15.9 mm)
			$(\overline{\Phi})$		(\oplus) ,	— (Ē	W)
			0.313"			لات	ዺ
			(7.9 mm)				T
		Belt Da	ita				
	Default Rod Material.			Temperat	ure Range		
	Diameter 0.24 in	Bel	It Strength	(conti	nuous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²
Polypropylene	Polypropylene	1,000) 14,600	34 to 220	1 to 104	1.77	8.66
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.87	9.13
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.75	13.43
Nylon	Polyethylene	1,200) 17,500	-50 to 150	-46 to 66	2.32	11.33
Detectable polypropylane A00	Delvethylene	CE0	0,400	04 to 150	1 to 00	0.01	10.70

650

9,490

34 to 150

Detectable polypropylene A22

Polyethylene

2.21

1 to 66

10.79

	Ор	en Hinge	e Flat Top
	in	mm	
Pitch	2.00	50.8	
Minimum Width	4	102	Provide the second
Nidth Increments	0.66	16.8	1313 3 11 11
Dpening Size	-	-	I Stand St
Dpen Area	0	%	
linge Style	Ор	en	
Rod Retention; Rod Type	Snap-loc	k; headed	
Product	Notes		
 Smooth, closed upper surface with f Fully sculpted and radiused corners, corners to catch and hold debris. Cam-link designed hinges expose m goes around the sprocket. This exclu unsurpassed cleaning access to this Drive bar on the underside of this be outside of the belt for easier, faster of proven both in-house and in field tes Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov Compatible with S800 Flat Top. Can Top, using the same sprockets and a streamlined flights are available. State of the same streamlined flights are available. 	so there are no po ore hinge and rod usive Intralox featu area. It channels water cleanup. Drive bar sts. material. Other roo he best belt and roo ided in Product Lin be spliced directly accessories. andard height is 6	area as the belt re allows and debris to the effectiveness is d materials are od material ne. r into S800 Flat in (152.4 mm).	Figure 16: Top surface

	Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt S	trength		ure Range 1uous)	Belt	Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene	Polypropylene	900	13,100	34 to 220	1 to 104	1.63	7.96			
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.70	8.30			
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.52	12.3			
РК	РК	900	13,100	-40 to 176	-40 to 80	2.26	12.01			
X-ray detectable acetal	X-ray detectable acetal	900	13,100	-50 to 200	-46 to 93	3.06	11.03			

Open Hinge Flat Top with Heavy-Duty Edge in mm Pitch 2.00 50.8 Minimum Width 10 254.0 0.66 Width Increments 16.8 Open Area 0% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Contact Intralox for precise belt measurements and stock status • before designing equipment or ordering a belt. • Smooth, closed upper surface with fully flush edges. • Impact-resistant belt designed for tough, meat-industry applications. · Closed flush edge provides belt robustness and no catchpoints. · Fully sculpted and radiused corners, with no pockets or sharp corners that can catch and hold debris. • Like S1600 and S1800, the drive bar on the underside of this belt style channels water and debris to the outside of the belt for easier, faster cleanup. The drive bar sweeps into the closed edge to further aid in washing away debris. Drive bar effectiveness is proven both in-house and in field tests. Available with Clean Release variation. Clean Release allows tool-free ٠ belt removal and installation and eliminates foreign material contamination caused by belt or rod damage when opening or closing belts. Clean Release modules are not compatible with scroll idlers. See Scroll Idlers. • Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Also available in 6 in (152 mm) and 8 in (203 mm) mold to width. Streamlined flights are available. • For flight options, contact Intralox Customer Service. Figure 18: Clean Release variation 0.625 in 2.00 in NOM. (50.8 mm) 2.00 in NOM. (50.8 mm) (15.9 mm) \oplus 0.313 in (7.9 mm)

Belt Data									
	Default Rod Material, Diameter 0.24 in			Temperati (contir	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
Acetal	РК	900	13,100	-40 to 176	-40 to 80	2.74	13.38		
Polyethylene	PK	500	7,300	-40 to 150	-40 to 66	1.7	8.30		
РК	РК	900	13,100	-40 to 176	-40 to 80	2.46	12.01		
X-ray detectable PK	РК	900	13,100	-40 to 176	-40 to 80	2.93	14.31		

Open Hinge	Flat Top	Mold to V
	in	mm
Pitch	2.00	50.8
Molded Widths	6	152.4
	8	203.0
Open Area	0	%
Hinge Style	0	ben
Rod Retention; Rod Type	Occluded ed	ge; unheaded
Product	Notes	
 Contact Intralox for precise belt r before designing equipment or or 	neasurements an rdering a belt.	d stock status
• Smooth, closed upper surface with	fully flush edges	
• Impact-resistant belt designed for te	ough, meat-indust	ry applications
• Closed flush edge design provides a catchpoints.	a robust belt and e	iminates
• Fully sculpted and radiused corners that can catch and hold debris.	, with no pockets o	or sharp corners
 Like S1600 and S1800, the drive ba channels water and debris to the ou cleanup. The drive bar sweeps into washing away debris. Drive bar effe and in field tests. 	Itside of the belt fo the closed edge to	r easier, faster further aid in
 Each belt material has a default rod available. Intralox can help identify combination for your application. 		
• Detailed material information is pro-	vided in Product Li	ne.
For flight options, contact Intralox C	ustomer Service.	

Belt Data									
	Standard Rod Material, Diameter 0.24 inTemperature Range Belt StrengthTemperature Range (continuous)						Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft	kg/m		
РК	PK	900	13,100	-40 to 176	-40 to 80	2.18	10.64		

0.313 in (7.9 mm) (\oplus)

+

	SeamFre	e [™] Oper	n Hinge Flat Top
	in	mm	1
Pitch	2.00	50.8	A MA
Minimum Width	6	152	State of State
Width Increments	0.66	16.8	
Opening Size	-	-	S/ 3 / 3 / 3 / 3
Open Area	00	%	8 3 3 1
Hinge Style	Ор	en	S 3 3 B BAR
Rod Retention; Rod Type	Snap-lock	k; headed	223 3 3 13 1103
			and the second second
	t Notes		
Contact Intralox for precise belt before designing equipment or of	measurements and ordering a belt.	l stock status	REFERENCES
· Smooth, closed upper surface with	n fully flush edges.		
 Cam-link designed hinges expose goes around the sprocket. This exu unsurpassed cleaning access to the 	clusive Intralox featu	area as the belt re allows	
• Fully sculpted and radiused corner corners to catch and hold debris.	rs, so there are no po	ockets or sharp	anannanana:
 Drive bar on the underside of this outside of the belt for easier, faste proven both in-house and in field the 	r cleanup. Drive bar		
 Each belt material has a default ro available. Intralox can help identify combination for your application. 			
• Detailed material information is pr	ovided in Product Lir	ie.	
 Compatible with S800 Flat Top. Ca Top, using the same sprockets and 		into S800 Flat	
• Belts over 36 in (914 mm) are buil row, but seams are minimized.	t with more than one	e module per	
• Blue polyethylene belts over 18 in one module per row.	(457 mm) are built v	vith more than	2.00" NOM. (50.8 mm) 2.00" NOM. (50.8 mm) 0.313"
• Streamlined flights are available. S	Standard height is 6 i	n (152.4 mm).	
Custom flight heights are available for more information.	e. Contact Intralox Cu	stomer Service	

Belt Data								
	Default Rod Material, Diameter 0.24 in	Belt St	rength	-	ure Range 1uous)	Belt Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.70	8.30	
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.52	12.3	

		Tough Fl	at Top
	in	mm	N 1 1 2 2 2 8 8 8
Pitch	2.00	51.0	
Minimum Width	2	51	The second se
Width Increments	0.66	16.8	A Dr A A
Opening Size	-	-	
Open Area	0	%	
Hinge Style	Op	ben	S IN IN IN IN I
Rod Retention; Rod Type	Snap-loc	k; headed	A B B B
Product	Notes		
 Contact Intralox for precise belt r before designing equipment or or Smooth, closed upper surface with Cam-link designed hinges expose n goes around the sprocket. This exclusurpassed cleaning access to this Drive bar on the underside of this b outside of the belt for easier, faster proven both in-house and in field te White and grey material is fully Foor and EU MC compliant. Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is pro Withstands extreme impact in food Compatible with S800 Flat Top and directly into either style, using the s Easy retrofit from S1800 without extended and and and and and and and and and an	rdering a belt. fully flush edges. nore hinge and rod usive Intralox featu s area. elt channels water cleanup. Drive bar sts. d and Drug Adminis material. Other roo the best belt and roo vided in Product Lin processing applica S800 Open Hinge. ame sprockets and tensive conveyor fi	area as the belt ire allows and debris to the effectiveness is stration (FDA) d materials are od material ne. tions. Can be spliced d accessories. rame changes for	
 most meat industry applications sin are within 0.25 in (6 mm) of S1800. A molded-in indent 1.3 in (33 mm) Streamlined Tough flights are availa (101.6 mm) or 6 in (152.4 mm). Custom flight heights are available. for more information. 	from the edge is av Ible. Standard heig	railable. ht is 4 in or	0.313" (7.9 mm) (50.8 mm)
		Belt Da	

Belt Data								
	Default Rod Material, Diameter 0.24 in		Belt Strength		ure Range 1uous)	Belt Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Hi-Impact	РК	500	7,300	0 to 120	-18 to 49	2.26	11.03	
Hi-Impact	Polyethylene	450	6,570	0 to 120	-18 to 49	2.26	11.03	

	Pe	rforated	Flat Top
	in	mm	
Pitch	2.00	50.8	
Minimum Width	2	51	
Width Increments	0.66	16.8	
Minimum Opening Size (approximate)	0.29 × 0.08	7.4 × 1.9	
Maximum Opening Size (approximate)	0.44 × 0.08	11.1 × 1.9	
Open Area	18	%	
Hinge Style	Ор	en	Constant of the second
Rod Retention; Rod Type	Snap-lock	k; headed	
Product	Notes		
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Smooth upper surface with fully flush edges. Perforated version of S800 Flat Top. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Flights and sideguards are available. 			Linillinillinillinillinillinillinillini
		Belt D	ata
	Dofault Pod Ma		Temperature Range

Belt Data									
Default Rod Mater Diameter 0.24 i		Belt S	trength	-	ure Range 1uous)	Belt	Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.54	7.25		
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.59	7.76		
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.28	11.15		

	Perforated F	lat To	op Round	d Hole			
		mm	-	E S 51113 - 34	11: 31.5	- 8115	
Pitch	2.00 5	50.8		ME 111		111	
Minimum Width	2	51	. 1.43	The state	111 A	12. s.M	
Width Increments	0.66 1	6.8		AN IN	112 8 3111		
Opening Size	See photos on rig	ht.		07 0	×11/200	11	
Open Area	See photos on rig						
Hinge Style	Open		10/1	1 A		1	
Rod Retention; Rod Type	Snap-lock; heade	ed			al		
Produ	uct Notes						
 Contact Intralox for precise be before designing equipment of Smooth upper surface with fully Round hole version of S800 Perf Each belt material has a default available. Intralox can help idem combination for your application Detailed material information is Stainless steel split sprockets an For abrasive applications, use w 	or ordering a belt. I flush edges. forated Flat Top. rod material. Other rod materi tify the best belt and rod materi provided in Product Line. re not recommended.	als are rial	Figure 19: 5/				0.625"
			0.313" (7.9 mm)	0" NOM. (50.8 mm)	2.00" NOM. (50.8 mm)	(15.9 mm
		Belt Da	ta				
	Default Rod Material, Diameter 0.24 in		t Strength	Temperati (contin	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft		°F	°C	lb/ft ²	kg/m
Polypropylene	Polypropylene	1.000		34 to 220	1 to 104	1.54	7.52

	Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt S	trength		ure Range 1uous)	Belt	Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.54	7.52			
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.59	7.76			
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.28	11.15			
ChemBlox ^a	ChemBlox	900	13,100	0 to 150	-18 to 66	2.87	14.01			
PK ^b	PK	900	13,100	-40 to 176	-40 to 80	2.05	10.01			
^a Only available in 11/32 in (8.73 mn	^a Only available in 11/32 in (8.73 mm).									

Perforated	l 11/32 in	Round H	lole with Heavy-Duty Edge
	in	mm	
Pitch	2	50.8	
Minimum Width	10	254.0	000000000000000000000000000000000000000
Width Increments	0.66	16.8	
Opening Size (approximate)	11/32	8.75	
Open Area	14	%	
Hinge Style	Ор	en	25
Rod Retention; Rod Type	Occluded edg	je; unheaded	
Product	Notes		
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. 		d stock status	
• Smooth, closed upper surface with	fully flush edges		
• Closed flush edge design provides a catchpoints.	robust belt and eli	minates	hunnunun
 The drive bar on the underside of th to the outside of the belt for easier, sweeps into the closed edge to furth Drive bar effectiveness is proven bo 	faster cleanup. The her aid in washing a	drive bar away debris.	• • • • • • • • • • • • • • • • • • •
 Impact-resistant belt designed for to 			
 Each belt material has a default rod 	•		
available. Intralox can help identify			
combination for your application.Detailed material information is prov	vided in Product Lir	10.	decereptetet
			2.00 in NOM. (50.8 mm) 2.00 in NOM. (50.8 mm) (15.9 mm)
			0.313 in (7.9 mm)

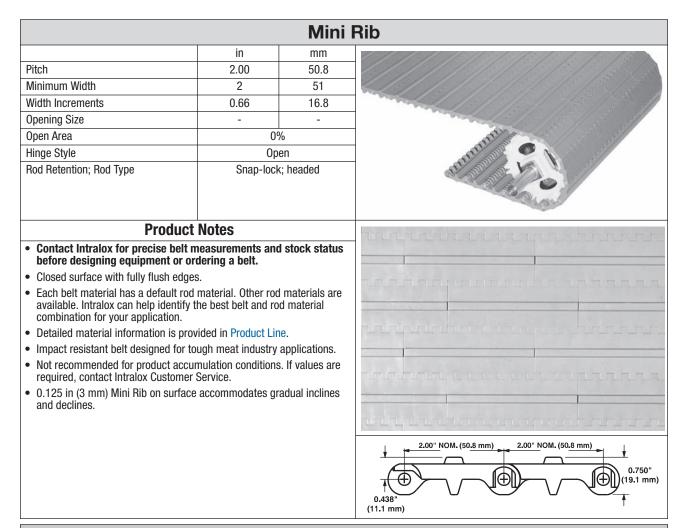
Belt Data								
	Default Rod Material, Diameter	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt	Mass	
Belt Material	0.24 in (6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft ²	kg/m²	
РК	РК	900	13,100	-40 to 176	-40 to 80	2.22	10.84	

inmmPitch2.0050.8Minimum Width4.6117Width Increments0.6616.8Opening Size (approximate)0.15 × 0.903.8 × 22.9Open Area27%Product Contact Area73%Hinge StyleOpenRod Retention; Rod TypeOccluded edge; unheadedProduct NotesProduct Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.• Smooth upper surface with fully flush edges.• Open slots improve drainage and cleanability.• Perforations on polyethylene edge modules are slightly different. See inset photo on right.• Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.• Detailed material information is provided in Product Line.• Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line.• Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error.• Complete range of accessories available, including round-top flights, flights with drainage bases, and sideguards.	нининининини попоннининини цицицицици
Minimum Width 4.6 117 Width Increments 0.66 16.8 Opening Size (approximate) 0.15 × 0.90 3.8 × 22.9 Open Area 27% Product Contact Area 73% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Smooth upper surface with fully flush edges. Open slots improve drainage and cleanability. Perforations on polyethylene edge modules are slightly different. See inset photo on right. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line. Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. Complete range of accessories available, including round-top flights,	ппппппппппп
Width Increments 0.66 16.8 Opening Size (approximate) 0.15 × 0.90 3.8 × 22.9 Open Area 27% Product Contact Area 73% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Smooth upper surface with fully flush edges. Open slots improve drainage and cleanability. • Perforations on polyethylene edge modules are slightly different. See inset photo on right. Seach belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line. • Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. • Complete range of accessories available, including round-top flights,	ппппппппппп
Opening Size (approximate) 0.15 × 0.90 3.8 × 22.9 Open Area 27% Product Contact Area 73% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Smooth upper surface with fully flush edges. • Open slots improve drainage and cleanability. • Perforations on polyethylene edge modules are slightly different. See inset photo on right. • Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line. • Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. • Complete range of accessories available, including round-top flights,	ппппппппппп
Open Area 27% Product Contact Area 73% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Smooth upper surface with fully flush edges. Open slots improve drainage and cleanability. • Perforations on polyethylene edge modules are slightly different. See inset photo on right. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line. • Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. • Complete range of accessories available, including round-top flights,	ппппппппппп
Product Contact Area 73% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Notes Occluded edge; unheaded Occluded edge; unheaded Product Notes Occluded edge; unheaded Occluded edge; unheaded Product Notes Occluded edge; unheaded Occlude edge; unheaded <td>ппппппппппп</td>	ппппппппппп
Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Notes Occluded edge; unheaded Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Smooth upper surface with fully flush edges. Open slots improve drainage and cleanability. Perforations on polyethylene edge modules are slightly different. See inset photo on right. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processin	ппппппппппп
Rod Retention; Rod Type Occluded edge; unheaded Product Notes • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Smooth upper surface with fully flush edges. • Open slots improve drainage and cleanability. • Perforations on polyethylene edge modules are slightly different. See inset photo on right. • Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Provides excellent drainage during production and cleanup. Hole design eliminates water collecting on belt surface and being carried throughout processing line. • Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. • Complete range of accessories available, including round-top flights,	пппппппппппп
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 Bi-directional belt design allows sprockets to drive or idle belt in both directions. Reduces chances of installation error. Complete range of accessories available, including round-top flights, 	NAMANANTS, HIMINAMAN
• Complete range of accessories available, including round-top flights, flights with drainage bases, and sideguards.	A Inset: polyethylene edge module
flights with drainage bases, and sideguards.	
	2.0" (50.8 mm) (50.8 mm) (15.9 mm) (15.9 mm) (15.9 mm) (15.9 mm) (15.9 mm)
	(7.9 mm) Figure 21: Polyethylene belts
	0.313" (7.9 mm) 0.625" 0.625" 0.625"
	Figure 22: All other materials
Belt Da	ata

Beit Data								
	Default Rod Material,	Belt S	trength		ure Range nuous)	Belt	Mass	
Belt Material	Diameter 0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²	
Polypropylene	Polypropylene	800	11,700	34 to 220	1 to 104	1.45	7.08	
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.63	7.96	
Acetal	Polyethylene	1,000	14,600	-50 to 150	-46 to 66	2.25	10.99	
Acetal	Polypropylene	1,000	14,600	34 to 200	1 to 93	2.25	10.99	
Detectable polypropylene A22	Polypropylene	500	7,300	34 to 150	1 to 66	1.71	8.35	
ChemBlox	ChemBlox	1,000	14,600	0 to 150	-18 to 66	2.83	13.82	

		Mesh 1	Гор™
	in	mm	
Pitch	2.00	50.8	Personanan
Minimum Width	2	51	- FREE FREE FREE FREE FREE FREE FREE FRE
Width Increments	0.66	16.8	- A A A A A A A A A A A A A A A A A A A
Opening Size (approximate)	0.50 × 0.04	12.7 × 1.0	
Open Area	9	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-loci	k; headed	
Product	Notes		
 Smooth, closed upper surface with Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is pro Flights are available. 	I material. Other roo the best belt and ro	od material	Figure 23: Top surface $Figure 23: Top surface$ $Figure 24: Underside surface$ $\frac{0.313"}{(7.9 \text{ mm})} = \frac{2.00" \text{ NOM.}}{(50.8 \text{ mm})} = \frac{2.00" \text{ NOM.}}{(50.8 \text{ mm})} = \frac{2.00" \text{ NOM.}}{(50.8 \text{ mm})} = \frac{0.625"}{(15.9 \text{ mm})}$

	Belt Data							
	Default Rod Material, Diameter 0.24 in	Belt St	rength		ure Range 1uous)	Belt	Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.60	7.86	



Belt Data								
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt	Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²	
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.77	8.66	
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.87	9.13	
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.92	14.26	

		Nub T	ор™
	in	mm	
Pitch	2.00	50.8	
Minimum Width	4	102	- re-re-re-re
Width Increments	0.66	16.8	
Open Area	00	%	
Product Contact Area	15	%	The state of the s
Hinge Style	Ор	en	3ª 3ª 3 6
Rod Retention; Rod Type	Snap-lock	<; headed	· 31/31/3605
Product Notes			00000 00000 00000 00000
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Closed upper surface with fully flush edges. Not recommended for product accumulation conditions. If values are required, contact Intralox Customer Service. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Standard flights and sideguards (without nubs) are available. Standard nub indent: 1.3 in (33.0 mm). 			
			0.100" (2.5 mm) 0.413" (10.5 mm) 0.413" (10.5 mm) 0.333" NOM. 0.125" (3.2 mm) 0.125" (3.2 mm) 0.725" (18.4 mm) 0.725" (18.4 mm) 0.725"

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		-	ure Range 1uous)	Belt	Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.90	9.26		
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	2.01	9.80		
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.95	14.40		

	Flu	sh Grid I	Nub Top™
	in	mm	
Pitch	2.00	50.8	
Minimum Width	4.6	117	
Width Increments	0.66	16.8	
Opening Size (approximate)	0.15 × 0.90	3.8 × 22.9	
Open Area	27	7%	
Product Contact Area	15	5%	
Hinge Style	Op	ben	72922121 22
Rod Retention; Rod Type	Uccluded ed	ge; unheaded	Sex al
Product	Notes		
 before designing equipment or or inset photo. Nub pattern reduces contact betwee Nub pattern is continuous over the shinges. Available in acetal and polypropyler Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is pro Recommended for products large e between the nubs. Compatible with S800 Flush Grid fii Standard nub indent: 1.3 in (33.0 minimum) 	nodules are slightly en belt surface and surface of the belt, ne. I material. Other ro the best belt and ro vided in Product Li nough to span the ghts only.	l product. even over the d materials are od material ne.	A Inset: polyethylene edge module

Belt Data									
	Default Rod Material, Diameter 0.24 in	Dalt Olympic with		Temperature Range (continuous)		Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
Polypropylene	Polypropylene	800	11,700	34 to 220	1 to 104	1.56	7.62		
Acetal	Polyethylene	1,000	14,600	-50 to 150	-46 to 66	2.36	11.52		
Acetal	Polypropylene	1,000	14,600	34 to 200	1 to 93	2.36	11.52		
Polyethylene	Polyethylene	500	7,300	-50 to 150	-46 to 66	1.85	9.03		

	SeamFree	e [™] Open ∣	Hinge Nub Top [™]
	in	mm	
Pitch	2.00	50.8	
Minimum Width	6	152	
Width Increments	0.66	16.8	
Opening Size (approximate)	-	-	Stown 11 11
Open Area	0	%	
Hinge Style	Op	ben	
Rod Retention; Rod Type	Snap-loc	k; headed	
Produc	t Notes		
Contact Intralox for precise belt before designing equipment or o		d stock status	
Closed upper surface with fully flux	0		
 Fully sculpted and radiused corner to catch and hold debris. 	s, with no pockets c	or sharp corners	
 Cam-link hinge provides easy clear exposure as the belt moves around 	ning, with greater hi I the sprockets.	inge and rod	
 Drive bar on the underside of this b outside of the belt for easier, faster proven both in-house and in field t 	cleanup. Drive bar		
 Each belt material has a default ro available. Intralox can help identify combination for your application. 			
• Detailed material information is pro	ovided in Product Li	ne.	EPEPEPEPEPEPE
 Not recommended for product account of the service for more service for more service for more for		s. Contact	0.100" 0.333" NOM. (2.5 mm) (8.5 mm)
• Nub height: 0.100 in (2.5 mm).			
Nub spacing: 0.333 in (8.5 mm).			
• Standard nub indent: 1.3 in (33.0 r	nm).		0.413" (10.5 mm)
			2.0" NOM

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperatı (contir	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.72	13.26		
РК	PK	900	13,100	-40 to 176	-40 to 80	2.4	11.72		

		Cone	Top™
	in	mm	
Pitch	2.00	50.8	
Minimum Width	4	102	- antererererererererererererererererererer
Width Increments	0.66	16.8	and the second s
Opening Size	-	-	
Open Area	00	6	
Hinge Style	Ор	en	SA ANI
Rod Retention; Rod Type	Snap-lock; headed		shake,
Product	t Notes		
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Closed upper surface with fully flush edges. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. If values are required, contact Intralox Customer Service. Standard flights and sideguards (without cones) are available. Standard cone indent: 1.3 in (33.0 mm). 			0.125" NOM. (3.2 mm) (1.1 mm)

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperature Range (continuous)		Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.84	13.89		

	Оре	n Hinge (
	in	mm
Pitch	2.00	50.8
Minimum Width	6	152
Width Increments	0.66	16.8
Opening Size	-	-
Open Area	0	%
Hinge Style	Op	pen
Rod Retention; Rod Type	Snap-loc	k; headed
Duradurat	Nata	
Product		
 Contact Intralox for precise belt in before designing equipment or or 		d stock status
Closed upper surface with fully flush	1 edges.	
• Fully sculpted and radiused corners, to catch and hold debris.	, with no pockets o	or sharp corners
 Cam-link hinge provides easy cleani exposure as the belt moves around to 		inge and rod
 Drive bar on the underside of this be outside of the belt for easier, faster of proven both in-house and in field test 	cleanup. Drive bar	
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 		
Detailed material information is prov	vided in Product Li	ne.
Not recommended for product accur Intralox Customer Service for more i	mulation condition	s. Contact
• Standard cone indent: 1.3 in (33.0 m	nm).	
Standard flights and sideguards (wit	hout cones) are av	vailable.

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contii	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft ²	kg/m²		
Polypropylene	Polypropylene	900	13,100	34 to 220	1 to 104	1.63	7.96		

	SeamFree	[™] Open ŀ	linge Cone Top [™]
	in	mm	The second second second second
Pitch	2.00	50.8	
Minimum Width	6	152	
Width Increments	0.66	16.8	The second se
Opening Size (approximate)	-	-	The second se
Open Area	00	%	and all all a second statut
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	k; headed	
Produc	t Notes		
Contact Intralox for precise belt before designing equipment or Closed upper surface with fully flu	ordering a belt.	d stock status	ามาว่าน้ำนำนำนำนำนำ
 Fully sculpted and radiused corne to catch and hold debris. 	-	r sharp corners	
Cam-link hinge provides easy cleater exposure as the belt moves around		nge and rod	
 Drive bar on the underside of this outside of the belt for easier, faste proven both in-house and in field 	er cleanup. Drive bar		
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			
• Detailed material information is pr	rovided in Product Lir	ne.	
 Not recommended for product accumulation conditions. Contact Intralox Customer Service for more information. 		0.295" NOM. (7.5 mm) (3.2 mm)	
• Cone height: 0.125 in (3.2 mm).			
• Cone spacing: 0.295 in (7.5 mm).			
• Standard cone indent: 1.3 in (33 r	nm).		0.438" (11.1 mm) (11.1 mm) (50.8 mm)

Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperati (contii	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Polyethylene	900	13,100	-50 to 150	-46 to 66	2.61	12.72		

		Raised
	in	mm
Pitch	2.00	50.8
Minimum Width	14	356
Width Increments	2.00	50.8
Opening Size (approximate)	0.51 x 0.49	12.9 x 12.4
Open Area	40)%
Hinge Style	Ор	ben
Rod Retention; Rod Type	Barn door;	unheaded
Product Contact Intralox for precise belt m		d stock status
before designing equipment or ord	dering a belt.	
Open slots improve drainage and cle Com link design binges provide accur		otor bingo and
 Cam-link design hinges provide easy rod exposure as the belt moves arou 		ater ninge and
Each belt material has a default rod i		
available. Intralox can help identify th combination for your application.	ne best beit and ro	o material
Detailed material information is prov	ided in Product Lir	ne.
• Fully compatible with S800 EZ Clean	[™] angled sprocke	ets.
• Finger transfer plates are available.		
 Raised ribs extend 0.275 in (7.0 mm flush odgoo) above basic mod	dule with fully
flush edges.		

		Belt Data					
	Default Rod Material, Diameter 0.24 in	Belt St	rength	-	ure Range nuous)	Belt Mass °C Ib/ft² kg/ 1 to 104 1.48 7.2	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	ous) Belt Mass °C Ib/ft² kg/r 1 to 104 1.48 7.2	kg/m²
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.48	7.23
Enduralox PP	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.48	7.23

		Roller	ТОР				
	in	mm		120 12	5. 2/S	Star Star	5720
Pitch	2.00	50.8	and the				11 51
Ainimum Width	0			10.00		())	1. 5110
Vidth Increments	See Produ	ct Notes.		-	100	1/1	0115
Dpening Size	-	-		5	Cind	5/1	115
Dpen Area	3%	6	65	2.52	0	$\langle \langle \rangle \rangle$	10
linge Style	Ope	en	(5?)	5		· ///	0
Rod Retention; Rod Type	Snap-lock	; headed		XX.		300	
Product	Notes		\cap	\cap	\cap	\cap	\cap
Contact Intralox for precise belt n before designing equipment or or			\cup	\cup	\cup	\cup	
Has fully flush edges.		and shares and shares			ter den benegt	the state of the state	
Uses acetal rollers.			\square	\square	\cap	\cap	\cap
 Uses stainless steel axles. Each belt material has a default rod available. Intralox can help identify t combination for your application. 							
Detailed material information is prov	vided in Product Lin	е.	\cap	\cap	\cap	\cap	\cap
Impact resistant belt designed for to pressure applications.	ugh box and packa	ge, low back-		\cup	\cup	\cup	\cup
Product accumulation load is 5%-1	0% of product weig	ıht.					
Roller diameter: 0.70 in (17.8 mm).	Roller length - 0.82	25 in (20.9 mm).	\frown	\frown	\frown	\frown	\frown
Roller spacing: 2.0 in (50.8 mm).					-		•
Standard roller indent: 0.60 in (15 n	,		0.75"	_		$\overline{}$	1.062"
Custom widths of 4 in (102 mm) and (254 mm) and up, in 2.00 in (50.8 n		d from 10 in	(19 ₁ mm) 		2.00" NOI (50.8 mm		(27 mm)

		Belt Data				Belt Mass Ib/ft² kg/ 93 2.93 14 66 2.99 14	
	Default Rod Material, Diameter 0.24 in	Belt St	rength	•	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²
Polypropylene	Acetal	1,000	14,600	34 to 200	1 to 93	2.93	14.34
Polyethylene	Acetal	500	7,300	-50 to 150	-46 to 66	2.99	14.62
Acetal	Acetal	900	13,100	-50 to 200	-46 to 93	4.11	20.10

		Roι	unded	Frictio	on Top					
		in	mm				25		5	13
Pitch		2.00	50.8	~~		E 3	E.	16	1	5
Minimum Width		8	203		100		3	E.	37 E	
Width Increments		0.66	16.8			Sec. 1				500
Opening Size		-	-		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	32 50	1	5		
Open Area		0	%		2.00	1000	20	a Th	- 22	1.11
Hinge Style		Ор	en		4	C.S.	12 5	3 -	S	S. A
Rod Retention; Rod	d Type	Occluded edg	ge; unheaded	t		and the	532	27	1.1	1
	Pro	duct Notes					and the	22	9	1
		belt measurements and t or ordering a belt.	d stock stat	us			6	1-19	50	
The Rounded Fr composite base		dule is black rubber on a	white PP							
	ox can help id	ult rod material. Other roo entify the best belt and ro ion.		ire			1.0			
 Detailed materia 	al information	is provided in Product Lin	ne.	1.0					B B 1	
 No mistracking tracked by the s rollers. 	or stick-slip e procket drive	ffect, even on long runs. system instead of unrelia	Belt is positinable friction	vely						
 Thermally bonder molded (therma mechanically fast 	lly bonded) w	es not peel off. Friction Top ith the plastic base instea	p surface is o ad of glued o	n or			11			
		can be used with other S accompanying modules.		Jse						
 Easy to maintain quickly removed replace individu 	and installed	ntralox reusable unheade d with only minimal tools, minutes.	d rods are so one can							
 No tensioning results systems. 	equired, whic	n eliminates expensive te	nsioning							
 Lower construct than a friction re construction. 	ion cost: Intra oller system, a	alox sprocket drive require allowing shallow, less exp	es far less sp ensive trenc	0.47 h 0.47 (11.9 r			" NOM. 8 mm)	2.00" (50.8		0.16" 1 mm)
 Lower wearstrip premature wear mm from the out 	strip erosion.	cost: Flat Top edge mode The smooth surface spar	ules prevent ns 1.5 in (38	.1)			$\overline{\mathcal{A}}$		~) † 0.625") (15.9 mm
			Be	lt Data						
					Temperat	ure Range			Aa	ency
	Base/	Default Rod Material,	Belt St	rength		nuous)	Belt	Mass		tability
Base Belt	Friction	Diameter 0.24 in		-					FDA	
Material	Тор	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²	(USA)	EU MC
Polypropylene										

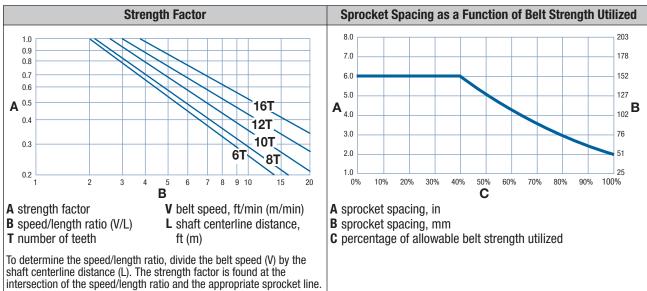
^aEuropean Migration Certificate providing approval for food contact according to EU Regulation 10/2011. ^bFDA compliant with restriction: Do not use in direct contact with fatty foods.

Belt Wid	th Range ^a	Minimum Number of Sprockets	Wea	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway
2	51	1	2	2
4	102	1	2	2
6	152	2	2	2
8	203	2	2	2
10	254	2	3	2
12	305	3	3	2
14	356	3	3	3
16	406	3	3	3
18	457	3	3	3
20	508	5	4	3
24	610	5	4	3
30	762	5	5	4
32	813	7	5	4
36	914	7	5	4
42	1,067	7	6	5
48	1,219	9	7	5
54	1,372	9	7	6
60	1,524	11	8	6
72	1,829	13	9	7
84	2,134	15	11	8
96	2,438	17	12	9
120	3,048	21	15	11
144	3,658	25	17	13

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.66 in (16.8 mm) increments beginning with minimum width of 2 in (51 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets. Polyurethane sprockets require a maximum 4 in (102 mm) centerline spacing.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



See Belt Selection Instructions for more information.

						EZ Clea	n [™] Spro	ocket ^a		
						A	vailable E	ore Size	es	
in	mm	in	mm	in	mm	Round in ^b	Square in	Round mm ^b	Square mm	
4.0	102	3.8	97	1.5	38	1.0	1.5	30	40	ALTIA
5.2	132	5.0	127	1.5	38	1.0	1.5	30	40	
6.5	165	6.2	157	1.5	38		1.5		40	
7.7	196	7.5	191	1.5	38		1.5		40	
10.3	262	10.1	257	1.5	38		1.5		40	2 O.S
	Diam in 4.0 5.2 6.5 7.7	4.0 102 5.2 132 6.5 165 7.7 196	Diameter Diameter in mm in 4.0 102 3.8 5.2 132 5.0 6.5 165 6.2 7.7 196 7.5	Diameter Diameter in mm in mm 4.0 102 3.8 97 5.2 132 5.0 127 6.5 165 6.2 157 7.7 196 7.5 191	Diameter Diameter Wi in mm in mm in 4.0 102 3.8 97 1.5 5.2 132 5.0 127 1.5 6.5 165 6.2 157 1.5 7.7 196 7.5 191 1.5	Diawer Diawer Witten in mm in mm in mm 4.0 102 3.8 97 1.5 38 5.2 132 5.0 127 1.5 38 6.5 165 6.2 157 1.5 38 7.7 196 7.5 191 1.5 38	Nom. Pitch Diameter Nom. ∪ter Diameter Nom. Hub Width And And in mm in Mm And And 4.0 102 3.8 97 1.5 38 1.0 5.2 132 5.0 127 1.5 38 1.0 6.5 165 6.2 157 1.5 38 1.0 7.7 196 7.5 191 1.5 38 1.0	Nom. Pitch Diameter Nom. Outer Diameter Nom. Hub Width Available B in mm in mm in Round in ^b Square in 4.0 102 3.8 97 1.5 38 1.0 1.5 5.2 132 5.0 127 1.5 38 1.0 1.5 6.5 165 6.2 157 1.5 38 1.0 1.5 7.7 196 7.5 191 1.5 38 1.5 1.5	Diameter Diameter With Autority Square from from from from from from from from	Nom. Pitch Diameter Nom. Outer Diameter Nom. Hub Width Azilable Bore Sizes in mm in mm fin Round inb Square inb Round mmb Square inn Round innb Square inn Squa

^aWhen using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain the published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

^bU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

							Clean	_ock™	Sprock	ets
Number of Teeth		Pitch neter		Outer neter	-	. Hub dth	A	/ailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
8 (7.61%)	5.2	132	5.0	127	1.0	25		1.5		
10 (4.89%)	6.5	165	6.2	157	1.0	25		1.5		

			Spli	t Ultra	Abrasi	ion Resis	stant Po	lyureth	ane (FD	A) Sprockets ^a
-		-		-		A	/ailable E	Bore Size	es	
in	mm	in	mm	in	mm	Round in ^b	Square in	Round mm ^b	Square mm	
6.5	165	6.2	157	1.5	38		1.5		40	
7.7	196	7.5	191	1.5	38		1.5,		40, 60	
10.3	262	10.1	257	1.5	38		2.5		40, 60	R. D.
										100 100 100 100 100 100 100 100 100 100
	Dian in 6.5 7.7	6.5 165 7.7 196	Diameter Diameter in mm in 6.5 165 6.2 7.7 196 7.5	Nom. Pitch Diaweter Nom. Outer Diaweter in mm in mm 6.5 165 6.2 157 7.7 196 7.5 191	Nom. Pitch Diaweter Nom. Outer Diaweter Nom in mm in mm in 6.5 165 6.2 157 1.5 7.7 196 7.5 191 1.5	Nom. Pitch Diaweter Nom. Outer Diaweter Nom. Hub Width in mm in mm 6.5 165 6.2 157 1.5 38 7.7 196 7.5 191 1.5 38	Nom. Pitch Diaweter Nom. Outer Diaweter Nom. Hub Width And And And And And And And And And And	Nom. Pitch Diaweter Nom. Outer Diaweter Nom. Hub Width Available E in mm in mm in Square in 6.5 165 6.2 157 1.5 38 1.5 7.7 196 7.5 191 1.5 38 1.5	Nom. Pitch Diameter Nom. Outer Diameter Nom. Hub Width Available Bore Size in mm in mm fin Round in ^b Square in Round mm ^b 6.5 165 6.2 157 1.5 38 1.5 7.7 196 7.5 191 1.5 38 1.5,	Diameter Diameter Width Autobic Square Sizes in mm in mm in Round inb Square inb Round inb Square inb Square mmb Square mmb

^aWhen using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain their published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets. These sprockets are FDA-compliant.

^bU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

							Мо	Ided Sp	rocket ^a	
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth				
(Chordal					_		1	Square		Square
Action)	in	mm	in	mm	in	mm	in	in	mm	mm
8 (7.61%)	5.2	132	5.0	127	1.5	38		1.5		40
10 (4.89%)	6.5	165	6.2	157	1.5	38		1.5, 2.0, 2.5		40, 60
12 (3.41%)	7.7	196	7.5	191	1.5	38		1.5, 2.5		40, 60
16 (1.92%)	10.3	262	10.1	257	1.5	38		1.5, 2.5		40, 60

^a When using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain the published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

						Abrasi	on Resis	tant Sp	lit Meta	l Sprocl	kets	
Number of Teeth	-	Pitch neter	-	Outer neter	-	. Hub dth	A	/ailable E	Bore Size	es		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
8 (7.61%)	5.2	132	5.0	127	1.7	43		1.5, 2.5		40, 60		
10 (4.89%)	6.5	165	6.2	157	1.7	43		1.5, 2.5		40, 60	prove.	1
12 (3.41%)	7.7	196	7.5	191	1.7	43		1.5, 2.5		40, 60	A Carl	, 27.
16 (1.92%)	10.3	262	10.1	257	1.7	43		1.5, 2.5		40, 60		

							Angled E	Z Clean	™ Spro	cket ^a
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
6 (13.40%)	4.0	102	3.8	97	2.0	50.8		1.5		40
8 (7.61%)	5.2	132	5.0	127	2.0	50.8		1.5		40
10 (4.89%)	6.5	165	6.2	157	2.0	50.8		1.5		40
12 (3.41%)	7.7	196	7.5	191	2.0	50.8		1.5		40
16 (1.92%)	10.3	262	10.1	257	2.0	50.8		1.5, 2.5		40, 60

	CleanLock™ Sprockets									
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	ailable I	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
8 (7.61%)	5.2	132	5.0	127	1.0	25		1.5		
10 (4.89%)	6.5	165	6.2	157	1.0	25		1.5		

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Streamline Flight Available Flight Height Available Materials in mm 1 25 2 51						
Available F	light Height					
in	mm	Available Materials				
1	25					
2	51]				
3	76	Polypropylene, polyethylene, acetal, nylon				
4	102					
6	152					
 Streamline fli 	ghts are smooth	on both sides.				

 Each flight extends from the center of the module, molded as one part. No fasteners are required.

An extension can be welded at a 45-degree angle to create a bent flight.
Custom flight heights are available. Contact Intralox Customer Service for more information.

• Minimum indent without sideguards: 1.3 in (33 mm).

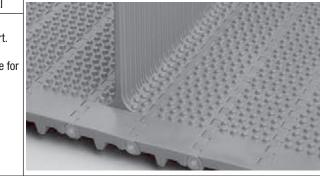
^a Contact Intralox Customer Service for availability.

	Flat Top Base Flights (No-Cling)							
Available Fl	light Height							
in	mm	Available Materials						
4	102	Polypropylene, polyethylene, acetal						
 Each flight ex No fasteners 		enter of the module, molded as one part.						
 Custom flight more informa 		able. Contact Intralox Customer Service for						
 Minimum inde 	ent without sideg	uards: 1.3 in (33 mm).						
			TITT					

ana a Canance -2

Nub Top Base Flights (Double No-Cling)

Available Flight Height Available Materials in mm 4 102 Polypropylene, polyethylene, acetal · No-Cling vertical ribs are on both sides of the flight. • Each flight extends from the center of the module, molded as one part. No fasteners are required. · Custom flight heights are available. Contact Intralox Customer Service for more information. • Minimum indent without sideguards: 1.3 in (33 mm).



	Flush Grid Base Flights (No-Cling)					
Available F	light Height					
in	mm	Available Materials				
2	51	Polypropylene, polyethylene, acetal,				
4	102	ChemBlox [™] , detectable polypropylene A22				

- · The No-Cling vertical ribs are on both sides of the flight.
- Each flight extends from the center of the module, molded as one part. No fasteners are required.
- These flights cannot be used with the S800 Perforated Flat Top (slotted version with 18% open area).
- Molded 1.3 in (33 mm) indent available.
- · Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent without sideguards: 1.3 in (33 mm).



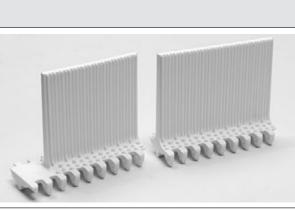
		No-Cling Impact Resistant	Open Hinge Flights		
Available F	light Height	Available Materials			
in	mm				
4	102	Acetal, polypropylene, polyethylene			
No fasteners	are required.	enter of the module, molded as one part.			
		n) molded indent.			
 Custom flight more information 		lable. Contact Intralox Customer Service for	- Internet Pression		
Minimum ind	ent without sideo	guards: 1.3 in (33 mm).	And the second se		
			TATATATA PARATATA		

No-Cling Impact Resistant Open Hinge Nub Top Flights

- Available Flight Height

 in
 mm
 Available Materials
- 4
 102
 Acetal, polypropylene, PK

 • Each flight extends from the center of the module, molded as one part. No fasteners are required.
- Available with a 1.3 in (33 mm) molded indent.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent without sideguards: 1.3 in (33 mm).



		Heavy-Duty Edg	e Flights
Available Flight Height			
in	mm	Available Materials	
4	102	РК	-
Each flight extends from the center of the module, molded as one part. No fasteners are required.			
Available with	h 1.3 in (33 mm)	and 2 in (51 mm) molded indent	
Flights can be mm).	e cut down to cu	stom heights. Minimum height: 1.0 in (25.4	
Streamline fli	ights are smooth	on both sides.	Sec.
			an aller
			alse mar

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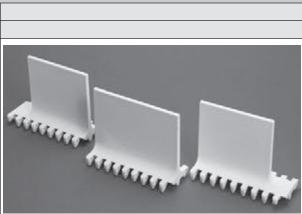
		Impact Resistar
Available F	light Height	
in	mm	Available Materials
1	25	
2	51	Acatal X roy datastable sostal
3	76	Acetal, X-ray detectable acetal
4	102	
 Each flight ex No fasteners 		enter of the module, molded as one part.
Custom flight more information		lable. Contact Intralox Customer Service for
Minimum ind	lent without sideo	juards: 1.3 in (33 mm).

Open Hinge Impact Resistant Flights

Available F	light Height	
in	mm	Available Materials
4	102	Polypropylene, polyethylene, acetal, X-ray detectable acetal, ChemBlox [™] , PK
6	152	

• Each flight extends from the center of the module, molded as one part. No fasteners are required.

- Standard 4 in (102 mm) height can be cut to suit application.
- Available with 1.3 in (33 mm) and 2 in (51 mm) molded indent.
- Minimum indent without sideguards: 1.3 in (33 mm).



		Tough Flig	its
Available F	light Height		
in	mm	Available Materials	
4	102	Hi-Impact	
6	152	HI-IIIpact	
Each flight ex No fasteners		enter of the module, molded as one part.	
Custom flight more informa		lable. Contact Intralox Customer Service for	

- Molded 2 in (51 mm) indent available.
- Minimum indent without sideguards: 1.3 in (33 mm).



		Scoop Flig	hts ^a		
Available F	Available Flight Height in mm Available Materials				
in					
3	76				
4	102	Acetal, polyethylene, polypropylene, ChemBlox [™] , nylon, PK			
6	152				
	xtends from the c are required.	enter of the module, molded as one part.			
 Bucket flight built belts. C 	ts and scoop fligh Contact Intralox Cu	ts can be cut and combined for custom- istomer Service for more information.			
Minimum ind	dent without side	guards:1.3 in (33 mm).	and and and and		
a Contact Introlog	v Customor Sorvico	for ovailability			

⁴Contact Intralox Customer Service for availability.

Heavy-Duty Edge Scoop Flights^b

	Available Flight Height				
Available Materials	mm	in			
PK	102	4			
	152	6			

• Each flight extends from the center of the module, molded as one part. No fasteners are required.

• Bucket flights and scoop flights can be cut and combined for custombuilt belts. Contact Intralox Customer Service for more information.

• Minimum indent without sideguards: 1.3 in (33 mm).



^b Contact Intralox Customer Service for availability.

	Bucket Flights ^a								
Available F	light Height								
in	mm	Available Materials							
2.25 ^b	57 ^b								
3	76	- Polypropylene, polyethylene, acetal -							
4	102								
6	152								
 Each flight ex No fasteners 		enter of the module, molded as one part.							
 Bucket flights built belts. Co 	s and scoop fligh ontact Intralox Cu	ts can be cut and combined for custom- istomer Service for more information.	the set in the						
Minimum ind	ent without sideo	guards: 1.3 in (33 mm).	and the send the						
^a Contact Intralox	Customer Service	for availability.							
^b 2.25 in (57 mm)) bucket flight only	available in polypropylene.							

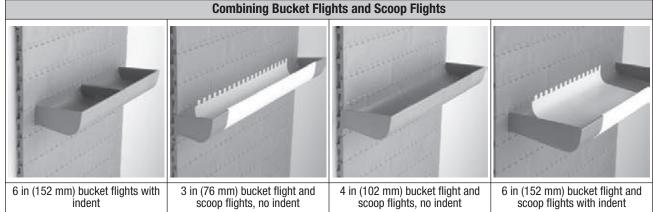
3-Piece Perforated Bucket and Scoop Flights

Available F	light Height	
in	mm	Available Materials

- 4 102 Polypropylene, polyethylene^a, acetal^a
 Flights consist of 3 pieces: the base module, the attachment, and the rod.
- Open slots improve drainage for inclines.
- Flight surface has 30% open area.
- Belt surface has 0% open area. Base module is S800 Flat Top Open Hinge.
- Flights can be cut and combined for custom-built belts. Contact Intralox Customer Service for more information.
- Do not use with S800 Perforated Flat Top (slotted version with 18% open area) or S800 Flush Grid Nub Top.
- Bucket profile has a 0.27 in (6.9 mm) gap between the belt top surface and the bottom surface of bucket side panel.
- Approximate flight surface opening size: 0.130 in (3.3 mm) \times 2.40 in (70.0 mm).
- Minimum indent without sideguards:2.00 in (50.8 mm).

^a Contact Intralox Customer Service for availability.





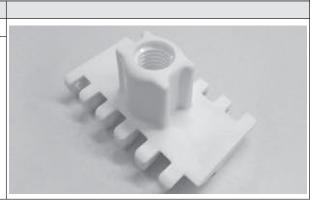
Bucket flights and scoop flights can be cut and combined for custom-built belts. Contact Intralox Customer Service for more information.

Таре	Tapered Edge						
Available Materials							
Polypropylene, acetal							
Compatible with S800 Flat Top and S800 Mesh Top.							
Designed to accept headed plastic rods.							
Steel rods can be retained with plastic rodlets.	The UNITED STORES						
	1 Ultime alles						
	Man Andrews						
	OL OL REE						

Threaded Barrel Attachments

Available Materials Acetal

- Attaches to \$800 Open Hinge Flat Top modules-4 in (102 mm) wide.
- 3/4 in-10 thread.
- Commonly used on poultry cone assemblies for the manual deboning process.



Sideguards Available Sizes Available Materials in mm Available Materials 2 51 3 3 76 Polypropylene, polyethylene, PK, acetal 4 102 6 6 152 Image: Containment.

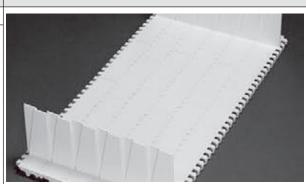
- Fastens to belt with hinge rods. No other fasteners required.
- Sideguards are installed with the back ends angled inward, toward the product. This is called a product-friendly orientation. On request, the back ends can be angled outward, toward the conveyor sides.
- When going around the 6- and 8-tooth sprockets, sideguards fan out, opening a gap at the top that can allow small products to fall out. The sideguards stay completely closed when going around the 10-, 12- and 16-tooth sprockets.
- Standard gap between sideguards and flight edge: 0.3 in (8 mm)
- Minimum indent: 0.7 in (18 mm) except for Flush Grid which is 1.3 in (33 mm).



Molded-in Sideguards

Availab	le Sizes	
in mm		Available Materials
4	102	Polypropylene, polyethylene, acetal

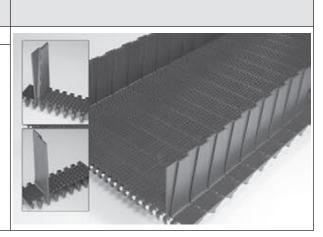
- Molded as integral part of the belt with no fasteners required
- Part of the Intralox EZ Clean product line.
- Overlapping sideguards fully open when wrapping around sprocket, allowing greater access during cleaning. Sideguards partially open on forward bends of elevating conveyors.
- Sideguards can be spliced into all S800 belts, except Flat Top, Perforated Flat Top (18% open area) and Flush Grid Nub Top.
- Standard 4 in (102 mm) height can be cut to suit application.
- Molded indent: 1.3 in (33 mm).
- Minimum backbend radius: 12 in (305 mm).



Nub Top Molded-In Sideguards

Availab	le Sizes	
in	mm	Available Materials
4	102	Acetal, polypropylene

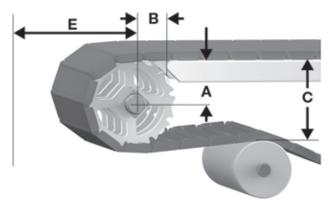
- Molded as integral part of the belt with no fasteners required
- Part of the Intralox EZ Clean product line.
- Nub Top design and No-Cling rib feature provide a non-stick conveying surface that delivers superior product release and cleanability.
- Overlapping sideguards fully open when wrapping around sprocket, allowing greater access during cleaning. Sideguards partially open on forward bends of elevating conveyors.
- Sideguards can be spliced into all Series 800 belts, except Series 800 Perforated Flat Top (18% open area) and Series 800 Flush Grid Nub Top.
- Standard 4 in (102 mm) height can be cut to suit application.
- Molded indent: 1.3 in (33 mm).
- Minimum backbend radius:10 in (254 mm).



	Scoop/Bucket Flight Cross-Sectional Area for Vertical Incline								
in	mm	sq in	sq mm						
Scoop	Height	Ai	rea						
3	76	4.3	2774	H					
4	102	6.0	3871	R 0.1"					
6	152	9.5	6129						
Bucket	Height	Ai	rea	$\begin{bmatrix} 1 & \dots & \dots \\ 0.5^{n} & \dots & \dots \\ 2 & \dots & $					
2.25	57	2.3	1484	(7.6 mm) (7.6 mm) (7.6 mm)					
3.00	76	4.3	2774	(25.4 mm)					
4.00	102	6.0	3871						
6.00	152	9.5	6129	1 height					
Minimum row sp buckets, and 4 in	acing: 6 in (152 m (102 mm) for all c	m) for 6 in (152 m other sizes.	m) scoops and	2 area					

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

 ${f B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)

C vertical distance between carryway top and returnway support top

E minimum horizontal distance between shaft centerline and other components

Figure 26: A, B, C, and E drive dimensions

Spi	ocket Descr	iption		A		В		C		E
•	Diameter	Number		tom to top) ^a		-				-
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
Flat Top,	Flush Grid,		pen Hinge Flat To	p, Open Hinge F at Top, Perforate	lat Top with d Flat Top (a	Heavy-Duty	Edge, Sean	nFree Open	Hinge Flat	Top, Toug
4.0	102	6	1.42-1.69	36-43	1.73	44	4.00	102	2.38	60
5.2	132	8	2.09-2.29	53-58	2.00	51	5.20	132	2.98	76
6.5	165	10	2.78-2.94	71-75	2.16	55	6.50	165	3.63	92
7.7	196	12	3.41-3.54	87-90	2.45	62	7.70	196	4.23	107
10.3	262	16	4.74-4.84	120-123	2.84	72	10.30	262	5.53	140
1010	202	10			ni Rib	, -	10.00	202	0.00	110
4.0	102	6	1.42-1.69	36-43	1.73	44	4.13	105	2.50	64
5.2	132	8	2.09-2.29	53-58	2.00	51	5.33	135	3.10	79
6.5	165	10	2.78-2.94	71-75	2.16	55	6.63	168	3.75	95
7.7	196	12	3.41-3.54	87-90	2.45	62	7.83	199	4.35	110
10.3	262	16	4.74-4.84	120-123	2.84	72	10.43	265	5.65	144
				ub Top, Nub Top,					0.00	
4.0	102	6	1.42-1.69	36-43	1.73	44	4.10	104	2.48	63
5.2	132	8	2.10-2.30	53-58	1.98	50	5.33	135	3.09	78
6.5	165	10	2.77-2.92	70-74	2.18	55	6.57	167	3.71	94
7.7	196	10	3.42-3.55	87-90	2.43	62	7.83	199	4.34	110
10.3	262	16	4.72-4.81	120-122	2.88	73	10.35	263	5.60	142
10.0	202	10		1 Hinge Cone Top				200	0.00	172
4.0	102	6	1.42-1.69	36-43	1.73	44	4.13	105	2.50	64
5.2	132	8	2.10-2.30	53-58	1.98	50	5.35	136	3.11	79
6.5	165	10	2.77-2.92	70-74	2.18	55	6.60	168	3.74	95
7.7	196	10	3.42-3.55	87-90	2.43	62	7.85	199	4.36	111
10.3	262	16	4.72-4.81	120-122	2.88	73	10.38	264	5.63	143
10.0	202	10	4.72 4.01		er Top	10	10.00	204	0.00	140
4.0	102	6	1.42-1.69	36-43	1.73	44	4.44	113	2.81	71
5.2	132	8	2.10-2.30	53-58	1.98	50	5.66	144	3.43	87
6.5	165	10	2.77-2.92	70-74	2.18	55	6.91	176	4.05	103
7.7	196	12	3.42-3.55	87-90	2.43	62	8.17	207	4.68	119
10.3	262	16	4.72-4.81	120-122	2.88	73	10.69	272	5.94	151
10.0	202	10	1.72 1.01		ed Rib	10	10.00		0.01	
4.0	102	6	1.42-1.69	36-43	1.73	44	4.28	109	2.65	67
5.2	132	8	2.09-2.29	53-58	2.00	51	5.48	139	3.25	83
6.5	165	10	2.78-2.94	71-75	2.16	55	6.78	172	3.90	99
7.7	196	12	3.41-3.54	87-90	2.45	62	7.98	203	4.50	114
10.3	262	16	4.74-4.84	120-123	2.84	72	10.58	269	5.80	147
10.0	202	10			riction Top	12	10.00	200	0.00	1 11
4.0	102	6	1.42-1.69	36-43	1.74	44	4.16	106	2.53	64
5.2	132	8	2.09-2.29	53-58	2.00	51	5.36	136	3.13	80
6.5	165	10	2.78-2.94	71-75	2.00	55	6.66	169	3.78	96
7.7	196	10	3.40-3.54	86-90	2.17	62	7.86	200	4.38	111
10.3	262	12	4.74-4.84	120-123	2.43	72	10.46	266	5.68	144
10.5			ns where end trans		2.04	12	10.40	200	5.00	144

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S800 Dead Plate Gap							
	Sprocket Description	Minimum Gap					
Pitch D	iameter						
in	mm	Number of Teeth	in	mm			
4.0	102	6	0.268	6.8			
5.2	132	8	0.200	5.1			
6.5	165	10	0.158	4.0			
7.7	196	12	0.132	3.4			
10.3	262	16	0.098	2.5			

	SeamFree [™]	[™] Minimu	um Hinge Flat Top
	in	mm	
Pitch	2.00	50.8	
Minimum Width	6	152	
Width Increments	1.00	25.4	
Opening Size	-	-	a la
Open Area	0'	%	SISTS BUS
Hinge Style	Ор	en	SAUS B
Rod Retention; Rod Type	Snap-loci	k; headed	23/3/5/BU.
Produ	ct Notes		
 Contact Intralox for precise bel before designing equipment or 	t measurements and ordering a belt.	d stock status	
 Smooth, closed upper surface with 	th fully flush edges.		
 Fully sculpted and radiused corner to catch and hold debris. 	ers with no pockets or	r sharp corners	
 Cam-link hinge provides easy cle exposure as the belt moves arour 		inge and rod	
 Detailed material information is p 	rovided in Product Lir	ne.	and the second sec
 Drive bar on the underside of this outside of the belt for easier, faste proven both in-house and in field 	er cleanup. Drive bar		Fuch the fuctor
 Designed for use with S800 Angle compatible with standard S800 E 	ed EZ Clean sprockets Z Clean sprockets.	s. Also fully	
Belts over 36 in (914 mm) are bu	ilt with multiple modu	iles per row, but	
seams are minimized.			2.00" NOM 2.00" NOM (50.8 mm)

Belt Data									
Default Rod M Diameter 0.1		Belt Strength		Temperati (contii	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft²	kg/m²		
Acetal	Acetal	275	4,010	-50 to 200	-46 to 93	2.19	10.68		
Acetal	Polypropylene	250	3,650	34 to 200	1 to 93	2.13	10.41		
Acetal	Polyethylene	150	2,190	-50 to 150	-46 to 66	2.13	10.40		
Polyethylene	Acetal	200	2,920	-50 to 150	-46 to 66	1.50	7.32		
Polyethylene	Polyethylene	150	2,190	-50 to 150	-46 to 66	1.44	7.05		

Se	amFree [™] I	Minimun	n Hinge Cone Top [™]
	in	mm	Y ANY ANY ANY ANY ANY ANY ANY ANY ANY AN
Pitch	2.00	50.8	
Minimum Width	6	152	Contraction of the second seco
Maximum Width	36	914	
Width Increments	1.00	25.4	
Opening Size (approximate)	-	-	
Open Area	0%	6	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	; headed	
			STATE STATE
Produc	t Notes		0 0 0 0 0 0
 Contact Intralox for precise belt before designing equipment or 	measurements and ordering a belt.	l stock status	
• Closed upper surface with fully flu	sh edges.		
• Fully sculpted and radiused corne to catch and hold debris.	rs with no pockets or	sharp corners	
Cam-link hinges provide easy cleater exposure as the belt moves aroun	ning with greater hin d the sprockets.	ge and rod	
Detailed material information is pr	ovided in Product Lin	e.	
 Drive bar on the underside of this outside of the belt for easier, faste proven both in-house and in field 	r cleanup. Drive bar e		
 Not recommended for product acc Intralox Customer Service for more 	umulation conditions e information.	. Contact	
• Cone height: 0.125 in (3.2 mm).			
• Cone spacing: 0.268 in (6.88 mm)			0.268" NOM R 0.030" 0.125" (6.8 mm)
• Standard cone indent: 1.3 in (33 n	ım).		(11.1 mm) 2.0" NOM. (50.8 mm)

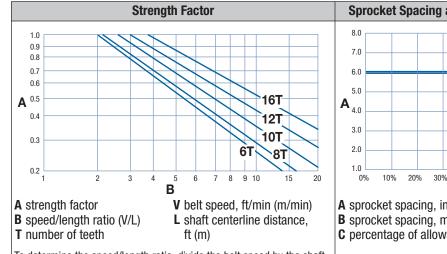
Belt Data									
	Default Rod Material, Diameter 0.24 in	Belt Strength		Temperature Range (continuous)		Belt Mass			
Belt Material	Material (6.1 mm)		N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Acetal	275	4,010	-50 to 200	-46 to 93	2.28	11.13		
Acetal	Polypropylene	250	3,650	34 to 200	1 to 93	2.22	10.84		
Acetal	Polyethylene	150	2,190	-50 to 150	-46 to 66	2.22	10.84		
Polyethylene	Acetal	200	2,920	-50 to 150	-46 to 66	1.56	7.62		
Polyethylene	Polypropylene	150	2,190	-50 to 150	-46 to 66	1.50	7.32		

		Sprocket and Support		
Belt Wi	dth Range ^a	Minimum Number of Sprockets	Wear	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway
2	51	1	2	2
4	102	1	2	2
6	152	2	2	2
8	203	2	2	2
10	254	2	3	2
12	305	3	3	2
14	356	3	3	3
16	406	3	3	3
18	457	3	3	3
20	508	5	4	3
24	610	5	4	3
30	762	5	5	4
32	813	7	5	4
36	914	7	5	4
42	1,067	7	6	5
48	1,219	9	7	5
54	1,372	9	7	6
60	1,524	11	8	6
72	1,829	13	9	7
84	2,134	15	11	8
96	2,438	17	12	9
120	3,048	21	15	11
144	3,658	25	17	13
	s, use an odd numb rline spacing. ^c	er of sprockets at Maximum 6 in	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing

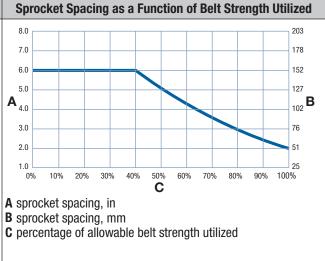
^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.0 in (25.4 mm) increments beginning with minimum width of 2 in (51 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets. Polyurethane sprockets require a maximum 4 in (102 mm) centerline spacing.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



To determine the speed/length ratio, divide the belt speed by the shaft centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.



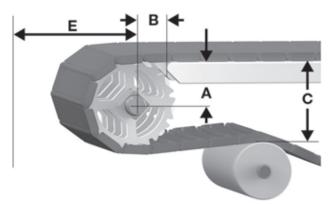
						ł	Angled E	Z Clean	™ Spro	cket ^a
Number of Teeth		Pitch neter	-	Outer 1eter		. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
6 (13.40%)	4.0	102	3.8	97	2.0	50.8		1.5		40
8 (7.61%)	5.2	132	5.0	127	2.0	50.8		1.5		40
10 (4.89%)	6.5	165	6.2	157	2.0	50.8		1.5		40
12 (3.41%)	7.7	196	7.5	191	2.0	50.8		1.5		40
16 (1.92%)	10.3	262	10.1	257	1.5	38		1.5, 2.5		40, 60

^a Do not use Angled EZ Clean sprockets with Series 800 Mesh Top.

		Streamline F	ights
Available F	light Height		
in	mm	Available Materials	
4	102	Acetal	
Streamline fli	ghts are smooth	on both sides.	
Each flight ex No fasteners		enter of the module, molded as one part.	
SeamFree flig greater than	ghts are available 12 in (304 mm) v	e in 12 in (304 mm) widths. Flighted belts vide are available with seams minimized.	
Custom flight more information		lable. Contact Intralox Customer Service for	- 22
Molded-in, 1.	.3 in (33 mm) ind	ent from each edge.	Saar

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 $\boldsymbol{\mathsf{A}}$ vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 27: A, B, C, and E drive dimensions

			S	850 Conveyor F	rame Dime	ensions					
Spro	Sprocket Description A			В		C		E			
Pitch D	iameter	Number	Range (Bot	ge (Bottom to Top) ^a							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
	SeamFree Minimum Hinge Flat Top										
4.0	102	6	1.42-1.69	36-43	1.73	44	4.00	102	2.38	60	
5.2	132	8	2.09-2.29	53-58	2.00	51	5.20	132	2.98	76	
6.5	165	10	2.78-2.94	71-75	2.16	55	6.50	165	3.63	92	
7.7	196	12	3.41-3.54	87-90	2.45	62	7.70	196	4.23	107	
10.3	262	16	4.74-4.84	120-123	2.84	72	10.30	262	5.53	140	
			5	SeamFree Minimu	im Hinge Co	ne Top					
4.0	102	6	1.42-1.69	36-43	1.73	44	4.13	105	2.50	64	
5.2	132	8	2.10-2.30	53-58	1.98	50	5.35	136	3.11	79	
6.5	165	10	2.77-2.92	70-74	2.18	55	6.60	168	3.74	95	
7.7	196	12	3.42-3.55	87-90	2.43	62	7.85	199	4.36	111	
10.3	262	16	4.72-4.81	120-122	2.88	73	10.38	264	5.63	143	
^a For genera	l applications	and applicatio	ons where end transf	er of tip-sensitive pr	oduct is not cr	ritical, use the	bottom of the	range.			

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S850 Dead Plate Gap										
	Sprocket Description	Minimum Gap									
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
5.2	132	8	0.200	5.1							
6.5	165	10	0.158	4.0							
7.7	196	12	0.132	3.4							

itin I a are

	Belt Data										
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contii	ure Range 1uous)	Belt Mass					
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft²	kg/m²				
Enduralox polypropylene	303/304 stainless steel	1,500	21,900	34 to 220	1 to 104	2.4	11.7				

N	Nedium Slo	t Stainle	ss Steel Link (SSL)
	in	mm	
Pitch	1.99	50.5	
Minimum Width	11.3	288	
Width Increments	0.66	17	
Slot Size, Linear	0.08 x 0.40	2.0 x 10.2	
Slot Size, Transverse	0.09 x 0.24	2.3 x 6.1	
Open Area	26	6%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Barn door;	unheaded	
Produ	ict Notes		CALLER PROVIDED AND ADDRESS OF A DECEMBER OF A
 Contact Intralox for precise be before designing equipment of other or designing equipment of when ordering. Molded-in sideguards are flush wuse of the belt surface. Robust design reduces contamin Stainless steel links (SSL) are int manage high loads and thermal temperature variations. Barn door style rod retention sys maintenance. Enduralox polypropylene materia temperature cycling. Each belt material has a default of the set o	r ordering a belt. I-in sideguards. Specif with belt edges to prov nation risks. Regrated into the belt d expansion associated tem simplifies installat I increases resistance	ry sideguards ride maximum lesign to with tion and routine to chemical and	
 Each beit material has a default i available. Intralox can help identi combination for your application. Detailed material information is p 	ify the best belt and ro	od material	
Wear-resistant stainless steel roo wide			3.0" (76 mm)
Drive system requires less back elongation.			sideguard sideguard
• For belts with molded-in sidegua radius of 7 in (180 mm)			
Wear-resistant stainless steel roo wide.	ds available for belts u	ip to 10 ft (3 m)	1.99" (50.5 mm) (50.5 mm)

Belt Data										
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	0°	lb/ft ²	kg/m²			
Enduralox polypropylene	303/304 stainless steel	2,000	29,200	34 to 220	1 to 104	2.6	12.7			

La	arge Slot S	Stainles	s Steel Li	nk (SSL)	
	in	mm	~		
Pitch	1.99	50.5		Contraction of the second	muniter
Minimum Width	16.0	406		inner linner	initian al anti-
Width Increments	0.66	17		and the second	inning
Slot Size, Linear	0.16 x 0.39	4.1 x 9.9	-		innu sauger
Slot Size, Transverse	0.12 x 0.50	3.0 x 12.7	556°	and the second	
Open Area	22%	6	- Jose -	South a second	
Hinge Style	Оре	n		Property in a	
Rod Retention; Rod Type	Barn door; u	unheaded			
Product	Notes				uttertte se je j
 Contact Intralox for precise belt n before designing equipment or or 		stock status	ruhr	ากการการการการการการการการการการการการกา	
• Available with or without molded-in when ordering.	sideguards. Specify	sideguards			ufficilitatio
 Molded-in sideguards are flush with use of belt surface. 			Hallallat top		
Robust design reduces contamination	on risks.				
 Barn door style rod retention system maintenance. 	n simplifies installati	on and routine	ruhp	mmmmml	nnn_
 Stainless steel links (SSL) are integr manage high loads and thermal exp temperature variations. 	ated into the belt de ansion associated w	esign to vith			ullullulli ullullulli
 Proven Enduralox polypropylene main chemical and temperature cycling. 	terial increases resi	stance to	Indialia	LACKERCEREE Hullin	Influting the
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 					
Detailed material information is prov	vided in Product Line	э.			
 Proven drive system requires less babelt elongation. 	ack tension and is le	ess sensitive to			3.0" (76 mm)
 For belts with molded-in sideguards radius of 7 in (180 mm). 	s, provide a minimun	n backbend		sideguard sideguar	d
 Wear-resistant stainless steel rods a wide 	available for belts up	to 10 ft (3 m)			
					.625" (15.9 mm)
		Belt I	ata		
	Default Rod Mate	erial,		Temperature Range	
	Diameter 0.24		elt Strength	(continuous)	Belt Mass

lbf/ft

2,000

N/m

29,200

°F

34 to 220

°C

1 to 104

lb/ft²

2.6

kg/m²

12.7

Belt Material

Enduralox polypropylene

(6.1 mm)

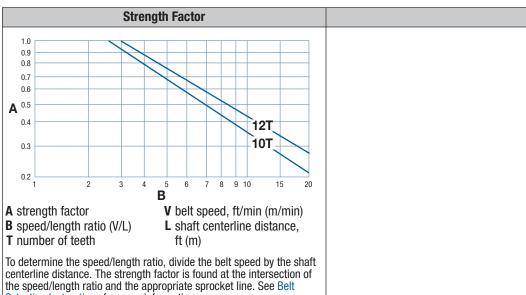
303/304 stainless steel

	Rou	nd Hole	Enhanced
	in	mm	
Pitch	1.99	50.5	
Minimum Width	6	152.4	
Width Increments	0.66	16.8	
Opening Size	5/32 (0.156)	4	
Open Area	20%	6	
Hinge Style	Оре	n	
Rod Retention; Rod Type	Barn door; u	unheaded	
Prod	uct Notes		· · · · · · · · · · · · · · · · · · ·
 Contact Intralox for precise b before designing equipment of 	or ordering a belt.	stock status	งจากกล่างแน่นแนกเลื่อนนา
 Smooth upper surface with fully 	e e		
 Enhanced design and hole pattern 			* ** ** ** ** *** *** *** *** *** ***
 Improved hole pattern and more airflow and drainage. 			
• S888 sprocket design requires on the drive and idle shaft.	all sprockets to be retain	ed in position	
 To maintain proper tracking, de similar devices. 	sign conveyors to use tra	acking shoes or	
 Detailed conveyor design guide Customer Service for more info 	lines are available. Conta rmation.	act Intralox	นั้นของของการการการการการการการการการการการการการก
 Each belt material has a default available. Intralox can help iden combination for your application 	tify the best belt and rod		1.99 in 1.99 in 1
 Detailed material information is 	provided in Product Line	e.	(50.5 mm) (50.5 mm)
 Minimum sprocket indent: 2.0 i 	n (50 mm) to the sprock	et edge.	(h)
 Maximum clearance between the collars: no greater than 0.125 in 	ne sprocket and the retain (3 mm) for all sprocket	iner rings or s on the shafts	

	Belt Data											
	Default Rod Material, Diameter 0.24 in				ure Range 1uous)	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²					
Acetal	303/304 stainless steel	1,500	21,900	-50 to 200	-46 to 93	3.10	15.14					
X-ray detectable acetal	303/304 stainless steel	1,500	21,900	-50 to 200	-46 to 93	3.1	15.14					

Medium	Slot, Round Hole	Enhanced	Medium	Slot SSL, Large Slot	SSL	Wearstrips Me	edium Slot and
Belt Wid	th Range ^a	Minimum Number of	Belt Wid	th Range ^a	Maximum Number of	1 -	Slot SSL
in	mm	Sprockets Per Shaft ^b	in	mm	Sprockets Per Shaft ^b	Carryway	Returnway
6	152	2	22.6-28.0	575-711	6	2	2
8	203	2	28.6-30.6	727-778	7	2	2
10	254	2	31.3-35.3	795-897	8	3	2
12	305	3	36.0-40.6	914-1,032	9	3	2
14	356	3	41.3-46.0	1,049-1,167	10	3	3
16	406	3	46.6-48.0	1,184-1,218	11	3	3
18	457	3	48.6-52.6	1,235-1,336	12	3	3
20	508	5	53.3-58.6	1,353-1,489	13	4	3
24	610	5	59.3-64.6	1,506-1,641	14	4	3
30	762	5	65.3-66.6	1,658-1,692	15	5	4
32	813	7	67.3-72.6	1,709-1,844	16	5	4
36	914	7	73.3-79.9	1861-2030	17	5	4
42	1,067	7	80.6-84.6	2,047-2,148	18	6	5
48	1,219	9	85.3-87.9	2,165-2,233	19	7	5
54	1,372	9	88.6-91.9	2,250-2,335	20	7	6
60	1,524	11	92.6-95.2	2,351-2,419	21	8	6
72	1,829	13	95.9-98.6	2,436-2,504	22	9	7
84	2,134	15	99.2-103.2	2,521-2,622	23	11	8
96	2,438	17	103.9-109.2	2,639-2,774	24	12	9
120	3,048	21	109.9-118.6	2,791-3,011	25	15	11
144	3,658	25	119.2-119.9	3,028-3,045	26	17	13
	is, use an odd nu aximum 6 in (152	mber of 2 mm) centerline	To avoid sprocket inte the sprocket installation installation	Maximum 12 in (305 mm) centerline spacing			

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.66 in (16.8 mm) increments beginning with minimum width of 2 in (51 mm). If the actual width is critical, contact Intralox Customer Service. ^b Lock all sprockets. Use appropriate locking collars to restrict axial movement.



Selection Instructions for more information.

								Nylon S	procket	s
Number of Teeth	-	Pitch neter	-	Outer neter	-	. Hub dth		Available Bore Sizes		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.70%)	6.5	165	6.2	157	1.0	25	Availat	Available as a		Available as a custom order.
12 (3.29%)	7.78	196	7.5	191	1.0	25	custon	n order.	50, 60, 70, 80, 90, 100	50, 60, 80, 90

• U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

· Lock all sprockets in place on the shaft.

	Split Nylatron Sprockets										
Number of Teeth		Pitch neter		Outer neter		. Hub dth		Available	e Bore Siz	zes	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
12 (3.29%)	7.7	196	7.5	191	1.5	38		3.5			
											1 1

			Ny	latron Supp	ort Wheel	
Pitch Dia	meter		Available B	ore Sizes		
in	mm	Round in	Square in	Round mm	Square mm	
7.7	196		3.5			

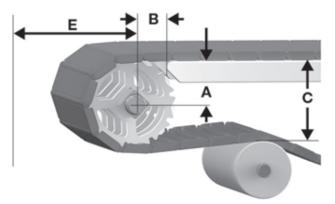
						Buil	dup Res	istant A	cetal S	procket
Number of Teeth		Pitch neter		Outer neter		. Hub dth	Av	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.5	165	6.2	157	1.5	38		2.5		60 ^a
	Intralo	x Custo	mer Ser	rvice bef	iore usin	ig in oth	in freezer er applica		pplicatio	ns.

^aAvailable as standard 60-mm square bore or available with four retention notches.

		Universal Sid	eguards
Availabl	le Height		
in	mm	Available Materials	
2	51	Blue polypropylene	
3	76	Blue polypropylene	
4	102	Blue polypropylene	
6	152	Blue polypropylene	
Part of the Interview	tralox EZ Clean p	roduct line.	
Fastens to be	elt with hinge rod	s. No other fasteners required.	
product. This back ends ca • Minimum ind	is called a produ		

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- \bm{B} horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\bm C}\,$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 28: A, B, C, and E drive dimensions

	S888 Conveyor Frame Dimensions											
Sprocket Description A					I	3	(C	E			
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a								
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm		
		S88	88 Medium Slot, N	ledium Slot SSL,	Large Slot \$	SSL, Round	Hole Enhan	ced				
6.5	165	10	2.77-2.925	70-74	3.00	76	6.5	165	3.61	92		
7.7 196 12 3.42-3.55 87-90 3.00 76 7.9 201 4.24 108										108		
a For genera	Lannlications	and applicatio	ne where end tranef	er of tin-sensitive pr	oduct is not cr	itical use the	hottom of the	rando				

^aFor general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S888 Dead Plate Gap										
	Sprocket Description	Minimum Gap									
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
6.5	165	10	0.158	4.0							
7.7	196	12	0.132	3.4							

		Open	Grid		
	in	- mm			
Pitch	1.07	27.2			
Minimum Width	2	51			
Width Increments	0.33	8.4			
Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1			
Open Area	38	%			
Hinge Style	Ор	en			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Rod Retention; Rod Type	Snap-lock	; headed		and the second	
Product	Notes		and have been	المتعا ليسا ليسا	hanne berne berne
 before designing equipment or or Large, open area provides excellent Low-profile transverse ridges help r declines. Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov Not recommended for product accu Intralox Customer Service for more Transverse ridge height: 0.188 in (4 Normal ridge indent: 0.25 in (6.4 minimum) 	drainage. nove product up ind material. Other roc the best belt and ro vided in Product Lir mulation conditions information. .8 mm).	0.360" 1.07" (9.1 mm) (27.2 mm)			
		Belt	Data		
	Default Rod Mat Diameter 0.18	· · · ·	Belt Strength	Temperature Range (continuous)	Belt Mass

Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt S	trength	Temperatı (contir	Belt Mass						
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.81	3.95				
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	0.84	4.09				
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.26	6.14				
Acetal ^a	Polyethylene	1,000	14,600	-50 to 70	-46 to 21	1.26	6.14				
^a Polyethylene rods can be used in co	ld applications when impacts or sud	lden starts/stop	os occur. Please	note lower rating							

		Flush	Grid
	in	mm	
Pitch	1.07	27.2	
Minimum Width	2	51	
Width Increments	0.33	8.4	
Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1	a second and a s
Open Area	38	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	; headed	
Product	Notes		
 before designing equipment or or Open pattern with smooth upper sur Provides excellent lateral movement HR nylon belts use short rodlets to h The rodlets are made from the same Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov Flights and sideguards are available Belts made of Hi-Temp material hav type, and retention: Minimum width: 6 in (151 mm) Rod retention: occluded edge Rod type: unheaded 	rface and fully flush t of containers. hold the main hinge e material as the m material. Other rod the best belt and ro vided in Product Lin	0.172" (4.4 mm) (27.2 mm)	

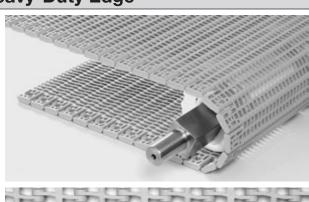
		Belt Data					
	Default Rod Material, Diameter 0.18 in	Belt St	trength	Temperati (contii	Belt Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.76	3.70
Enduralox polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.76	3.70
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	0.81	3.96
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.15	5.62
HSEC acetal	Polypropylene	800	11,700	34 to 200	1 to 93	1.15	5.62
Hi-Temp	Hi-Temp	1,200	17,500	70 to 400	21 to 204	1.08	5.27
FR TPES	Polypropylene	750	10,900	40 to 150	4 to 66	1.19	5.81
HR nylon	HR nylon	1,200	17,500	-50 to 240	-46 to 116	1.10	5.40
HHR nylon	HHR nylon	1,200	17,500	-50 to 310	-46 to 154	1.10	5.40
Acetal ^a	Polyethylene	1,000	14,600	-50 to 70	-46 to 21	1.15	5.62
Detectable polypropylene A22	Polypropylene	350	5,110	34 to 150	1 to 66	0.89	4.35
^a Polyethylene rods can be used in colo	d applications when impacts or sud	lden starts/stop	os occur. Please	e note lower rating			

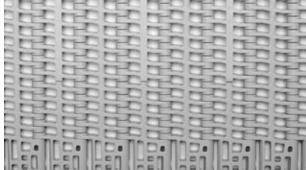
SERIES 900

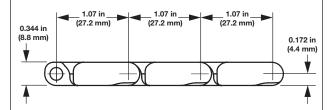
in	mm		
1.07	27.2		
4.7	118.4		
0.33	8.4		
0.24 x 0.28	6.1 x 7.1		
35%			
Open			
Occluded edge; unheaded			
	1.07 4.7 0.33 0.24 x 0.28 35 0p		

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Open pattern with smooth upper surface and fully flush edges
- Heavy-duty edge reduces catchpoints and increases belt lifespan.
- The combination of heavy-duty edge and unheaded rods inhibits rod migration caused by thermal expansion in microwave applications.
- Compatible with the Intralox Rod Remover
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Flights and sideguards are available. Minimum indent: 2 in (50.8 mm)







Belt Data							
	Standard Rod Material, Diameter 0.18 in	Belt Strength		Temperature Range (continuous)		Belt Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.76	3.71
Enduralox [™] polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.76	3.71

	0	pen Flu	sh Grid		
	in	mm			
Pitch	1.07	27.2			
Minimum Width	10	254			
Width Increments (See Product Notes.)	1.0	25.4			
Minimum Opening Size (approximate)	0.17 x 0.29	4.3 x 7.4			
Maximum Opening Size (approximate)	0.28 x 0.29	7.1 x 7.4			
Open Area	43	3%			
Hinge Style	Clo	sed			
Rod Retention; Rod Type	Occluded edg	ge; unheaded			
Product No	tes				
 Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Open pattern with a smooth upper surface and fully flush edges. Flush edge accommodates special abrasion resistant nylon rod growth for belt widths that are 42 in (1066 mm) or narrower. Other width increments may be available. Contact Intralox Customer Service for more information. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. To accommodate the rod retention design, ensure that outer sprockets are indented 2.5 in (63.5 mm) from the edge of the belt to the centerline of the sprocket. Flights are available. 			nannanananananaria nannanananariariaria nannanananariariariari		
		Belt Da	· · · · · · · · · · · · · · · · · · ·		

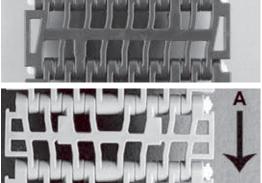
Beit Data							
	Default Rod Material, Diameter 0.18 in	Belt Strength		Temperature Range (continuous)		Belt Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.76	3.71
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.10	5.37
HR nylon	HR nylon	1,200	17,500	-50 to 240	-46 to 116	1.02	4.98
HHR nylon	HHR nylon	1,200	17,500	-50 to 310	-46 to 154	1.04	5.08

Mold	to Width	Flush Grid
in	mm	The second second
1.07	27.2	11111111111
3.25	83	
4.5	114	
7.5	191	
-	85	
0.24 × 0.28	6.1 × 7.1	
38	%	
Ор	en	
Snap-lock	k; headed	
	in 1.07 3.25 4.5 7.5 - 0.24 × 0.28 38 Op	1.07 27.2 3.25 83 4.5 114 7.5 191 - 85

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Molded with robust tracking tabs to support the belt in heavy sideloading applications
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Not compatible with sprockets that have a pitch diameter smaller than the 3.5 in (89 mm) pitch diameter (10 tooth) sprocket. If a 3.5 in (89 mm) pitch diameter is required, do not use a split sprocket.
- Sprockets required:
 - 85-mm belt: one sprocket
 - 4.5 in (114 mm) belt: up to three sprockets
 - 7.5 in (191 mm) belt: up to five sprockets
- Width tolerances: +0.000/-0.020 in (+0.000/-0.500 mm).
- Available in 10 ft (3 m) increments





A Arrow indicates preferred run direction

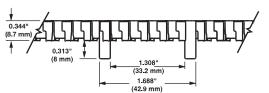


Figure 29: Series 900 Flush Grid Mold to Width

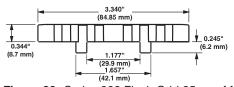


Figure 30: Series 900 Flush Grid 85 mm Mold to Width

	Belt Data									
Belt Width			Default Rod Material, Diameter 0.18 in	Dell Oliver with			ure Range 1uous)	Belt	Mass	
in	mm	Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m	
3.25	83	Polypropylene	Nylon	130	578	34 to 220	1 to 104	0.31	0.46	
3.25	83	Acetal	Nylon	250	1,110	-50 to 200	-46 to 93	0.42	0.62	
4.5	114	Polypropylene	Nylon	263	1,170	34 to 220	1 to 104	0.39	0.58	
4.5	114	Acetal	Nylon	555	2,470	-50 to 200	-46 to 93	0.54	0.80	
7.5	191	Polypropylene	Nylon	438	1,950	34 to 220	1 to 104	0.59	0.88	
7.5	191	Acetal	Nylon	800	3,560	-50 to 200	-46 to 93	0.85	1.26	
	85	Acetal	Nylon	275	1,220	-50 to 200	-46 to 93	0.38	0.57	

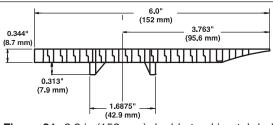
ONEPIECE[™] Live Transfer Flush Grid

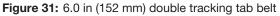
	in	mm		
Pitch	1.07	27.2		
Minimum Width	4.7	119		
Width Increments	0.33	8.4		
Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1		
Open Area	38	%		
Hinge Style	Ор	en		
Rod Retention; Rod Type	Snap-lock; headed			



Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Transfer edge is an integral part of this belt.
- Nylon rods provide superior wear resistance.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Addition of a fixed frame support can be necessary. The support ensures that the transfer belt does not snag when it intersects with the takeaway belt. Add support below the transfer belt, before the transfer. See 90-Degree Container Transfers for more information.
- When moving products from transfer belt to takeaway belt, ensure the transfer belt surface is no more than 0.06 in (1.5 mm) above the takeaway belt surface. When product is moving from the infeed belt onto the transfer belt, ensure the belts surfaces are level.
- · For custom belt widths, contact Intralox Customer Service.
- Do not use with sprockets smaller than a 3.5 in (89 mm) pitch diameter (10 tooth) sprocket. If a 3.5 in (89 mm) pitch diameter is required, do not use a split sprocket.
- For belt-strength calculations, subtract 1.5 in (38 mm) from the actual belt width.
- Also available in a 4.7 in (119 mm) wide single-tracking tab belt and 6 in (152 mm) wide double-tracking tab belt.
- Molded tracking tabs fit into standard 1.75 in (44.5 mm) wearstrip tracks, ensuring proper belt alignment.
- Available in 10 ft (3 m) increments





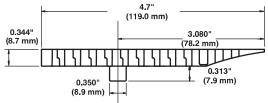
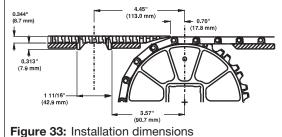


Figure 32: 4.7 in (119 mm) single tracking tab belt



Belt Data									
	Default Rod Material, Diameter 0.18 in	Belt Strength		-	ure Range 1uous)	Belt	Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Polypropylene	Nylon	700	10,200	34 to 220	1 to 104	0.93	4.54		
Acetal	Nylon	1,480	21,600	-50 to 200	-46 to 93	1.15	5.62		
FR TPES	Nylon	1,000	14,600	40 to 150	4 to 66	1.63	7.95		

		Raise	d Rib
	in	mm	3 mar
Pitch	1.07	27.2	
Minimum Width	2	51	
Width Increments	0.33	8.4	
Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1	
Open Area	38	%	
Product Contact Area	35	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	k; headed	
Produ	ict Notes		neessee
Contact Intralox for precise be before designing equipment o		l stock status	
HR nylon belts use short rodlets The rodlets are made from the s	to hold the main hinge ame material as the m	rod in place. ain rod.	
Use HR nylon in dry, elevated-te	mperature applications	S.	
Detailed material information is	provided in Product Lir	ю.	
 Each belt material has a default available. Intralox can help ident combination for your application 	tify the best belt and ro		
Detailed material information is	provided in Product Lir	ie.	
Raised ribs extend 3/16 in (4.7 r flush edges.	nm) above basic modu	le, with fully	
			0.391" 1.07" 1.07" 1.07" 1.07" (9.9 mm) (27.2 mm) (27.2 mm) (27.2 mm)

		Belt Data						
	Default Rod Material, Diameter 0.18 in	Belt S	Belt Strength		Temperature Range (continuous)		Belt Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.07	5.21	
Enduralox polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.07	5.21	
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	1.14	5.57	
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.68	8.19	
HSEC acetal	Polypropylene	800	11,700	34 to 200	1 to 93	1.68	8.19	
HHR nylon	HHR Nylon	1,200	17,500	-50 to 310	-46 to 154	1.60	7.80	
Acetal ^a	Polyethylene	1,000	14,600	-50 to 70	-46 to 21	1.68	8.19	

0.563" (14.3 mm)

 $\overline{\oplus}$

Ð

Raised Rib with Heavy-Duty Edge in mm Pitch 1.07 27.2 Minimum Width 4.7 118.4 0.33 Width Increments 8.4 Opening Size (approx.) 0.24 x 0.28 6.1 x 7.1 Open Area 38% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded **Product Notes** · Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. The combination of a heavy-duty edge and unheaded rods inhibits rod • migration caused by thermal expansion in microwave applications. · Compatible with Intralox Rod Remover • Can be used with finger transfer plates to eliminate product tipping and hang-ups Raised ribs extend 3/16 in (4.7 mm) above the module, with fully flush • edges. Each belt material has a default rod material. Other rod materials are • available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. • · Flights and sideguards are available. Minimum indent: 2 in (50.8 mm) 1.07 in 1.07 in 1.07 in (27.2 mm) (27.2 mm) (27.2 mm) 0.563 in (14.3 mm) 0.172 in 4.4 mm)

Belt Data								
	Default Rod Material, Diameter 0.18 in Temperature Rational Belt Strength						Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²	
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.07	5.22	
Enduralox polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.07	5.22	

		Mold	to Wid	th Ra	ised F	Rih			
		in	1		ISCU I				
Pitch		1.07	mm 27.2	_		1000			
THUI		1.1	27.2					-	
		1.1	37			-		30	
Molded W	idths (Blue acetal)	1.5	46				-		1
		2.2	55					20	
Onening S	ize (approximate)	0.24 × 0.28	6.1 × 7.1	1					11172
Open Area	,	38% -					-	_	94115
Hinge Styl		Clos				State-	21	AF	122011
Rod Reten	tion; Rod Type	Snap-lock	k; headed		1				
	Produc	t Notes			a second	10 I.		all.	
 Each be availabl combination Detailed 	odlets provide longer servic elt material has a default ro e. Intralox can help identify ation for your application. I material information is pro s both small and larger pro	d material. Other roo the best belt and ro ovided in Product Lir	nd material ne.	e		H		Ц	
 changes The 1.8 application 	, in (46 mm) belt is also ava tions where higher friction le in 10 ft (3 m) increments	is needed.	opylene for	0.39" (9.9 mr			1.07" (27.2 mm) (1)	1.07" - 27.2 mm)	0.56" (14.3 mm
 changes The 1.8 application 	in (46 mm) belt is also ava tions where higher friction	is needed.			m) _ 1.0	7" 1.07" mm) (27.2 mm)			
change: • The 1.8 applicat • Availabl	in (46 mm) belt is also ava tions where higher friction e in 10 ft (3 m) increments	is needed.	Bel	(9.9 mr ↓ ↑ t Data	n) - 1.0° (27.2)	Temperati	(27.2 mm) (() () () () () () () () () () () () ()	(27.2 mm)) (14.3 mm
change: • The 1.8 applicat • Availabl	in (46 mm) belt is also ava tions where higher friction	is needed.	Bel I Material,	(9.9 mr ↓ ↑	m) _ 1.0	Temperati (contin	(27.2 mm) (() () () () () () () () () () () () ()	(27.2 mm)	
change: • The 1.8 applicat • Availabl	in (46 mm) belt is also ava tions where higher friction e in 10 ft (3 m) increments	Default Rod	Bel I Material, 0.18 in	(9.9 mr ↓ ↑	n) - 1.0° (27.2)	Temperati	(27.2 mm) (() () () () () () () () () () () () ()	(27.2 mm)) (14.3 mm
change: The 1.8 applicat Availabl Belt V in 1.1	in (46 mm) belt is also ava tions where higher friction le in 10 ft (3 m) increments Width mm Belt Materi 29 Acetal	is needed. Default Rod Diameter ial (4.6 r Nyle	Bel I Material, • 0.18 in nm) on	t Data Belt St 140	n) 1.0 (27.2) trength N 623	Temperati (contin °F -50 to 200	(27.2 mm) ((27.2 mm) (() () () () () () () () () () () () ()	Beit Ib/ft 0.19	(14.3 mm) Mass kg/m 0.29
change: • The 1.8 applicat • Availabl Belt V	in (46 mm) belt is also availations where higher friction le in 10 ft (3 m) increments Width mm Belt Materi	Default Rod Diameter ial (4.6 r	Bel I Material, • 0.18 in nm) on on	t Data Belt St	n) 1.0 (27.2)	Temperati (contin	(27.2 mm) (() () () () () () () () () () () () ()	Belt) (14.3 mr † Mass kg/m

 $^{\rm a}$ 270 lbf (1,200 N) for 2.2 in (55 mm) with two (2) sprockets.

1.8

2.2

46

56

Polypropylene

Acetal

Nylon

Nylon

90

200^a

400

890^a

34 to 220

-50 to 200

1 to 104

-46 to 93

0.19

0.34

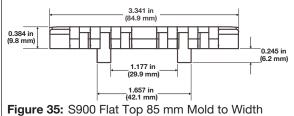
0.28

0.50

		Flat	Тор
Pitch	in 1.07	mm 27.2	·
Minimum Width	2	51	
Width Increments	0.33	8.4	
Opening Size	-	-	
Open Area	00	Vo.	
•	-		
Hinge Style Closed Rod Retention; Rod Type Snap-lock; headed			
Product	Notes		nnnninnnnn
 Contact Intralox for precise belt m before designing equipment or ord Smooth, closed surface with fully flux HR nylon belts use short rodlets to he The rodlets are made from the same Use HR nylon in dry, elevated-tempe Each belt material has a default rod available. Intralox can help identify th combination for your application. Detailed material information is prov Ideal for handling glass and other co 	dering a belt. sh edges. old the main hinge material as the m rature applications material. Other roo ne best belt and ro ided in Product Lir	rod in place. ain rod. S. I materials are d material	0.213" 1.07" 1.07" 1.07" (5.4 mm) (27.2 mm) (27.2 mm) (27.2 mm) (27.2 mm) (27.8 mm) (

	Belt Data										
	Default Rod Material, Diameter 0.18 in	Belt Strength		-	ure Range 1uous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²				
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.96	4.69				
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	1.01	4.95				
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.50	7.30				
HSEC acetal	Polypropylene	800	11,700	34 to 200	1 to 93	1.50	7.30				
HR nylon	HR nylon	1,200	17,500	-50 to 240	-46 to 116	1.40	6.80				
HHR nylon	HHR nylon	1,200	17,500	-50 to 310	-46 to 154	1.40	6.80				
Acetal ^a	Polyethylene	1,000	14,600	-50 to 70	-46 to 21	1.50	7.30				
Detectable polypropylene A22	Polypropylene	450	6,570	34 to 150	1 to 66	2.21	10.79				
^a Polyethylene rods can be used in col	d applications when impacts or suc	lden starts/sto	os occur. Please	e note lower rating							

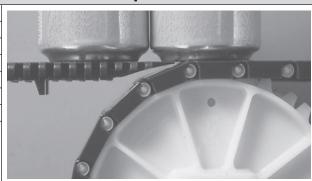
	Mol	d to Widt	th Flat Top
	in	mm	
Pitch	1.07	27.2	and the second second second
	3.25	83	
Molded Widths	4.5	114	
	7.5	191	
	-	85	
Opening Size (approximate)	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type		k; headed	
Produc	ct Notes		TOPPPPPP
 Contact Intralox for precise beli before designing equipment or 	t measurements an ordering a belt.	d stock status	
• Smooth, closed surface with fully	flush edges.		States and an other states and and
Molded with robust tracking tabs loading applications	to support the belt in	heavy side-	Jununnan
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			
Detailed material information is pr	rovided in Product Li	ne.	
 Do not use with sprockets smaller diameter (10 tooth) sprocket. If a required, do not use a split sprock 	3.5 in (89 mm) pitch ket.	diameter is	
 One sprocket can be placed on th Up to three sprockets can be place five sprockets can be placed on th 	ed on the 4.5 in (114	mm) belt. Up to	A preferred run direction
Available in 10 ft (3 m) increments	S		
			(33.2 mm) ↓ 1.308 in ↓ 1.688 in
			Figure 34: S900 Flat Top Mold to Width
			3.341 in



	Belt Data									
Belt	Width		Default Rod Material, Diameter 0.18 in	Belt Strength		· ·	ure Range nuous)	Belt	Mass	
in	mm	Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m	
3.25	83	Polypropylene	Nylon	130	578	34 to 220	1 to 104	0.37	0.55	
3.25	83	Acetal	Nylon	250	1,110	-50 to 200	-46 to 93	0.52	0.77	
4.5	114	Polypropylene	Nylon	263	1,170	34 to 220	1 to 104	0.52	0.77	
4.5	114	Acetal	Nylon	555	2,470	-50 to 200	-46 to 93	0.74	1.10	
7.5	191	Polypropylene	Nylon	438	1,950	34 to 220	1 to 104	0.83	1.24	
7.5	191	Acetal	Nylon	800	3,560	-50 to 200	-46 to 93	1.18	1.76	
	85	Acetal	Nylon	500	2,220	-50 to 200	-46 to 93	0.50	0.74	

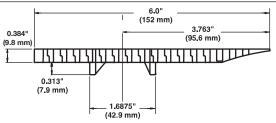
0.313 in (8.0 mm)

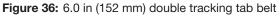
	in	mm
Pitch	1.07	27.2
Minimum Width	4.7	119
Width Increments	0.33	8.4
Opening Size (approximate)	-	-
Open Area	00	%
Hinge Style	Clos	sed
Rod Retention; Rod Type	Snap-loci	k; headed
1	1	



Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Transfer edge is an integral part of the belt.
- Nylon rods provide superior wear resistance.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Addition of a fixed frame support can be necessary. The support ensures that the transfer belt does not snag when it intersects with the takeaway belt. Add support below the transfer belt, before the transfer. See 90-Degree Container Transfers for more information.
- When moving products from transfer belt to takeaway belt, ensure the transfer belt surface is no more than 0.06 in (1.5 mm) above the takeaway belt surface. When product is moving from the infeed belt onto the transfer belt, ensure the belts surfaces are level.
- · For custom belt widths, contact Intralox Customer Service.
- Available in 10 ft (3 m) increments.
- Also available in a 4.7 in (119 mm) wide single tracking tab belt and 6 in (152 mm) wide double tracking tab belt.
- Molded tracking tabs fit into standard 1.75 in (44.5 mm) wearstrip tracks ensuring proper belt alignment.
- Do not use with sprockets smaller than a 3.5 in (89 mm) pitch diameter (10 tooth) sprocket. If a 3.5 in (89 mm) pitch diameter is required, do not use a split sprocket.





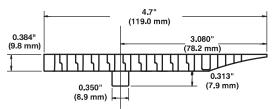
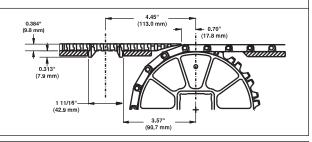


Figure 37: 4.7 in (119 mm) single tracking tab belt

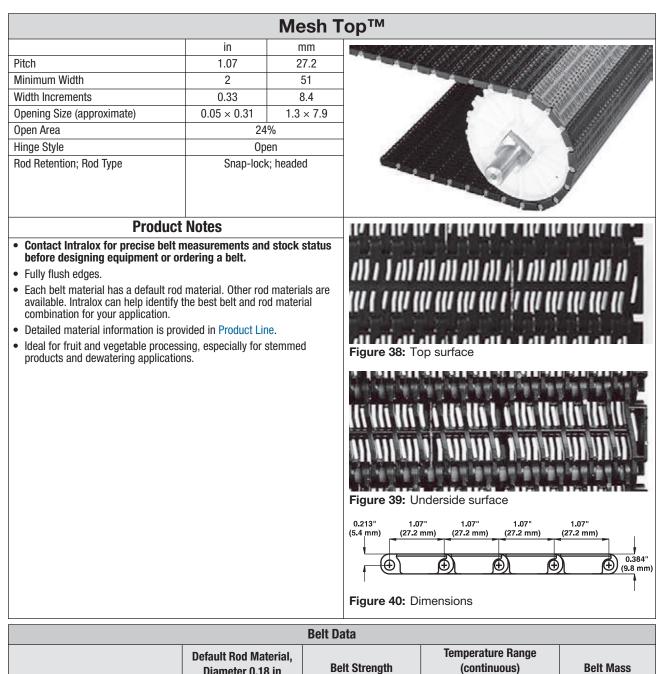


Belt Data												
	Default Rod Material, Diameter 0.18 in	Belt St	trength	-	ure Range 1uous)	Belt Mass						
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²					
Polypropylene	Nylon	700	10,200	34 to 220	1 to 104	0.93	4.54					
Acetal	Nylon	1,480	21,600	-50 to 200	-46 to 93	1.50	7.30					

		Perfo	orated	Flat Top			
		in	mm	- 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	1. 1. 1. 1.	1. 1	11: 11: 11:30
Pitch		1.07	27.2	2000			
Minimum Width		2	51			11.1	1. 19
Width Increments		0.33	8.4		1000	1. 1.	1. 1. 1.1
Opening Size		See Product N	lotes.		and the second		1.11
Open Area		See Product N	lotes.		1	1.1.	
Hinge Style		Closed			11/2 /	1.1.1	0
Rod Retention; Rod	Туре	Snap-lock; hea	aded			- A	
	Product Notes	6		had been been been	1-1-1-1-1-1-1-1-	and the second second	- test hard hard
before designing	for precise belt measure g equipment or ordering a	a belt.	ck status	•	•	•	•
	e 3% open area at the hing			•			
vacuum performa			0	иллпи	цпл	mm	RARI
Flat Top.	sions and patterns can be	-	-			•	0
	se short rodlets to hold the m the same material as the		in place	(0.51 mm)			
	al has a default rod materia < can help identify the best /our application.			A ^ℤ			
Detailed material	information is provided in	Product Line.					
Use stainless ste	el split sprockets in elevate	d-temperatures	3.				
Designed for vac to reduce carryw	uum transfer applications, v ay blockage.	with a scalloped	d underside	A molded hole de	etail		
• Available hole siz	es:			0.213" 1.07" (5.4 mm) (27.2 mm	1.07") (27.2 mm) ()7" : mm)
- Ø 0.125 in (3.2	2 mm) - 5% open area			(3.4 mm) (27.2 mm		27.2 mm) (27.2	
- Ø 0.15625 in (4	4.0 mm) - 6% open area				D) D) ()	0.384" (9.8 mm
- Ø 0.1875 in (4	.8 mm) - 8% open area						(9.8 mm
			Belt Da	ita			
	Default Rod Material, Diameter 0.18 in	Belt Strengt		perature Range continuous)	Belt Mass 1/8 in	Belt Mass 5/32 in	Belt Mass 3/16 in
Relt Material	(4 6 mm)	Ihf/ft N/r	`	°C	lh/ft² ka/m²	lh/ft2 ka/m2	lh/ft² ka/m²

				Dell Dala							
	Default Rod Material, Diameter 0.18 in	Belt St	trength	Temperati (contii		lass 1/8 in		Mass 32 in		Mass 16 in	
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	lb/ft ²	kg/m²	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	-	-	0.93	4.54	-	-
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	-	-	0.98	4.79	-	-
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.48	7.23	1.46	7.11	1.43	6.98
HSEC acetal	Polypropylene	800	11,700	34 to 200	1 to 93	-	-	1.46	7.11	-	_
FR TPES	Polypropylene	750	10,900	40 to 150	4 to 66	-	-	1.59	7.76	-	_
HR nylon	HR Nylon	1,200	17,500	-50 to 240	-46 to 116	-	-	1.40	6.80	-	-
Acetal ^a	Polyethylene	1,000	14,600	-50 to 70	-46 to 21	1.48	7.23	1.46	7.11	1.43	6.98
UVFR	UVFR	700	10,200	-34 to 200	1 to 93	2.04	9.96	2.04	9.96	2.04	9.96

^a Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating. 1/8 in (3.2 mm) and 3/16 in (4.8 mm) hole sizes are available in acetal only.



.4 mm)	(27.2 mm)	(27.2 mm)	(27.2 mm)	(27.2 m	1m)	
		Ð)	Ð)	€)	0.384" (9.8 mm)
igure 4	40: Dimer	nsions			Ť	
		Temperatu	re Range			

	Default Rod Material, Diameter 0.18 in	Belt St	rength	•	ure Range 1uous)	Belt Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Acetal	Polypropylene	1,480	21,600	34 to 200	1 to 93	1.39	6.79	
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.93	4.55	
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	0.99	4.84	

		D	Diam	ond	Frictio	n Top					
		in		mm			2000	1. 50	11 11 1	1. M	all.
Pitch		1.07		27.2			and the second s		and the	11	11/1
Minimum Width		3.0		76				6	1		
Width Increments		0.33		8.4		224		Sec.	Contraction	137	
Hinge Style			Open					· VA	17	97	
Rod Retention; Roc	і Туре	Snap	o-lock; h	eaded				~	1		
	Produ	ict Notes				and a state of the		8-8-8		-	-
•	ig equipment o	r ordering a belt									111
 Two-material rul interfering with or 	carryways and s	prockets.			L _M U _M		1				100
 Available in grey natural PE with v 	PP with black r white rubber.	ubber, white PP w	ith whit/	e rubber,	and						
 Abrasion resistar 					a liber libe	a Berlin Berlit	-N-N-	il a li a li	W-W-W-W-	led and	-lele
 Each belt materi available. Intralo combination for 	x can help ident	tify the best belt a			are						001
 Detailed materia 			ct Line.		Contraction of the	dialighterie	No.No.	2-9-8		in the last	100
 Temperature, en affect the maxim designing converte 	num degree of ir	ncline. Consider th									
 Not recommended Intralox Customed product and belt 	er Service for inf	ccumulation cond formation about fr			veen 0.421	п				0.22	4"
 When using this 	belt on a center	drive conveyor, i d collars at the b				1.07" (27.2 mm)	1.07" (27.2 m	m) (27	.07" 1.07' .2 mm) (27.2 m	im) (5.7 n	0.593"
 Minimum nomin (43 mm). 	al alternating ed	lge indents: 1 in (25 mm)	and 1.7	n f	⊕ ` €		Ð	Ð	_⊕ †	(15 mm)
				В	elt Data						
		Default Rod Material.	Te Belt Strength		-	ture Range nuous)	Belt	Mass		-	ency tability
Base Belt Material Ba	ase/Friction Top	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/black	Polypropylene	1,000	14,600	34 to 150	1 to 66	1.40	6.83	45 Shore A	b	
	\A/I:+ _ /!= :+ _	Daharanada	1 000	11000	044-450	1 4- 00	1 40	0.00	EQ Obarra A		1

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

1,000

350

14,600

5,110

34 to 150

-50 to 120

1 to 66

-46 to 49

1.40

1.50

6.83

7.32

56 Shore A

56 Shore A

b

b

С

С

Polypropylene

Polyethylene

^bFDA compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

White/white

Natural/white

Polypropylene

Polyethylene

			Squ	are F	riction	Тор					
		in		mm					50.0	N SHIFT	1004
Pitch		1.07		27.2		4			144		Ste
Minimum Widt	h	3.0		76				-		1410	all.
Width Increme	nts	0.33		8.4		22		1	1	12	× .
Hinge Style			Open			1		100	121	SA.	
Rod Retention;	Rod Type	Snaj	o-lock; h	leaded		1.18	1	o an	7713	1	
	Produ	uct Notes				0000	200	444	YYYYY	11	UC.
	ralox for precise b gning equipment c			tock stat	tus	XXXX	XX	888	1333	194	11
Two-materia	al rubber modules p vith carryways and s	rovide a high-frict		ace witho	ut 🚺	XXXX	XX			11	U
Available in	grey PP with black	rubber and white I	PP with v	white rub	ber.	XXXX	XX	$\sim \sim \sim$	88888	221	11
 Abrasion res 	sistant rods are reco	ommended.			(KX	XXXX	XX	∞	88888	XI	U
available. In	aterial has a default tralox can help iden for your applicatior	tify the best belt a			are		***			TP-	11
Detailed matrix	terial information is	provided in Produ	ict Line.			<u> </u>	$\mathcal{R}\mathcal{R}$	444	XXXX	- let-	11.
	ended for product a tomer Service for in belt.				ween		\bigotimes	***		×'	77, UU
affect the ef	e, environmental con fective maximum de ning conveyor syste	earee of incline. C	onsider	acteristic these fac	tors	1.07" NOM.	1.07" N			OM. 0.20	
	this belt on a cente elt laterally, by placi					(27.2 mm)	(27.2 m		2 mm) (27.2 m		1 mm)
 Minimum no and (43 mm 	ominal alternating e).	dge indents: 1 in (25 mm)	and 1.7	n 0.40" (10.1 mr	0 (21			(U) (1	0.57" 4.4 mr
		_		В	elt Data				_		
		Default Rod Material,	Belt St	trength	Temperati (contii	-	Belt	Mass		Age Accep	
Base Belt Material	Base/Friction Top	Diameter	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC
Polypropylene	Grey/black	Polypropylene	1,000	14,600	34 to 150	1 to 66	1.50	7.32	45 Shore A	b	
	14/1 11 / 1 11		4 000	44.000	041 450	41.00	4 50	7.00	50.01		

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

1,000

14,600

34 to 150

1 to 66

1.50

7.32

56 Shore A

Polypropylene

^b FDA compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

White/white

b

С

Polypropylene

	Μ	old to Wi	dth 2	29 m	m Squa	are Fric	tion	Тор)		
		in		mm							
Pitch		1.07		27.2					4	TF.	1
Molded Width		1.1		29		7.8					2
Hinge Style			Closed		20	A STAN			-	(TH	R
Rod Retention;	Rod Type	Snaț)-lock; h	eaded		J.J.	A Part	ball			A HAR
	Produ	uct Notes					-	2.0	(house)		
 before desi Two-materia interfering v 	ralox for precise b gning equipment of al rubber modules p vith carryways and s grey PP with black	or ordering a belt rovide a high-frict sprockets.	ion surfa	ice witho	out		L	X			
 and blue act Each belt mavailable. In combination 	etal with black rubb aterial has a default tralox can help iden I for your application terial information is	er. rod material. Oth tify the best belt a n.	er rod m nd rod n	aterials a			Ž	X	X		
 Not recomm 	ended for product a tomer Service for in	Iccumulation cond	litions. C	ontact Ilues bet	ween	5		Ĩ.			
					0.41" (10.4 mm)	1.07" NOM. (27.2 mm)		7" NOM <u>.</u> 7.2 mm)	1.07" NOM. (27.2 mm)	0.20" (5.1 mm	0.58 14.7 m
				B	elt Data						
		Default Rod Material.	Belt St	trength		Temperature Range (continuous) Belt Mass					ncy tabilit
Base Belt Material	Base/Friction Top	Diameter 0.18 in (4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m	Friction Top Hardness	FDA (USA)	EU MC
Polypropylene	Grey/black	Nylon	65	289	34 to 150	1 to 66	0.17	0.25	45 Shore A	b	
	Grey/black	Nylon	140	623	-10 to 130	-23 to 54	0.21	0.31	54 Shore A		
Acetal	an og/ braon	NyIOII			1010100						

^a European Migration Certificate providing approval for food contact according ^b FDA compliant with restriction: Do not use in direct contact with fatty foods.

	F	lat Fricti	ion Top
	in	mm	
Pitch	1.07	27.2	115 br / / / / /
Minimum Width	3.0	76	Sector / / / /
Width Increments	0.33	8.4	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	k; headed	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or c 		d stock status	
 Two-material rubber modules prov interfering with carryways and spr 	ide a high-friction su	urface without	
 Available in grey PP with black rub 	ber and white PP wi	th white rubber.	
 Abrasion resistant rods are recommended 	nended.		100001
 Each belt material has a default ro available. Intralox can help identify combination for your application. 			
 Detailed material information is pro 	ovided in Product Lir	ne.	
 Not recommended for product acc Intralox Customer Service for infor product and belt. 			
 When using this belt on a center-d retain the belt laterally, by placing the drive. 			0.347" (0.0 mm) 1.07" 1.07" 1.07" (3.8 mm)
 Temperature, environmental condi affect the effective maximum degr when designing conveyor systems 	ee of incline. Consid		(8.8 mm) (27.2 mm) (27.2 mm) (27.2 mm) (0.532)
 Minimum nominal alternating edge (43 mm). 	e indents: 1 in (25 m	m) and 1.7 in	

				В	elt Data						
		Default Rod Material,	Belt Strength		Temperature Rang (continuous)		•			· ·	ency tability
Base Belt		Diameter							Friction Top	FDA	
Material	Base/Friction Top	0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Hardness	(USA)	EU MC ^a
Polypropylene	Grey/black	Polypropylene	1,000	14,600	34 to 150	1 to 66	1.40	6.83	45 Shore A	b	
Polypropylene	White/white	Polypropylene	1,000	14,600	34 to 150	1 to 66	1.40	6.83	56 Shore A	b	С
Polypropylene	High-Performance FT blue/blue	Polypropylene	1,000	14,600	34 to 212	1 to 100	1.40	6.83	59 Shore A	b	С
a European Migra	tion Certificate provid	ing approval for foo	d contact	according	to FU Regulatio	n 10/2011				-	

ligration Certificate providing approval for food contact according to EU Regulation 10/2011.

 $^{\rm b}\,{\rm FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

SERIES 900

	Flush G	arid with	Insert Rollers
	in	mm	
Pitch	1.07	27.2	
Minimum Width	6	152	
Width Increments	1.00	25.4	
Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1	
Open Area	38	l %	
Hinge Style	d0	en	
Rod Retention; Rod Type	Snap-lock	k; headed	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or 	t measurements and ordering a belt.	d stock status	Same Same Same Same
 Uses acetal rollers. 			
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			
 Detailed material information is pr 	rovided in Product Lir	ne.	televiste estatele estateles propriet
 For applications where low back- 	pressure accumulation	on is required.	34
 Product accumulation load is 5% 	to 10% of product we	eight.	
 For low back pressure application For driven applications, place wea 	s, place wearstrips b arstrip directly under	etween rollers. rollers.	
 Do not place sprockets inline with 			
 Standard roller diameter: 0.75 in (are available. Contact Intralox Custometer) 	19.05 mm). Other rol stomer Service for mo	ller diameters ore information.	99 **** 99 **** 99 **** 99 **** 99 *****
 Standard roller spacing across be or 4 in (102 mm) inline or stagger 	ed.		
 Standard roller spacing along belt (54.4 mm). 			te par par par data
 For custom roller-placement optio Service. 	ns, contact Intralox C	Customer	
 Minimum roller indent: 1.0 in (25. 	/ mm)		
			1.07" (27.2 mm) (27.2 mm)
			0.172" (4.4 mm) Ø0.75" (8.7 mm) (19.1 mm)
		Belt D	ata
		Belt Strength	

					Belt Da	ita					
	Default Rod			Belt S	Strength						
	Material,		R	oller Wi	dth Spacin	g		Temperati	ure Range		
	Diameter 0.18 in	2 in	51 mm	3 in	76 mm	4 in	102 mm	(contir	nuous)	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	۴	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	490	7,150	550	8,030	590	8,610	34 to 220	1 to 104	0.76	3.71
Acetal	Polypropylene	1,030	15,000	1,170	17,100	1,240	18,100	34 to 200	1 to 93	1.15	5.61

		Nub T	ор™		
	in	mm	-	2 35 - 200072 - X2	
Pitch	1.07	27.2		- 1 I I B	
Minimum Width	10	254	_	Aller and a second seco	
Width Increments	0.33	8.4	_		
Open Area	00	%	4		St. M. St.
Product Contact Area	70	%	in the second se		1 9 8
Hinge Style	Clos	sed	100		2. 9
Rod Retention; Rod Type	Snap-lock	k; headed	1		
Produ	ict Notes		Innnnn		FFFFFFFF
 Fully flush edges. Each belt material has a default available. Intralox can help ident combination for your application Detailed material information is Ideal for batch-off applications. Minimum nominal alternating ed mm). 	ify the best belt and ro provided in Product Lir	d material ne.	0.31" -+ (7.35 mm)	-0.27" (6.8 mm)	
			(5.4 mm) (2	77" NO <u>M. 1.07</u> " NO <u>M. 1.07</u> " NO <u>M.</u> 7.2 mm) (27.2 mm) (27.2 mm)	1.07" NOM. (27.2 mm) 0.48" (12.3 mm)
		Belt D	Data		
	Default Rod Mat	terial.		Temperature Range	

	Default Rod Material, Diameter 0.18 in	Belt St	rength ^a	•	ure Range nuous)	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.98	4.78
^a When using steel sprockets, the belt stre	ngth for polyethylene is 240 lbf	f/ft (3,500 N/m)	. Contact Intrale	ox Customer Serv	ice for availability	of polyuretha	ane

Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Fully flush edges. • Fully flush edges. Built with Flush Grid edge modules. • Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Not recommended for product accumulation conditions. For information about friction values between product and belt, contact. Intralox Customer Service. • Can only be used with S900 Flush Grid base flights. • Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. • Output		Flu	ish Gric	I Nub Top		
Minimum Width 6 152 Width Increments 0.33 8.4 Open Area 38% Open Area 38% Product Contact Area 3% Hinge Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Product Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges. Built with Flush Grid edge modules. Built with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact intralox Cashorer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Ying Must Line (100 mm) trop (100 mm) and 2 in (51 mm) pattern. User (100 mm) (in	mm	121213		ST-5-00-6-00-001
Width Increments 0.33 8.4 Opening Size (approximate) 0.24 × 0.28 6.1 × 7.1 Open Area 38% Product Contact Area 3% Hinge Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Contact Intratox for precise belt measurements and stock status before designing equipment or ordering a belt. Puilt with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intratox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact intratox Customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Product_customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Open	Pitch	1.07	27.2			
Opening Size (approximate) 0.24 × 0.28 6.1 × 7.1 Open Area 38% Product Contact Area 3% Hinge Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges. Built with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best bet and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact intralox Customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. <u>0.050°</u> <u>(1.3 mm)</u> <u>1.07° NOM.</u> <u>1.07° </u>	Minimum Width	6	152			
Open Area 38% Product Contact Area 3% Hings Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Image: Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges. Built with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact. Intralox Customer Service. C annly be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) intralor. Customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. User to the service of t	Width Increments	0.33	8.4	_		TE PERMIN
Product Contact Area 3% Hinge Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Contact Intralox continues and stock status before designing equipment or ordering a belt. Contact Intralox can belp identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact Intralox Customer Service. Can only be used with S000 Flush Grid base flights. Minimum mominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Cost only be used with S000 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Cost only the used with S00 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Cost only the used with S00 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Cost only the used with S00 musethere th	Opening Size (approximate)	0.24 × 0.28	6.1 × 7.1			1
Hinge Style Open Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes • Contact Intratox for precise belt measurements and stock status before designing equipment or ordering a belt. Image: Contact Intratox for precise belt measurements and stock status before designing equipment or ordering a belt. • Fully flush edges. Built with Flush Grid edge modules. • Each belt material has a default rod material. Other rod materials are available. Intratox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Not recommended for product accumulation conditions. For information about friction values between product and belt, contact Intratox Customer Service. • Can only be used with S900 Flush Grid base flights. • Minimum moninal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. • Obse: (1.07 mOM) • (1.07 moM) (1.07 moM) • (1.07 moM) (1.07 moM) • (1.07 moM) (1.07 moM) • (27.2 mm) (27.2 mm) • (27.2 mm) (27.2 mm)	Open Area	380	%			Aller Weller
Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Image: Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Fully flush edges. Built with Flush Grid edge modules. • Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. • Detailed material information is provided in Product Line. • Not recommended for product accumulation conditions. For information about friction values between product and belt, contact intralox Customer Service. • Can only be used with S900 Flush Grid base flights. • Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. • Use the set with S900 Flush Grid base flights. • Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. • Use the set with S900 Flush Grid base flights. • Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) <u>Use the set with Can the set with the set withe set</u>	Product Contact Area	3%	, 0			E- Martine
Product Notes 9. Contact Intralox for precise belt measurements and stock status. Each belt material nas a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. 9. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact. Intralox Customer Service. 2. Can only be used with S900 Flush Grid base flights. 1. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. 0. Built with Customer Service. 2. Built with S900 Flush Grid base flights. 3. Garonly be used with S900 Flush Grid base flights. 3. Garonly be used with S900 Flush Grid base flights. 4. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. 5. Garonly be used with S900 Flush Grid base flights. 4. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. 5. Bet Data	Hinge Style	Оре	en			E Maller
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges. Built with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact Intralox Customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Belt Data 	Rod Retention; Rod Type	Snap-lock	; headed			C. C.
 before designing equipment or ordering a belt. Fully flush edges. Built with Flush Grid edge modules. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Not recommended for product accumulation conditions. For information about friction values between product and belt, contact Intralox Customer Service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Detailed material. Detailed material. Morience and the service of the service of the service of the service of the service. Can only be used with S900 Flush Grid base flights. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Detailed material. Detailed material. Minimum nominal alternating edge indents: 1 in (25 mm) and 2 in (51 mm) pattern. Detailed material. Belt Data 	Produc	t Notes				
(1.7 mm) (1.7 mm) (1.	 Built with Flush Grid edge modules Each belt material has a default ro available. Intralox can help identify combination for your application. Detailed material information is pro Not recommended for product acc information about friction values by Intralox Customer Service. Can only be used with S900 Flush Minimum nominal alternating edge 	d material. Other rod the best belt and roo ovided in Product Lin- umulation conditions etween product and I Grid base flights.	d material e. . For pelt, contact		(7.4 mm)	0.394"
			Relt	(1.3 mm) (1.3 mm) (1.222" (5.6 mm) (27) (27)	" NOM. 1.07" NOM. 1.07" NOM.	(10.0 mm 1.07" NOM.
Default Rod Material. Temperature Range				Data	Temperature Range	1

		Don Data					
	Default Rod Material, Diameter 0.18 in	Belt St	rength ^a	•	ure Range nuous)	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.80	3.91
^a When using steel sprockets, the belt stre	ngth for polyethylene is 240 lbf	/ft (3,500 N/m)					

		M	old to W	/idth F	lat To	p with	Holes			
			in	mm					-	
Pitch			1.07	27.2				-	2- 2:52	
Molded Wi	dths		3.35	85				1.	1 .2	1
	uuio		4.5	114	-	1.200				24
Open Area			See Produ	ict Notes.		1000	States .			
Hinge Style	е		Clos	sed			2528	Can Vill	1	
Rod Retent	tion; Rod Ty	/pe	Snap-lock	k; headed					51.	1
		Product No	tes						74 .	11
 Contact before d 	t Intralox fo designing 6	or precise belt meas equipment or orderi	surements and ng a belt.	l stock stat	us				- Ch	100
	/ flush edge	• •	•					1973		
Molded	-	t tracking tabs to sup	port the belt in	heavy side-		1				
 Holes had 	••	fered top edge allowi	ng quiet opera	tion and goo	d	4	5			
	•	asion resistant.								
appropri	on belt mat iate for elev s and light t	terial has a UL94 flam vated temperature ap testers.	mability rating plications, suc) of V2, h as pin			•	••		•
available	e. Intralox c	has a default rod mat an help identify the b ur application.			re					
 Detailed 	material in	nformation is provided	d in Product Lir	ne.						
• Use a ny	lon, machi	ned, split sprocket in	high-speed va	cuum						
applicati									Sec.	
		ailable for easy instal	lation.							
		B m) increments.	1 00/ to 10/ on	an area at th						/
holes.Hole dia	meter: 0.21	area at the hinges and 17 in (5.51 mm) on th e 4.5-in (114-mm) be	ie 3.35-in (85-i		(9.8 m			308 in		0.31; (8.0 r
								688 in .9 mm)		
					Figu	ire 41: S9	00 Flat Top 4	1.5 in Mold to	Width	
						·		41 in) mm)		
					0.384					
					(9.8 m	m)		▁▋▁▋▁▋	H	0.24
								77 in		(6.2 r
								9 mm)		
							1.65	57 in		
					Figu	ire 42: So		35 mm Mold t	o Width	
					, igt					
				Be	lt Data					
Belt V	Vidth		Default Rod Diameter		Belt S	trength	•	ure Range nuous)	Belt	Mass
in	mm	Belt Material	(4.6 n		Ibf	N	°F	°C	lb/ft	kg/m
3.35	85	HHR nylon	Nyle	-	220	979	-50 to 310	-46 to 154	0.41	0.61
4.5	114	HHR nylon	Nylo		450	2,000	-50 to 310	-46 to 154	0.41	0.01
т.Ј	114		ivyi		400	2,000	-50 10 510		0.00	0.78

in mm Pitch 1.07 27.2 Molded Widths 3.0 76 Open Area See Product Notes: Image Style Closed Rod Retention; Rod Type Snap-lock; headed Product Notes Image Style Closed Rod Retention; Rod Type Snap-lock; headed Product Notes Image Style Closed Contact Intralox for precise belt measurements and stock status Entro designing equipment or ordering a bet. Evaluation of the ordege allowing quiet operation and good Pully flush edges Holes have a chamfered top edge allowing quiet operation and good vacuum performance. Phendiameterial Information is provided in Product Line. Pole diameter: 0.22 in (5.6 mm) Belt has 3% open area at the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. 102 im (22 mm) 107 im (27 mm) 107 im (27 mm) 22 im (22 mm) 107 im (27 mm) 107 im (27 mm) 24 mm) 107 im (27 mm) 107 im (27 mm) 102 im (21 mm) 107 im (27 mm) 107 im (27 mm)	3 in Mold to	Width Pe	rforated	Flat Top with 4-7/32 in holes
Molded Widths 3.0 76 Open Area See Product Notes, Inge Style Closed Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges Held Ryton belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Hole shave a the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments Available in 10 ft (3 m) increments This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. Sproket, and the stripper and the s			1	S " white " white he
Dpen Area See Product Notes. linge Style Closed Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges Fully flush edges Here have a chamfered top edge allowing quiet operation and good vacuum performance. HHR nylon belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Hed diameter: 0.22 in (5.6 mm) Bet has 3% open area at the hinges and 3% to 4% open area at the noles. Available in 10 ft (3 m) increments • Available in 10 ft (3 m) increments Inits bet is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. • Available in 10 ft (2 m) increments Inits bet is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications.	Pitch	1.07	27.2	and the stand of the stand
Inige Style Closed Rod Retention; Rod Type Snap-lock; headed Product Notes Product Notes Contact Intratox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges Pully flush edges Hease chamfered top edge allowing quiet operation and good vacuum performance. HHR nyton belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Held elameter: 0.22 in (5.6 mm) Bet thas 3% open area at the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. 107 in	Molded Widths	3.0	76	
Nod Retention; Rod Type Snap-lock; headed Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges Holes have a chamfered top edge allowing quiet operation and good vacuum performance. HHR nylon belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Hole diameter. 0.22 in (5.6 mm) Bett has 3% open area at the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments This bett is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. 0.21 in (5.4 mm) 0.21 in (5.4 mm)	Open Area	See Proc	luct Notes.	
Product Notes • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Fully flush edges • Holes have a chamfered top edge allowing quiet operation and good vacuum performance. • HHR nylon belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. • Abrasion resistant rod material • Detailed material information is provided in Product Line. • Hole diameter: 0.22 in (5.6 mm) • Belt has 3% open area at the hinges and 3% to 4% open area at the holes. • Available in 10 ft (3 m) increments • This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. • Use the second top only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications.	Hinge Style	CI	osed	
 Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges Holes have a chamfered top edge allowing quiet operation and good vacuum performance. HHR nylon belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Hole diameter: 0.22 in (5.6 mm) Belt has 3% open area at the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. Value for wacuum applications.<	Rod Retention; Rod Type	Snap-lo	ck; headed	
 before designing equipment or ordering a belt. Fully flush edges Holes have a chamfered top edge allowing quiet operation and good vacuum performance. HHR nylon belt material has a UL94 flammability rating of V2, appropriate for elevated temperature applications, such as pin strippers and light testers. Abrasion resistant rod material Detailed material information is provided in Product Line. Hole diameter: 0.22 in (5.6 mm) Belt has 3% open area at the hinges and 3% to 4% open area at the holes. Available in 10 ft (3 m) increments This belt is compatible only with the Dual-Tooth Nylon Split Sprocket, which is optimized for vacuum applications. 	Product	Notes		
Dalt Data	 before designing equipment or ord Fully flush edges Holes have a chamfered top edge all vacuum performance. HHR nylon belt material has a UL94 th appropriate for elevated temperature strippers and light testers. Abrasion resistant rod material Detailed material information is prov Hole diameter: 0.22 in (5.6 mm) Belt has 3% open area at the hinges holes. Available in 10 ft (3 m) increments This belt is compatible only with the 	dering a belt. owing quiet oper flammability ratir e applications, su ided in Product L and 3% to 4% o Dual-Tooth Nylor	ation and good ng of V2, ch as pin ine. pen area at the	0.21 in (5.4 mm) (27.2 mm) (27.2 mm) (27.2 mm)
Dalt Data				
Bell Data			Belt D	ata

			Ве	it Data					
Belt \	Nidth		Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contii	ure Range 1uous)	Belt	Mass
in	mm	Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m
3	76	HHR Nylon	Nylon	450	2,002	-50 to 310	-46 to 154	0.34	0.51

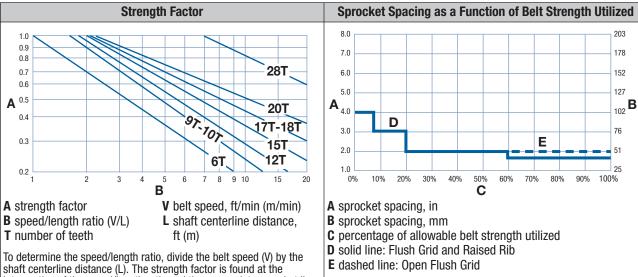
Belt Wid	th Range ^a	Minimum Number of Sprockets	Wear	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway ^c
2	51	1	2	2
4	102	1	2	2
6	152	2	2	2
7	178	2	3	2
8	203	2	3	2
10	254	3	3	2
12	305	3	3	2
14	356	5	4	3
15	381	5	4	3
16	406	5	4	3
18	457	5	4	3
20	508	5	5	3
24	610	7	5	3
30	762	9	6	4
32	813	9	7	4
36	914	9	7	4
42	1,067	11	8	5
48	1,219	13	9	5
54	1,372	15	10	6
60	1,524	15	11	6
72	1,829	19	13	7
84	2,134	21	15	8
96	2,438	25	17	9
120	3,048	31	21	11
144	3,658	37	25	13

^a If your belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range listed. Belts are available in 0.33 in (8.4 mm) increments beginning with minimum width of 2 in (51 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets.

 $^{\rm C}$ For Friction Top applications, use caution and contact Intralox Customer Service.

^dLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



shaft centerline distance (L). The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.

							Mo	ded Sp	r ocket a	
Number of Teeth		Pitch neter		Outer neter		. Hub dth	Av	ailable B	ore Size	s
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^b	Square in	Round mm ^b	Square mm
6 (13.40%)	2.1°	53°	2.2	56	0.75	19		1.0		25
9 (6.03%)	3.1	79	3.2	81	1.0	25	1	1.0, 1.5	25	25, 40
10 (4.89%)	3.5	89	3.6	91	0.75	19		1.0, 1.5		40
12 (3.41%)	4.1	104	4.3	109	1.5	38	1 to 1-1/2, 1-15/16 to 2-3/16	1.5	25 to 40, 50 to 55	40
17 (1.70%)	5.8	147	5.9	150	1.5	38	1-3/16 to 1-1/2		30 to 40	
18 (1.52%)	6.1	155	6.3	160	1.5, 1.0	38, 25	1 to 11/2, 1-15/16, 2-3/16	1.5, 2.5	25 to 40, 50 to 55	40, 60, 65
20 (1.23%)	6.8	173	7.0	178	1.5	38	1 to 1-1/2, 1-15/16 to 2-3/16	1.5, 2.5	25 to 40, 50 to 55	40, 60, 65

^a When using 1.5 in (40 mm) bore polyurethane sprockets, the belt strength for belts rated over 650 lbf/ft (9,490 N/m) is de-rated to 650 lbf/ft (9,490 N/m). When using 2.5 in (60 mm) bore polyurethane sprockets, the belt strength for belts rated over 1,100 lbf/ft (16,100 N/m) is de-rated to 1,100 lbf/ft (16,100 N/m. All other belts maintain their published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

^b Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

^c For more information on retaining the 2.1 in (53 mm) pitch diameter sprocket, see Retainer Rings and Center Sprocket Offset.

							EZ C	lean [™] S	procke	t ^a
Number of Teeth		Pitch neter		Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
12 (3.41%)	4.1	104	4.3	109	1.5	38		1.5		40
18 (1.52%)	6.1	155	6.3	160	1.5	38		1.5		40

^aWhen using when using 1.5 in (40 mm) bore polyurethane sprockets, the belt strength for belts rated over 650 lbf/ft (9,490 N/m) is de-rated to 650 lbf/ft (9,490 N/m). When using when using 2.5 in (60 mm) bore polyurethane sprockets, the belt strength for belts rated over 1,100 lbf/ft (16,100 N/m) is de-rated to 1,100 lbf/ft (16,100 N/m). All other belts maintain their published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

							Split	: Metal S	Sprocke	et	
Number of Teeth											
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
10 (4.89%)	3.5	89	3.6	91	1.5	38		1.5		40	- and the
12 (3.41%)	4.1	104	4.3	109	1.5	38		1.5		40	Par
15 (2.19%)	5.1	130	5.3	135	1.5	38	1-3/16, 1-1/4	1.5	30, 40		
17 (1.70%)	5.8	147	6.1	155	1.5	38			40	40	
18 (1.52%)	6.1	155	6.3	160	1.5	38	1-1/4, 1-1/2	1.5, 2.5		40, 60	
20 (1.23%)	6.8	173	7.0	178	1.5	38	1-1/4	1.5, 2.5		40, 60	and the second
28 (0.63%)	9.7	246	9.7	246	1.5	38		1.5, 2.5		40, 60	

^a Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

			Split M	/letal w	ith Pol	yureth	ane (FD/	A) Joinir	ng Plate	s Reduc
Number of Teeth	Nom. Dian	Pitch neter		Outer 1eter	-	Nom. Hub Width				
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
15 (2.19%)	5.1	130	5.3	135	1.5	38		1.5		40
17 (1.70%)	5.8	147	6.1	155	1.5	38				40
18 (1.52%)	6.1	155	6.3	160	1.5	38		1.5, 2.5		40, 60
20 (1.23%)	6.8	173	7.0	178	1.5	38		1.5, 2.5		40
28 (0.63%)	9.7	246	9.7	246	1.5	38		2.5		60

n. Hub /idth	A	vailable E			
			sore Size	es	
mm	Round in ^a	Square in	Round mm ^a	Square mm	
38	1, 1-3/16	1.5	30, 40	40	
38			30, 40	40	John Stores
38	1-1/4, 1-1/2	1.5, 2.5		40, 60	
38	1-1/4	1.5, 2.5		40, 60	
5	5 38 5 38 5 38 5 38	mm in ^a 5 38 1, 1-3/16 5 38 1 6 38 1 7 38 1 1 -1/4, 1-1/2 1	mm in ^a in 5 38 1, 1-3/16 1.5 5 38 - 6 38 1-1/4, 1-1/2 1.5, 2.5 6 38 1-1/4, 1-5, 1.5, 6 38 1-1/4, 1.5,	mm ina in mma 5 38 1, 1-3/16 1.5 30, 40 5 38	mm in ^a in mm ^a mm 5 38 $\frac{1}{1-3/16}$ 1.5 30, 40 40 5 38

^a Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

							Nylon	Split Sp	procket	S	
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
18 (1.52%)	6.2	157	6.4	163	1.5	38			30, 40		

Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter		Nom. Hub Width		A	Available Bore Sizes Round Square Round Square		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
17 (1.70%)	5.8	147	6.1	155	1.69	43	1-1/4			
with 4-5				iny with	une 330		to Width F	enorated	Παιτομ) Deit

		Flat Top Base Flights	(Streamline)
Available F	light Height		
in	mm	Available Materials	
1	25		× ×
2	51	Polypropylene, polyethylene, acetal	
3	76		
• Streamline fli	ghts are smooth	on both sides.	
 Each flight ex No fasteners 		enter of the module, molded as one part.	- tur
 Custom flight more information 		lable. Contact Intralox Customer Service for	Contraction of the Contraction o
Minimum ind	ent without sideç	guards: 0.7 in (17.8 mm).	CONCERCICULAR SO SO

Flush Grid Nub Top Base Flights (Double No-Cling)

Available	Flight Height					
in	mm	Available Materials				
4	102	Polypropylene, acetal				
No-Cling v	ertical ribs are on b	oth sides of the flight.				
	 Each flight extends from the center of the module, molded as one part. No fasteners are required. 					
	ustom flight heights are available. Contact Intralox Customer Service for ore information.					
Minimum i	 Minimum indent without sideguards: 0.7 in (17.8 mm). 					

0000

Flush Grid Base Flights (Streamline/No-Cling)

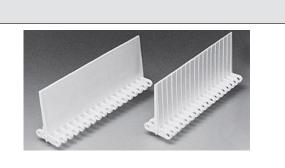
Available F	light Height	
in	mm	Available Materials
1	25	Polypropylene, polyethylene, acetal, HR
2 51		HHR nylon, HR nylon

• Streamline/No-Cling flights are smooth on one side and vertically ribbed on one side.

• Each flight extends from the center of the module, molded as one part. No fasteners are required.

• Custom flight heights are available. Contact Intralox Customer Service for more information.

• Minimum indent without sideguards: 0.7 in (17.8 mm).



		Open Flush Grid, Flush Edge B	ase Flights (No-Cling)			
Available F	light Height					
in	mm	Available Materials				
2	51	Polypropylene, HR nylon, HHR nylon				
 Each flight ex No fasteners Custom flight 	ttends from the c are required. theights are avai	Cling) on both sides. enter of the module, molded as one part. lable. Contact Intralox Customer Service for				
 Flight is molded with a 1 in (25 mm) indent. Can be machined to any indent between 1 in (25 mm) and 3 in (76 mm). 						
		Elat Ton Base Elights (St	comline Dubber			

Flat Top Base Flights (Streamline Rubber)									
Flight Height									
mm	Available Materials								
25									
51	Polypropylene								
76									
lox Customer Ser	vice for more information.	COLOCICION OF							
	mm 25 51 76	Iight Height Available Materials 25 51							

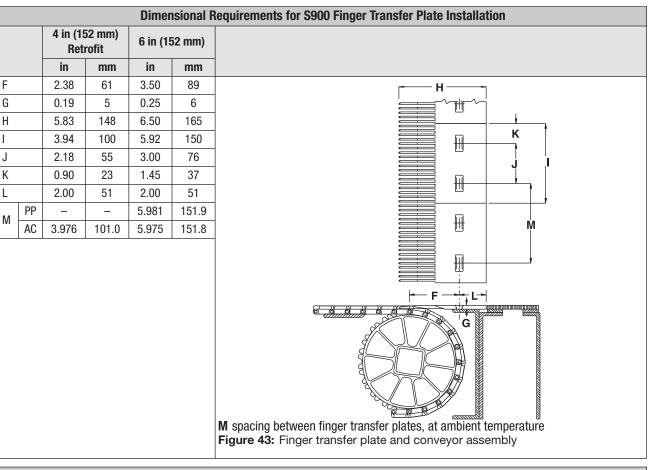
		Sideguard					
Available Sizes							
in	mm	Available Materials					
2	2 51 Polypropylene, polyethylene, acetal, HR nylon, HHR nylon						
Standard ove	erlap design ensu	res product containment.					
Fastens to be	Fastens to belt with hinge rods. No other fasteners required.						
product. This	s is called a produ	the back ends angled inward, toward the uct-friendly orientation. On request, the ward, toward the conveyor sides.					

- When going around the 6-, 9-, and 10-tooth sprockets, sideguards fan out, opening a gap at the top that can allow small products to fall out. The sideguards stay completely closed when wrapping around the 12-tooth and larger sprockets.
- Standard gap between sideguards and flight edge: 0.2 in (5 mm)
- Minimum indent: 1 in (25.4 mm)



			Finger Transfe	Plates
Available Widths		Number of		
in	mm	Fingers	Available Materials	
6	152	18	Acetal	
4	102	12 Acetal		
between the	roduct transfer ar belt ribs to allow ngages the sproc	a smooth contin	ns. The fingers extend uation of the product flow	and the second
 Easily installe Caps easily s of the slots. 	ed on the convey snap into place ov	or frame with the ver the bolts, and	supplied shoulder bolts. keep foreign materials out	Million Million
When retrofit only use the	tting from Series 4 in (102 mm) 12	100 Raised Rib to ? finger) width.	o Series 900 Raised Rib,	

• Do not mix 4 in (102 mm) and 6 in (152 mm) wide finger plates.



Hold Down Tabs

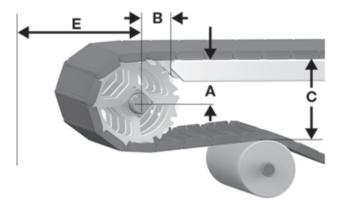
	Available Clearance		
	in	mm	Available Materials
	0.16	4.1	Acetal
0.35 8.9		8.9	Acetai
	Tobo oro place	ad an avany atha	r row

- Tabs are placed on every other row.
- Carryway wearstrips or rollers that engage the tabs are only required at the transition between horizontal sections and angled sections. Use a carryway radius design at this transition.
- Ensure that adequate lead-in radii and/or angles are used to prevent the possibility of snagging the tab on the frame.
- The 0.16 in (4.1 mm) tab is available in both Flat Top and Flush Grid styles. The 0.35 in (8.9 mm) tab is available with a Flat Top style. The top of this tab sits 0.04 in below the top of Flat Top belts and is level with the top of Flush Grid belts.
- Hold down tabs do not work with 2.1 in (53 mm) and 3.1 in (79 mm) pitch diameter sprockets. 3.5 in (89 mm) pitch diameter sprockets can be used with a 1.5 in (40 mm) square bore.
- A minimum of 2.7 in (69 mm) is required between tabs to accommodate 1 sprocket.
- Tabs width: 1.4 in (36 mm).
- Minimum indent: 0.7 in (17.8 mm).



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 44: A, B, C, and E drive dimensions

			S	900 Conveyor F	rame Dime	ensions					
Spro	ocket Descr	iption		1		В		C		E	
Pitch D	liameter	Number	Range (bot	tom to top)							
in	mm	of Teeth	in	mm	in	mm	in	in mm		mm	
			Flat Top, Flus	h Grid, Mesh Toj	o, Nub Top, F	Perforated F	lat Top ^a				
2.1	53	6	0.75-0.90	19-23	1.25	32	2.28	58	1.51	38	
3.1	79	9	1.30-1.39	33-35	1.51	38	3.20	81	1.75	44	
3.5	89	10	1.47-1.56	37-40	1.70	43	3.60	91	2.01	51	
4.1	104	12	1.82-1.90	46-48	1.74	44	4.25	108	2.51	64	
5.1	130	15	2.34-2.40	60-61	2.00	51	5.20	132	2.77	70	
5.8	147	17	2.69-2.74	68-70	2.13	54	5.80	147	3.15	80	
6.1	155	18	2.86-2.91	73-74	2.20	56	6.20	155	3.30	84	
6.8	173	20	3.21-3.25	81-82	2.32	59	6.75	171	3.86	98	
9.7	246	28	4.65	118	2.71	69	9.74	247	5.13	130	
				Flush Gri	d Nub Top ^a						
2.1	53	6	0.75-0.90	19-23	1.22	31	2.19	56	1.35	34	
3.1	79	9	1.30-1.39	33-35	1.52	39	3.17	81	1.85	47	
3.5	89	10	1.47-1.56	37-40	1.64	42	3.51	89	2.02	51	
4.1	104	12	1.82-1.90	46-48	1.75	44	4.19	106	2.35	60	
5.1	130	15	2.34-2.40	59-61	1.95	50	5.19	132	2.86	73	
5.8	147	17	2.69-2.74	68-70	2.09	53	5.87	149	3.20	81	
6.1	155	18	2.86-2.91	73-74	2.12	54	6.21	158	3.37	86	
6.8	173	20	3.21-3.25	82-83	2.25	57	6.89	175	3.70	94	
9.7	246	28	4.65	118	2.71	69	9.74	247	5.13	130	
			Raised Ri	b, Flush Grid wit	th Insert Rol	lers, Open (Grid ^a				
2.1	53	6	0.75-0.90	19-23	1.25	32	2.28	58	1.73	44	
3.1	79	9	1.30-1.39	33-35	1.51	38	3.20	81	1.97	50	
3.5	89	10	1.47-1.56	37-40	1.70	43	3.60	91	2.23	57	
4.1	104	12	1.82-1.90	46-48	1.74	44	4.25	108	2.73	69	
5.1	130	15	2.34-2.40	60-61	2.00	51	5.20	132	2.99	76	
5.8	147	17	2.69-2.74	68-70	2.13	54	6.00	152	3.40	86	
6.1	155	18	2.86-2.91	73-74	2.20	56	6.20	157	3.52	89	
6.8	173	20	3.21-3.25	81-82	2.32	59	6.75	171	4.08	104	

Snro	cket Descr	iption		4		3		C	E	
-	iameter	Number	Range (bot					<u> </u>	-	-
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
9.7	246	28	4.65	118	2.71	69	9.92	252	5.30	135
				Open F	lush Grid ^a		1			
2.1	53	6	0.75-0.90	19-23	1.25	32	2.28	58	1.51	38
3.1	79	9	1.30-1.39	33-35	1.51	38	3.20	81	1.75	44
3.5	89	10	1.47-1.56	37-40	1.70	43	3.60	91	2.01	51
4.1	104	12	1.82-1.90	46-48	1.74	44	4.25	108	2.51	64
5.1	130	15	2.34-2.40	60-61	2.00	51	5.20	132	2.77	70
5.8	147	17	2.69-2.74	68-70	2.13	54	5.80	147	3.15	80
6.1	155	18	2.86-2.91	73-74	2.20	56	6.20	155	3.30	84
6.8	173	20	3.21-3.25	81-83	2.32	59	6.75	171	3.86	98
9.7	246	28	4.65	118	2.71	69	9.70	246	5.08	129
		1 1	Diamond Fric	tion Top, Flat F	riction Top, S	quare Frict	ion Top ^a			
2.1	53	6	0.75-0.90	19-23	1.25	32	2.28	58	1.76	45
3.1	79	9	1.30-1.39	33-35	1.51	38	3.20	81	1.96	50
3.5	89	10	1.47-1.56	37-40	1.70	43	3.60	91	2.22	56
4.1	104	12	1.82-1.90	46-48	1.74	44	4.25	108	2.72	69
5.1	130	15	2.34-2.40	60-61	2.00	51	5.20	132	2.98	76
5.8	147	17	2.69-2.74	68-70	2.13	54	6.00	152	3.40	86
6.1	155	18	2.86-2.91	73-74	2.20	56	6.20	157	3.51	89
6.8	173	20	3.21-3.25	81-82	2.32	59	6.75	171	4.08	104
9.7	246	28	4.65	118	2.71	69	9.95	253	5.33	135
	1		Mole	d to Width 29 m	m Square Fri	ction Top ^a	1	1	<u> </u>	
2.1	53	6	0.75-0.90	19-23	1.27	32	2.38	60	1.54	39
3.1	79	9	1.30-1.39	33-35	1.58	40	3.36	85	2.04	52
3.5	89	10	1.47-1.56	37-40	1.70	43	3.70	94	2.21	56
4.1	104	12	1.82-1.90	46-48	1.88	48	4.38	111	2.54	65
5.1	130	15	2.34-2.40	59-61	2.10	53	5.38	137	3.05	77
5.8	147	17	2.69-2.74	68-70	2.32	59	6.06	154	3.39	86
6.1	155	18	2.83-2.88	72-73	2.31	59	6.34	161	3.52	89
6.8	173	20	3.21-3.25	82-83	2.42	61	7.08	180	3.89	99
9.7	246	28	4.65	118	2.71	69	9.94	252	5.32	135
				Mold to Width F	lat Top with	Holes				
6.2	157	18	2.86	73	2.20	56	6.20	157	3.36	6.2
		3	in Mold to Wi	dth Perforate	d Flat Top	with 4-7/	32 in hole	S		
6.9	150	17	2.73-2.78	69-71	2.27	58	5.94	151	3.22	82

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S900 Dead Plate Gap										
	Sprocket Description		Minimu	m Gap							
Pitch	Diameter										
in	mm	Number of Teeth	in	mm							
2.1	53	6	0.147	3.7							
3.1	79	9	0.095	2.4							
3.5	89	10	0.084	2.1							
4.1	104	12	0.071	1.8							
5.1	130	15	0.057	1.4							
5.8	147	17	0.050	1.3							
6.1	155	18	0.047	1.2							
6.8	173	20	0.042	1.1							
9.7	246	28	0.029	0.7							

		Flat 1	Гор
	in	mm	and the second
Pitch	0.60	15.2	and the second descent of the second descent of the second descent descent descent descent descent descent des
Minimum Width	3	76	
Width Increments	0.50	12.7	
Opening Size	-	-	1 den 1
Open Area	00	6	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Barn door;	unheaded	
Produ	ct Notes		
 Contact Intralox for precise be before designing equipment or 	It measurements and ordering a belt.	l stock status	
 Smooth, closed upper surface wi 	th fully flush edges.		
Closed edges on one side of the	belt.		
 Underside design and small pitch nosebars. 	allow the belt to run	smoothly around	
 Lug tooth sprockets improve sproinstallation. 	ocket engagement and	l simplify	
 Small pitch reduces chordal action dead plate. 	on and the gap require	d at the transfer	
 Each belt material has a default r available. Intralox can help identi combination for your application. 	fy the best belt and ro		
 Detailed material information is p 			
 Minimal back tension required for 			0.60" NOM. 0.60" NOM. 0.60" NOM. (15.2 mm) (15.2 mm) (15.2 mm) 0.17"
 Can be used over 0.75 in (19.1 m transfers. 	nm) diameter nosebars	s for tight	(4.3 mm)
แฉทรเซาร.			
			$ (0.34^{\circ}) (0$

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r
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Belt Data									
Default Rod Materia Diameter 0.18 in		Belt St	trength	Temperati (contii	ure Range 1uous)	Belt	Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Polypropylene	1,500	21,900	34 to 200	1 to 93	1.55	7.57		
Polypropylene	Polypropylene	1,000	14,600	34 to 220	1 to 104	1.07	5.22		
Polyethylene	Polyethylene	600	8,760	-50 to 150	-46 to 66	1.11	5.42		
HR nylon	Nylon	1,000	14,600	-50 to 240	-46 to 116	1.31	6.43		

		Insert F	Roller
	in	mm	
Pitch	0.60	15.2	
Minimum Width	9	228	
Width Increments	3.00	76	
Open Area	12.	5%	
Hinge Style	Clo	sed	28
Rod Retention; Rod Type Barn door; unheaded			
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or 	t measurements and ordering a belt.	d stock status	
Has fully flush edges on one side	and closed edges on	opposite side.	
 Rollers protrude above and below 	the belt surface.		
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			
Detailed material information is pr	rovided in Product Lir	ne.	
 Roller density: 240 rollers/ft² (258 	0 rollers/m ²).		
· Minimal back tension required for	sprocket engageme	nt	FINER'S STATE A SAME
 Compatible with 0.75 in (19.1 mm tight transfers. Contact Intralox Cu 			
• Belt can be supported using 1.38 parallel wearstrips.	in (35.1 mm) wide o	r narrower	
 For low back-pressure application For activated roller applications, p 	ns, place wearstrip be lace wearstrip direct	etween rollers. ly under rollers.	
 Yellow acetal rollers are 0.3 in (7.0 diameter. Rollers are on the belt roll 	od.	. ,	0.60" NOM. 0.60" NOM. 0.60" NOM.
• Rollers are spaced in groups with zones.	1.5 in (38.1 mm) bet	tween roller	(15.2 mm) (15.2 mm) (15.2 mm)
Roller indent from edge of belt to	edge of roller: 2.25 ir	n (57.2 mm).	0.34" (8.7 mm) (8.7 mm) (12.2 m
 Sprocket locations are indented 1 Sprocket locations are 3.0 in (76.2) 	()	edge of belt.	4.3 mm)

	Belt Data							
	Belt St	rength	Temperatı (contir	0	Belt	Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Acetal	Nylon	1,000	14,600	-50 to 200	-46 to 93	1.7	8.3	

	Mold [•]	to Width	Insert Roller
	in	mm	
Pitch	0.60	15.2	
Molded Width	6	152.4	
Open Area	12	.5%	
linge Style	Clo	sed	
Rod Retention; Rod Type	Snap-loc	k; headed	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or 	measurements an ordering a belt.	d stock status	ALL
Rollers protrude both above and b	elow the belt.		
Rollers are on the hinge rod.			
 Each belt material has a default ro available. Intralox can help identify combination for your application. 			
Detailed material information is pr	ovided in Product Li	ne.	
Minimal back tension required for	sprocket engageme	nt	
 Compatible with 0.75 in (19.1 mm applications. Contact Intralox Cust) diameter nosebars omer Service for mo	for tight transfer ore information.	ากการการการ
• The belt can be supported using 1 parallel wearstrips.	.38 in (35.1 mm) wi	de or narrower	Junium
 For low back-pressure application rollers. For activated roller applica under rollers. 			JUNNEULINNE
• Yellow acetal rollers are 0.3 in (7.6 diameter.	6 mm) wide and 0.48	3 in (12.1 mm)	
 Roller indent from edge of belt to e 	edge of roller: 0.44 i	n (11.2 mm).	0.60" NOM. 0.60" NOM. (15.2 mm) (15.2 mm) (12.2 mm) (13.2 mm) (15.2 mm) (15

Belt Data									
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contir	Belt Mass				
Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m		
Acetal	Nylon	1,000	14,600	-50 to 200	-46 to 93	0.85	4.15		

	High-D	Density I	nsert Roller
	in	mm	
Pitch	0.60	15.2	and the second sec
Minimum Width	9	229	
Width Increments	3.00	76.2	
Open Area	4	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Barn door;	unheaded	
Product N	lotes		
 Contact Intralox for precise belt me before designing equipment or orde 		stock status	Magamadamagaama
Fully flush edges on one side and clos	ed edges on oppos	site side.	
Rollers protrude above and below the	belt surfaces.		
 Uses one unheaded rod across the en 	tire belt width on e	ach belt row.	
 Each belt material has a default rod m available. Intralox can help identify the combination for your application. 			
 Detailed material information is provid 	ed in Product Line		
Minimal back tension required for spread	ocket engagement		Mannanananan
 For activated roller applications, place 	wearstrip directly	under rollers.	
 For low back-pressure applications, p parallel. Wearstrip of 0.50 in (13 mm) some manufacturing and installation t providing adequate support to the bell width is 0.75 in (19 mm). 	wide is recommen olerance in the cor	ded to allow veyor, while	
 Compatible with 0.75 in (19.1 mm) dia transfers. For high-speed and load ap recommended. 	ameter nosebars fo olications, a nose-r	or tight roller is	
 Yellow acetal rollers are 0.30 in (7.6 n diameter. Rollers are on the belt rod. 	nm) wide and 0.48	in (12.1 mm)	0.60" NOM. 0.60" NOM. 0.60" NOM. (15.2 mm) (15.2 mm) (15.2 mm)
 Roller density: 320 rollers/ft² (3440 ro 	llers/m²).		0.34" 0.48"
• Roller indent: 0.70 in (17.8 mm) from	edge of belt to edg	e of roller.	(8.7 mm) (12.2 m)
 Sprocket indent: 1.5 in (38.1 mm) fror Sprocket spacing: 3.0 in (76.2 mm) at 	-		4 0.17" (4.3 mm) 0.24" (6.1 mm)

Belt Data									
	Default Rod Material, Diameter 0.18 in	Belt Strength		Temperati (contii	ure Range 1uous)	Belt Mass			
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal	Nylon	1,000	14,600	-50 to 200	-46 to 93	1.87	9.13		

Hi	gh-Dens	ity Inse	rt Roller 85 mm
	in	mm	
Pitch	0.60	15.2	
Vinimum Width	10	255	
Width Increments	3.35	85	BAR BAR HILL
Open Area	3.6	6%	HANNIN HANNIN
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Barn door;	unheaded	
Product No	tes	MARCAMARAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	
 Contact Intralox for precise belt meas before designing equipment or ordering 			
 Fully flush edges on one side and closed 	edges on opposition		
 Rollers protrude above and below the be 	lt surfaces.	LAGO CAADO CAADO DO AAD	
 Uses one unheaded rod across the entire 	e belt width on ea	100000000000000000000000000000000000000	
 Each belt material has a default rod mat available. Intralox can help identify the b combination for your application. 			
 Detailed material information is provided 	in Product Line.	100000100000100000000	
Minimal back tension required for sprocl	ket engagement	100000000000000000000000000000000000000	
• For activated roller applications, place w	earstrip directly (1120000110000011000001010	
 For low back-pressure applications, plac parallel. Use 0.50 in (13 mm) wide wear and installation tolerance, while providin Maximum wearstrip width is 0.75 in (19 	strips to allow ma g adequate belt s		
 Compatible with 0.75 in (19.1 mm) diam transfers. For high-speed and load applie recommended. 			
 Yellow acetal rollers are 0.30 in (7.6 mm diameter. Rollers are on the belt rod.) wide and 0.48 i	0.60" NOM. 0.60" NOM. 0.60" NOM. (15.2 mm) ↓ (15.2 mm) ↓ (15.2 mm) ↓	
• Roller density: 360 rollers/ft ² (3875 rolle	rs/m²).		
Roller indent: 0.89 in (22.6 mm) from ed	ge of belt to edge	(8.7 mm) (12.2 mr	
Sprocket indent: 1.67 in (42.5 mm) from		(4.3 mm)	
• Sprocket spacing: 3.35 in (85 mm) apart	•	(6.1 mm)	
		Belt Da	1

Belt Data								
	Default Rod Material, Diameter 0.18 in	Belt Strength		Temperati (contii	ure Range 1uous)	Belt Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Acetal	Nylon	1,000	14,600	-50 to 200	-46 to 93	1.95	9.52	

		FI	at F	rictic	n Top 8	35 mm					
		ir	ı 🛛	mn	1		+ celler	and the	39.11911h		
Pitch		0.6	60	15.	2				Math		
Minimum Width		3.3	35	85.	0				1111th		
Maximum Width		66	.9	170	0				11111k		
Width Increments	3	3.3	35	85		المراجع ومعرور			//////2		
Opening Size		-		-	للمصفيق المستعد	A Providence	1000				
Open Area			09	6							
Hinge Style			Clos	sed		all and a second	~./		/		
Rod Retention; Ro	od Type	Bai	n door;	unheade	d	5	and the second				
	Prod	uct Notes			- Second and	at in the	000000	Constanting of the	and the second second second	-	
 before design Smooth, closed Closed edges of Small pitch red dead plate. Lug tooth sprodinstallation. Minimal back t Underside desi smoothly arour for package ha Each belt mate available. Intra combination for 	ing equipment of d upper surface v on one side of the luces chordal act ckets improve sp ension required f gn combined wit nd a 0.75 in (19 r indling applicatio trial has a default lox can help iden r your application	tion and the gap re rocket engageme for sprocket engag th small pitch allov mm) nosebar. Use ns. trod material. Oth tify the best belt a	es. equired a nt and si jement vs the bi a dynan er rod m ind rod r	at the trai implify elt to run nic nose- naterials a	nsfer in a second			60" NOM. 15.2 mm)	0.60" NOM. (15.2 mm)	0.26" (6.6 mn	n)
											1
				B	elt Data						
		Default Rod Material,	Belt Strength		•	Temperature Range (continuous)		Mass		Agency Acceptability	
Base Belt Material	Base/Friction Top	Diameter			°F	°F °C		kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Acetal	Grey/black	Nylon	1,500	21,900	-10 to 130	-23 to 54	1.80	8.79	54 Shore A	b	

 $^{\rm a}$ European Migration Certificate providing approval for food contact according to EU Regulation 10/2011. $^{\rm b}$ Fully compliant

	M	old to Wi	dth F	at Top wit	h Tabs	
		in	mm		and the second se	
Pitch		0.60	15.2		and the second se	2
		3.25	83		A.	1
Molded Widths		3.35	85		1	
		4.50	114	80.	. Aller II	
Opening Size		_		Connection and	star it is	
Open Area		0%	6	-44 CEREBELL		
Hinge Style		Clos	ed		and the second	
Rod Retention; Rod Ty	ре	Snap-lock	; headed			
	Product No	tes				
 Contact Intralox for before designing et 	or precise belt meas equipment or orderi	urements and sing a belt.	tock statu			
 Smooth, closed upp 	er surface with fully	flush edges		Color Charles		
 Molded with robust loading applications 		port the belt in he	avy side-	20		
 Lug tooth sprockets installation. 	s improve sprocket er	ngagement and si	mplify	Name		and.
 Each belt material h available. Intralox c combination for you 	an help identify the b					
• Detailed material in	formation is provided	I in Product Line.		1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
Minimal back tension	on required for sprock	ket engagement				
 3.25 in (83 mm) tab 						
 4.50 in (114 mm) a sprockets. 	. ,					
 Can be used over 0 transfers if every ot 	.75 in (19.1 mm) diar her belt row has tabs	neter nosebars fo	or tight			
Width tolerances: +	```	,				
 3.35 in (85 mm) mo mm) wearstrip track 	olded tracking tabs fit ks, ensuring proper b	into standard 1.6 elt alignment.	2.1	0.60 in NOM		
 3.25 in (83 mm) an standard 1.75 in (4- alignment. 	d 4.50 in (114 mm) n 4.5 mm) wearstrip tra				0.64 in (16.2 mm)	
• Available in 10 ft (3	m) increments					0.30 in (7.6 mm)
			Belt	Data		
Belt Width		Default Rod M		Belt Strength	Temperature Range (continuous)	Belt Mass
		Diameter 0.	18 in	Den Suengal	(continuous)	DEIL Mass

Belt \	Width		Default Rod Material, Diameter 0.18 in	Belt S	trength	Temperati (contin	ure Range 1uous)	Belt Mass		
in	mm	Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m	
3.25	83	Acetal	Nylon	250	1,110	-50 to 200	-46 to 93	0.44	0.65	
3.35	85	Acetal	Nylon	419	1,860	-50 to 200	-46 to 93	0.44	0.65	
4.50	114	Acetal	Nylon	563	2,500	-50 to 200	-46 to 93	0.60	0.89	

	FI	at Top	85 mm
	in		
Pitch	0.60	15.2	
Minimum Width	3.35	85	
Maximum Width	67	1700	
Width Increments	3.35	85	
Opening Size	-	-	a freedom
Open Area	00	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Barn door;	unheaded	
Produ	ct Notes		
 Contact Intralox for precise bel before designing equipment or 		tock status	nnnagnaar
 Smooth, closed upper surface with 	th fully flush edges.		
 Closed edges used on one side of 	f the belt.		
 Small pitch reduces chordal actio dead plate. 	n and the gap required a	at the transfer	mmmm
 Lug tooth sprockets improve spro installation. 	ocket engagement and s	implify	nnnnhnnnn
 Each belt material has a default r available. Intralox can help identific combination for your application. 			mmann
Detailed material information is p	rovided in Product Line.		unninnen
 Underside design, combined with smoothly around a 0.75 in (19 m) 	small pitch, allows the m) nosebar.	belt to run	
 A dynamic nose-roller is highly re applications. 	commended for packag	e handling	0.60" NOM. 0.60" NOM. 0.60" NOM. (15.2 mm) (15.2 mm) 0.17" (4.3 mm) (4.3 mm)
 Minimal back tension required for 	r sprocket engagement		

Belt Data										
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperatı (contir	•	Belt Mass				
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²			
Acetal	Polypropylene	1,500	21,900	34 to 200	1 to 93	1.55	7.57			

Ā

Flat T		PIECE™	Live Transfer 6.3 in
	in	mm	
Pitch	0.60	15.2	and the second of the second o
Molded Width	6.3	160	
Width Increments	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Snap-loc	k; headed	
Product No	tes		
 Contact Intralox for precise belt meas before designing equipment or orderi 	surements and s ng a belt.	stock status	
Smooth, closed upper surface with fully	0		the second s
 Transfer edge is an integral part of this b 			
 Designed for smooth, self-clearing, right belts. 	-angle transfers	onto takeaway	
 Each belt material has a default rod mat available. Intralox can help identify the b combination for your application. 			
 Detailed material information is provided 	I in Product Line		
 Uses three sprockets. 			
 Lug tooth sprockets improve sprocket er installation. 	ngagement and s	simplify	
 For information regarding sprocket place offset table in Retainer Rings and Center 	ement, see the c Sprocket Offset	enter sprocket	
 Minimal back tension required for sproch 	00		
 Addition of a fixed frame support can be ensures that the transfer belt does not s takeaway belt. Add support below the tra See 90-Degree Container Transfers for not set to the transfers for not set. 	nag when it inter ansfer belt, befo	rsects with the re the transfer.	0.34 in 4.70 in (8.7 mm) (119.4 mm) 0.70 in
 Requires sprockets with a pitch diamete larger. 	,	,	
• Cannot be used over 0.75 in (19.1 mm) transfers.		-	(7.4 mm)
• Molded tracking tabs fit into standard 1. tracks to ensure proper belt alignment.	75 in (44.5 mm)	wearstrip	i pri i ii iii iiiiiiiiiiiiiiiiiiiiiiii
• Available in 10 ft (3 m) increments.			(43.6 mm)

	Belt Data										
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	0°	lb/ft ²	kg/m²				
Acetal	Nylon	500	7,300	-50 to 200	-46 to 93	0.78	3.81				

	F	Flat Fricti	on Top
	in	mm	
Pitch	0.60	15.2	CEEPPERE RACK
Minimum Width	3	76	State for
Width Increments	0.5	12.7	and the second
Dpening Size	-	-	
Dpen Area	0	%	
linge Style	Clo	sed	
Rod Retention; Rod Type	Barn door;	unheaded	
Produc	ct Notes		
 Contact Intralox for precise belt before designing equipment or Available in grey acetal with black 	ordering a belt.	d stock status	
 Smooth, closed upper surface wit 	h fully flush edges.		
 Friction Top extends to the edge or 	f the belt (no indent)		
Closed edges on one side of the b	elt.		
• Lug tooth sprockets improve spro installation.			
 Underside design and small pitch smoothly around nosebars. 	combine to allow the	e belt to run	
 Small pitch reduces chordal action dead plate. 	n and the gap require	ed at the transfer	
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			0.085" 0.60" NOM. 0.60" NOM. 0.60" NOM. 0.26"
 Detailed material information is plant 	rovided in Product Li	ne.	(2.2 mm) (15.2 mm) (15.2 mm) (6.6 mm)
• Can be used over 0.75 in (19.1 m transfers.			1 0 0 0 0.34" (8.7 mm)
		D.4 D	
		Belt Da	ta Temperature Range Agenc

				В	elt Data						
		Default Rod Material	fault Rod Naterial, Belt Strength		Temperature Range (continuous)		Belt	Mass		Agency Acceptability	
Base Belt		Diameter							Friction Top	FDA	EU
Material	Base/Friction Top	0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Hardness	(USA)	MC ^a
Acetal	Grey/black	Nylon	1,500	21,900	-10 to 130	-23 to 54	1.80	8.79	54 Shore A	b	
Acetal	White/white	Nylon	1,500	21,900	-10 to 130	-23 to 54	1.80	8.79	54 Shore A	b	
^a European Migrat ^b Fully compliant	ion Certificate provid	ling approval for foo	d contact	according	to EU Regulatio	n 10/2011.					

			Mold	to Wi	dth F	lat To	р			
			in	mm		-	1 5 5 4	and the second second		
Pitch			0.60	15.2		- 1	Martin Co	E F F E	the second	de
			1.1	29				Wart of	5 5	600
	lidth o		1.5	37				Same?	51 5	
Molded W	launs		1.8	46					Ast'	34
			2.2	55	5	6.6° +	in 1	-	A.S.	
Opening S	Size		-	-			Stat at an	1	1	1.5
Open Area	1		0%				2. 2. 2. 1		Arrite .	11 18
Hinge Styl	le		Close	ed			a const		1	1
	ntion; Rod T	he	Snap-lock;	lleaueu				1200	TIL	
		Product No								
 Contac before 	t Intralox f designing	or precise belt mea equipment or order	surements and a ing a belt.	stock statu	s			inn-		
		per surface with fully	-				TRUE			
nosebai	rs.	and small pitch allow		-	und		- ALA	unun-		
 Lug too installat 		s improve sprocket e	ngagement and	simplify			- rur	urun-		
availabl	le. Intralox o	has a default rod ma can help identify the l ur application.			e			urun.		
	-	nformation is provide	d in Product Line					LILI		
		ion required for sproc					100			
 Availabl 	le in 10 ft (3	3 m) increments.					100			
).75 in (19.1 mm) dia	meter nosebars	for tight		0.60	"NOM. 0.60" NOM.	0.60" NOM.		
transfer		n halta waa ana anwaa	leat				2 mm) (15.2 mm)	(15.2 mm)	0.17" .3 mm)	
		n belts use one sproc n belts can use up to							<u> </u>	
- 40 11/11	anu 55-1111	ii beits call use up to	two sprockets.			(\square)		' @[[())-	0.34 (8.7 m	
						\smile			¥ (
				Bel	t Data					
			Dofoult Dod				Temnerat	ure Range		
Belt	Width		Default Rod		Belt S	trength	-	nuous)	Belt	Mass
in	mm	Belt Material	(4.6 m		lbf	N	°F	°C	lb/ft	kg/n
1.1	29	Acetal	Nylon	,	140	623	-50 to 200	-46 to 93	0.15	0.22
	20	Acatal			000	020	50 to 200	10 10 00	0.10	0.22

Belt	Width		Default Rod Material, Diameter 0.18 in	t Data Belt S	trength	-	ure Range 1uous)	Belt	Mass		
in	mm	Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m		
1.1	29	Acetal	Nylon	140	623	-50 to 200	-46 to 93	0.15	0.22		
1.5	37	Acetal	Nylon	200	890	-50 to 200	-46 to 93	0.19	0.28		
1.8	46	Acetal	Nylon	230	1,020	-50 to 200	-46 to 93	0.23	0.35		
2.2	55	Acetal	Nylon	201 ^a	894 ^a	-50 to 200	-46 to 93	0.28	0.42		
^a 270 lbf (1,	^a 270 lbf (1,200 N) for 2.2 in (55 mm) with two (2) sprockets										

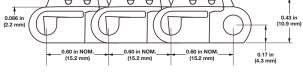
		Mold to	Width F	lat Frictio	n Top		
		in	mm	10000			
Pitch		0.60	15.2	and the second	aller.		
Molded Widths		1.1	29		The second	See.	
		2.2	55			Colles.	
Hinge Style		CI	osed		80.	Part of the	and and
Rod Retention; Rod Ty	/pe	Snap-lo	ck; headed	-			
	Product	Notes					
Contact Intralox for before designing of the second s	or precise belt r equipment or o	neasurements a rdering a belt.	nd stock status				
 Smooth, closed upp 	per surface with	fully flush edges.					and the second se
 Friction top extends 	s to the end of th	e belt, with no inc	lent.				
 Underside design a nosebars. 	nd small pitch a	llow the belt to ru	n smoothly aroun	d			
Available in grey ac	etal with black r	ubber.			12444	A DECEMBER OF	
 Each belt material l available. Intralox c combination for you 	an help identify					- <u>U</u> -U-1	
Detailed material in		vided in Product L	ine.		and the second second	1 <u>.</u>	100
 Lug tooth sprockets installation. 	s improve sprock	ket engagement a	nd simplify				
 Available in 10 ft (3) 	m) increments.						
 Minimal back tensi 	•						
 Can be used over 0 transfers. 	.75 in (19.1 mm) diameter noseba	ars for tight				0.085 in (2.2 mm)
 29-mm belts use o 	ne sprocket.					<u>) </u>	0.26
 55-mm belts can u 	se up to two spr	ockets.		.425 in (10.8 mm)	.60 in NOM.	0.60 in NOM.	0.60 in NOM.
					(15.2 mm)	(15.2 mm)	(15.2 mm)
			Belt	Data			
Belt Width	Base/	Default Rod Material, Diameter	Belt Strenath	Temperature Range (continuous)	Belt Mass	Friction Ton	Agency Acceptability 1=White, 2=Blue, 3=Natural, 4=Grev

Belt \	Vidth		Base/ Friction	Default Rod Material, Diameter	Belt S	trength		Temperature Range (continuous)		Mass	Friction Top	Agency Acc 1=White, 3=Natura	2=Blue,
in	mm	Belt Material	Тор	0.18 in (4.6 mm)	lbf	Ν	°F	°C	lb/ft	kg/m	Hardness	FDA (USA)	EU MC
1.1	29	Acetal	Grey/black	Nylon	140	623	34 to 130	1 to 54	0.17	0.25	54 Shore A	а	
2.2	55	Acetal	Grey/black	Nylon	200 ^b	890	34 to 130	1 to 54	0.34	0.48	54 Shore A	а	
	Fully compliant												

 b 270 lbf (1,200 N) for 2.2 in (55 mm) with two (2) sprockets

	No	n Skid F	aised Rib
	in	mm	
Pitch	0.60	15.2	
Minimum Width	3.0	76.0	
Width Increments	0.5	12.7	
Opening Size	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Barn door	; unheaded	
			07.5
			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Produ	ict Notes		
 Contact Intralox for precise be before designing equipment or 	elt measurements an r ordering a belt.	d stock status	
 Two edge options available: no in 	ndent and 21 mm inde	ent.	
 Non Skid Raised Rib surface incr 	reases traction.		
Closed edges on one side of the	belt.		
 Small pitch reduces chordal actividead plate. 	on and the gap require	ed at the transfe	
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro		
Detailed material information is	provided in Product Li	ne.	
Minimal back tension required for	or sprocket engageme	nt	
 Lug tooth sprockets improve spr installation. 	ocket engagement an	d simplify	
 Low profile conveyor reduces the digging pits. 	e installation costs as	sociated with	
Finger transfer plates apours ast	a transfora aliminatio	a the need for	

• Finger transfer plates ensure safe transfers, eliminating the need for safety stops and reducing downtime.



		Belt Data					
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperatı (contir	ure Range 1uous)	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	2,000	29,200	-50 to 200	-46 to 93	1.86	9.08
HSEC acetal	Nylon	1,800	26,300	-50 to 200	-46 to 93	1.88	9.18

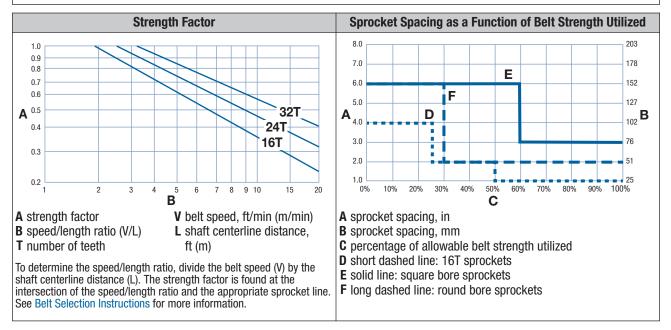
Belt Widt	th Range ^a	Minimum Number of Sprockets	Wea	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway ^c
3	76	2	2	2
4	102	2	2	2
6	152	2	2	2
7	178	2	3	2
8	203	2	3	2
10	254	2	3	2
12	305	3	3	2
14	356	3	4	3
15	381	3	4	3
18	457	3	4	3
24	610	5	5	3
30	762	5	6	4
36	914	7	7	4
42	1,067	7	8	5
48	1,219	9	9	5
54	1,372	9	10	6
60	1,524	11	11	6
72	1,829	13	13	7
84	2,134	15	15	8
96	2,438	17	17	9
120	3,048	21	21	11
144	3,658	25	25	13

^aBelts are available in 0.5 in (12.7 mm) increments beginning with 3 in (76 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets.

^C For Friction Top applications, use caution and contact Intralox Customer Service.

^dLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



							Mol	lded Spi	rockets		
Number of Teeth		Pitch neter				Available Bore Sizes					
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm	Square mm	
					0.5	13		1.5		40	
16 (1.92%)	3.1 ^b	79 ^b	3.2	81	1.0	25	1.0, 1.25				
24 (0.86%)	4.6	117	4.8	121	1.0	25		1.5, 2.5		40, 60	
(0.00%)					1.5	38			30		
					1.0	25					
30 (0.54%)	5.8	147	5.9	150	1.5	38	1.0, 1.25, 1-7/16				
32	6.1	155	6.5	164	1.0	25		1.5		40	
(0.48%)	0.1	133	0.0	104	1.5	38	1.25				

^a U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885. ^b When using 3.1 in (79 mm) pitch diameter sprockets, the belt strength for belts rated over 1,200 lbf/ft (17,500 N/m) is de-rated to 1,200 lbf/ft (17,500 N/m). All other belts maintain the published rating.

							Aceta	l Split S	procke	ts	
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
24 (0.86%)	4.6	117	4.8	121	1.5	38	1.25				
32 (0.48%)	6.1	155	6.5	164	1.5	38			30, 40		

Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
16 (1.92%)	3.1	79	3.2	81	1.0	25	1.9 ^b			

^a Cannot be used with S1000 High Density Insert Rollers. ^b 0.25 in keyway

							HR Nylo	n Molde	d Sproc	kets		
Number of Teeth		Pitch neter	-	Outer neter	. Hub dth	Available Bore Sizes						
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
16 (1.92%) ^c	3.1	79	3.2	81	1.0	25	1.9 ^d					
24 (0.86%)	4.6	117	4.8	121	1.5	38			30			
30 (0.54%)	5.8	147	5.9	150	1.5	38	1.0, 1.25, 1-7/16					
32 (0.48%)	6.1	155	6.5	164	1.5	38	1.25					

^c Cannot be used with S1000 High Density Insert Rollers.

|--|

							HR Nyl	on Split	Sprock	ets	
Number of Teeth	Nom. Pitch Diameter					A	/ailable E	Bore Size	es		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
30 (0.54%)	5.8	147	5.9	150	1.48	38	1-7/16				

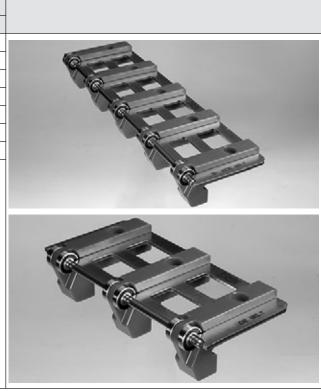
						Gla	ss-Fillec	Nylon	Split Sp	rockets		
Number of Teeth	-	Pitch neter		Outer neter	-	. Hub dth	Available Bore Sizes ^a					
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
24 (0.86%)	4.6	117	4.8	121	1.5	38	1.0, 1.25, 1-7/16, 1.5	1.5	30, 40	40		
30 (0.54%)	5.8	147	6	152	1.5	38	1.25, 1-7/16, 1.5		30, 40			
32 (0.48%)	6.1	155	6.5	164	1.5	38	1.0, 1.25, 1-7/16, 1.5	1.5	30, 40	40		

^a The 24-tooth, 30-mm round bore sprocket is available with or without keyway. Identify keyway requirements when ordering these sprockets.

					kets						
Number of Teeth		Pitch neter				A	vailable E	Bore Size	es		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
24 (0.86%)	4.6	117	4.8	121	1.5	38		1.5		40	and the second s
32 (0.48%)	6.1	155	6.5	164	1.5	38		1.5		40	

	Dynamic Nos	se-Rollers
Standard Nose	e-Roller Widths	
U.S. Sizes (in)	Metric Sizes (mm)	
4.5	170.0	
6.0	255.0	
9.0	340.0	
12.0	425.0	
15.0		
18.0		
24.0		
	-	

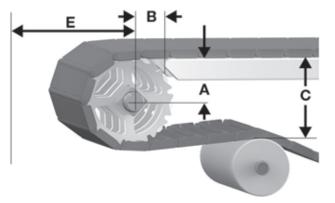
- U.S. sizes are available in 4.5 in, 6 in, and then in 3 in increments. Metric sizes are available in 85 mm (3.35 in) increments.
- For other belt widths, combine multiple nose-rollers in the available increments. For assistance, contact Intralox Customer Service.
- Made of FDA-compliant, blue, oil-filled nylon.
- Roller diameter: 0.75 in (19 mm)



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.

S



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 45: A, B, C, and E drive dimensions

			S1	000 Conveyor F	rame Dim	ensions							
Sproo	cket Descri	ption		1	I	B	C		E				
Pitch Di	ameter	Number	Range (Bott	om to Top) ^a									
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm			
Flat Top, Flat Top 85 mm, Mold to Width Flat Top													
3.1	79	16	1.34-1.37	34-35	1.59	40	3.08	78	1.77	45			
4.6	117	24	2.11-2.13	54	1.99	50	4.60	117	2.53	64			
6.1	155	32	2.88-2.89	2.88-2.89 73		62	6.12	155	3.29	84			
			Hi	gh Density Insert	Roller, Inse	rt Roller							
3.1	79	16	1.33	34	1.60	41	3.13	80	1.84	47			
4.6	117	24	2.10	53	2.02	51	4.65	118	2.60	66			
6.1	155	32	2.87	73	2.46	62	6.18	157	3.36	85			
			Flat	t Friction Top, Fla	t Friction To	op 85 mm							
3.1	79	16	1.35	34	1.59	40	3.17	81	1.86	47			
4.6	117	24	2.12	54	2.01	51	4.70	119	2.62	67			
6.1	155	32	2.88	73	2.44	62	6.22	158	3.39	86			

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1000 Dead Plate Gap											
	Sprocket Description	Minimum Gap										
Pitch D	iameter											
in	mm	Number of Teeth	in	mm								
3.1	79	16	0.029	0.7								
4.6	117	24	0.020	0.5								
6.1	155	32	0.015	0.4								

		Flush	Gr	rid				
	in	mm	75	124000000		-		
Pitch	0.60	15.2	1	ID D D D D D D D D D D D D D D D D D D	aaaaac			
Minimum Width					-uaaac			
Width Increments	— See Product I	Votes.				- Calado		Sec. Sec.
Minimum Opening Size (approximate	e) 0.17 × 0.10	4.3 × 2.5	199				0	
Maximum Opening Size (approximate)	,	7.9 × 2.5	10100				10	
Open Area	28%		1	lon				
Hinge Style			افافرفرق			- 9		
Rod Retention; Rod Type	Occluded edge; u	inheaded			المالم المالم الم	5.6	100	
						a) el el el el el el	10	
Produc	t Notes		25			-		
 Contact Intralox for precise beli before designing equipment or 	measurements and sto	ock status	2	MAR	1444	لألكرك	144	11
 Lightweight with smooth surface 	-		1		HAR		Inmit	
 Small pitch reduces chordal action dead plate. 	5	出出	下午中の	446	1-1-1	立		
 Custom-built in widths that vary b 	y material.			In the second	inc in the lo	in the long long	in how o	my let b
 Acetal and polypropylene are an and up, in 0.5 in (12.7 mm) inc 		in (76 mm)	10	10 DE	12 DU		1-15	
 Flame retardant thermoplastic widths from 5 in (127 mm) and 	oolyester (FR TPES) is ava up, in 1.0 in (25.4 mm) i	ailable in ncrements.	944944944944944					
 All other materials are available 1.0 in (25.4 mm) increments. 	in widths 3 in (76 mm) a	and up, in	2	605	70.01	205.5	h	70
 Each belt material has a default ro available. Intralox can help identif combination for your application. 							1-0	
 Detailed material information is presented and the presented of the presented	ovided in Product Line.)" NOM 0.60" N 5.2 mm) (15.2 m		
For information regarding sprocket	t placement, see the cen	ter sprocket			(13.2 mm) (13	(15.2 11		_
offset table in Locked Sprocket Po				 (_[$\mathfrak{H} (\mathfrak{H})$	$ (\mathbb{P}) $		344"
• Can be used over 0.875 in (22.2 r transfers.	nm) diameter nosebar foi	r tight		0.15" (3.8 mm)				7 mm)
		Belt D	ata					
					Temperat	ure Range		
	Default Rod Material	B	elt S	trength	(contii	-	Belt	Mass
Belt Material	Diameter 0.18 in (4.6 m			N/m	°F	°C	lb/ft ²	kg/m ²
Polypropylene	Polypropylene	700)	10,200	34 to 220	1 to 104	0.81	3.95
	Polyethylene	450		6,570	-50 to 150	-46 to 66	0.87	4.25
Acetal	Polypropylene	1,30	0	19,000	34 to 200	1 to 93	1.19	5.80
HSEC acetal	Polypropylene	800		11,700	34 to 200	1 to 93	1.19	5.80
FR TPES	Polypropylene	750)	7,355	40 to 150	4 to 66	1.30	6.34
HHR nylon	HHR nylon	1,10	0	14,600	-50 to 310	-46 to 154	1.14	5.57

		Belt Data					
	Default Rod Material,	Belt St	trength	Temperat (conti	Belt	Mass	
Belt Material	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.81	3.95
Polyethylene	Polyethylene	450	6,570	-50 to 150	-46 to 66	0.87	4.25
Acetal	Polypropylene	1,300	19,000	34 to 200	1 to 93	1.19	5.80
HSEC acetal	Polypropylene	800	11,700	34 to 200	1 to 93	1.19	5.80
FR TPES	Polypropylene	750	7,355	40 to 150	4 to 66	1.30	6.34
HHR nylon	HHR nylon	1,100	14,600	-50 to 310	-46 to 154	1.14	5.57
HR nylon	Nylon	1,100	14,600	-50 to 240	-46 to 116	1.07	5.22
UV resistant polypropylene	UV resistant polypropylene	700	10,200	34 to 220	1 to 104	0.81	3.98
Detectable polypropylene A22	Polypropylene	450	4,413	34 to 150	1 to 66	1.04	5.08
Acetal ^a	Polyethylene	1,200	17,500	-50 to 70	-46 to 21	1.19	5.80
UVFR	UVFR	700	10,200	-34 to 200	1 to 93	1.57	7.67
РК	РК	1,300	19,000	-40 to 176	-40 to 80	1.04	5.08
^a Polyethylene rods can be used in co	ld applications when impacts or sud	den starts/stop	os occur. Please	e note lower rating			

		Flat ⁻	Гор
	in	mm	
Pitch	0.60	15.2	a de la de l
Minimum Width	3	76	CODO DO DO
Width Increments	1.00	25.4	
Opening Size	-	-	A B B A A A A A A A A A A A A A A A A A
Open Area	00	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edç	Contraction of the second seco	
Produ	uct Notes		
Contact Intralox for precise be before designing equipment of	elt measurements and or ordering a belt.	l stock status	
 Small pitch reduces chordal act dead plate. 	ion and the gap require	d at the transfer	лллллллллрлл
• Lightweight with smooth, closed	d surface grid.		
 Each belt material has a default available. Intralox can help iden combination for your applicatior 	tify the best belt and ro		nnnnnnnhnin
• Detailed material information is	provided in Product Lir	ie.	
• For information regarding sproc offset table in Locked Sprocket		center sprocket	
• Can be used over 0.875 in (22.2 transfers. See Tight-Transfer Me	2 mm) diameter noseba ethods for more informa	r for tight ation.	nnnnnnnhan
			0.157" (4.0 mm) 0.157" 0.157" (4.0 mm) 0.157" (4.0 mm) 0.157"

	В	elt Data					
	Default Rod Material,	Belt St	trength	Temperat (conti	Belt Mass		
Belt Material	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²
Polypropylene	Polypropylene	500 ^a	4,903 ^a	34 to 220	1 to 104	0.90	4.40
Polyethylene	Polyethylene	300 ^a	2,942 ^a	-50 to 150	-46 to 66	0.96	4.69
HR nylon	Nylon	500	4,903	-50 to 240	-46 to 116	1.15	5.61
HHR nylon	HHR nylon	800	7,845	-50 to 310	-46 to 154	1.175	5.74
Acetal	Polypropylene	1,000	14,600	34 to 200	1 to 93	1.30	6.35
Acetal ^b	Polyethylene	900	8,826	-50 to 70	-46 to 21	1.30	6.35
X-ray detectable acetal	X-ray detectable acetal	800	11,700	-50 to 200	-46 to 93	1.6	7.81
Detectable polypropylene A22	Polypropylene	300	2,942	34 to 150	1 to 66	1.09	5.32
РК	PK	1,000	14,600	-40 to 176	-40 to 80	1.14	5.57
^a When using steel split sprockets, th	e helt strength for polypropylene is 400	lbf/ft (5 840 N	/m): nolvethyle	ne is 240 lbf/ft (*	3 500 N/m)		

^a When using steel split sprockets, the belt strength for polypropylene is 400 lbf/ft (5,840 N/m): polyethylene is 240 lbf/ft (3,500 N/m) ^b Polyethylene rods can be used in cold applications when impacts or sudden starts/stops occur. Please note lower rating.

	Ре	rfora	ted Fla	at Top)	
	in	mm		the second		
Pitch	0.60	15.2	0.0	a lance	CTOT	
Ainimum Width	3	76		6.00	and a state of the	
Vidth Increments	1.00	25.4			CONTRACTOR S	
pening Size	-	-		1. 1. 1. 1.		S M
pen Area	See Produ	ct Notes.	20			
inge Style	Оре	en	20	19696	888212 12	2 Sill
Rod Retention; Rod Type	Occluded edg	e; unhead	ed		04	355
Produ	ct Notes		3			
 Contact Intralox for precise bel before designing equipment or 		stock sta	tus		มามามามามามามา	
5.3% open area includes 2.1% op	pen area at the hinge.		24		0 0 0	0 0
Available with 5/32 in (4 mm) rou (25.4 mm) \times 0.6 in (15.2 mm) pe		ominal 1 i	1			
Underside design and small pitch nosebars.	allow the belt to run s	smoothly a	round	Furlir.	กมามามามามามาม	าสมัสสส
Each belt material has a default r available. Intralox can help identi combination for your application.	fy the best belt and ro		are		ร้าวราวราสาม	ามนับบน
Detailed material information is p		e.	10		• • •	
For information regarding sprock offset table in Locked Sprocket P	et placement, see the osition on Shaft.	center spr	ocket		• • •	
Can be used over 0.875 in (22.2 transfers. See Tight-Transfer Met	mm) diameter noseba hods for more informa	r for tight tion.			0.60" NOM 0.60" NOM	0.60" NOM.
For use on vacuum applications r	requiring tight, end-to-	end transf	ers.		(15.2 mm) (15.2 mm)	(15.2 mm)
		0.1 (4.0			0.34 (8.7 r	
		F	elt Data			
	Default Rod Mat		on Duid		Temperature Range	

Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	trength	•	ure Range 1uous)	Belt Mass					
Belt Material (4.6 mm)		lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Acetal	Polypropylene	1,000	14,600	34 to 200	1 to 93	1.30	6.35				
Acetal ^a Polyethylene 900 13,100 -50 to 70 -46 to 21 1.30 6.3											
^a Polyethylene rods can be used in cold a	pplications when impacts or suc	lden starts/stop	os occur. Please	note lower rating							

	Flus	h Grid Fi	riction Top
	in	mm	
Pitch	0.60	15.2	
Minimum Width	3	76	
Width Increments	0.5	12.7	
Opening Size (approximate)	0.17 × 0.10	4.3 × 2.5	
Open Area	28	%	
Hinge Style	Оре	en	
Rod Retention; Rod Type	Occluded edg	e; unheaded	
Product	Notes		APAUDUAPAUDUAPAUDUAPAUDUAPAUDUA
 Contact Intralox for precise belt m 	easurements and	stock status	CHACHACHACHACHAC
before designing equipment or or	•		1 # 4 6 \ # 1 # 4 6 \ # 1 # 4 6 \ # 1 # 4 6 \ # 1 # 4 6 \ # 1
Abrasion resistant rods are recomme			
 Available in grey polypropylene with with blue rubber, grey polypropylene polypropylene with white rubber. 	with black rubber,	and white	<i>ͺ</i> Ϳϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼͺϼ
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			Ϳ;ͼϳϞϥͿ;ͼϳϞϥͿ;ͼϳϞϥͿ;ͼϳϞϥ
 Detailed material information is prov 	ided in Product Lin	е.	FABRABRABRABRAB
 For information regarding sprocket p offset table in Locked Sprocket Posit 		center sprocket	Atelatelatelatelatela
 When using this belt on a center-driv retain the belt laterally, by placing co the drive. 			leditaleditaleditaleditaledital
 Temperature, environmental condition affect the effective maximum degree consideration when designing converted 	e of incline. Take th	0.085" 0.60" NOM. 0.60" NOM. 0.60" NOM. (2.2 mm) (15.2 mm) (15.2 mm) (15.2 mm)	
Can be used over 0.875 in (22.2 mm transfers.			
 Molded indent: 0.34 in (8.6 mm) 			0.235" (5.97 mm)

					Belt Data						
		Default Rod Material,	Belt Strength		Temperature Range (continuous)		Belt Mass			Agency Acceptability	
Base Belt Material	Base/Friction Top	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/grey	Polypropylene	700	10,200	34 to 150	1 to 66	1.18	5.76	64 Shore A		
Polypropylene	Grey/black	Polypropylene	700	10,200	34 to 150	1 to 66	1.18	5.76	55 Shore A	b	
Polypropylene	White/white	Polypropylene	700	10,200	34 to 150	1 to 66	1.18	5.76	55 Shore A	b	С
Polypropylene	High- performance FT blue/blue	Polypropylene	700	10,200	34 to 212	1 to 100	1.18	5.76	59 Shore A	b	с

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

 $^{\rm b}{\rm FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

	Flush Grid	d Frictior	n Top, No Indent
	in	mm	
Pitch	0.60	15.2	
Minimum Width	3	76	
Width Increments	0.5	12.7	
Opening Size (approximate)	0.17 × 0.10	4.3 × 2.5	
Open Area	28	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg		
Product	Notes		in a manufactor of the second
 Contact Intralox for precise belt m before designing equipment or or Abrasion resistant rods are recommediate and the second second	dering a belt. ended. r. material. Other roc he best belt and ro vided in Product Lir placement, see the tion on Shaft. ve conveyor, it can plars at the backbe pons, and product ch e. Consider these f hese belts.	I materials are d material ne. center sprocket be necessary to end roller before naracteristics factors when	Uphylophylophylophylophylophylophylophyl

				B	lelt Data						
Default Rod Material,			Belt Strength		Temperature Range (continuous)		Belt Mass			Agency Acceptability	
Base Belt	Base/Friction	Diameter 0.18 in							Friction Top	FDA	
Material	Тор	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Hardness	(USA)	EU MC ^a
Polypropylene	Polypropylene High-Performance FT Blue/Blue Polypropylene 700 10,200 34 to 212 1 to 100 1.18 5.76 59 Shore A b c										
^a European Migrat	tion Certificate provi	ding approval for foc	d contact	t accordin	g to EU Regulat	ion 10/2011.					

^b FDA compliant with restriction: Do not use in direct contact with fatty foods. ^C EU compliant with restriction: Do not use in direct contact with fatty foods.

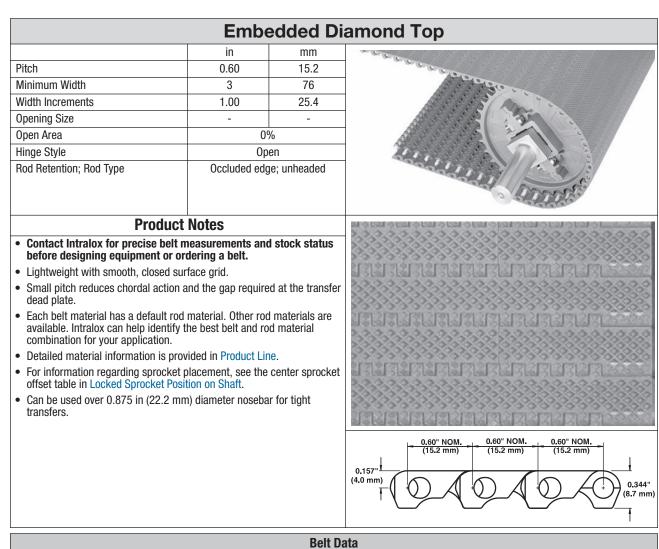
OI	NEPIECE	[™] Live Tı	ansfer Flush Grid
	in	mm	
Pitch	0.60	15.2	
Minimum Width	6	152	
Vidth Increments	1.00	25.4	
Minimum Opening Size (approximate)	0.17 × 0.10	4.3 × 2.5	
Maximum Opening Size approximate)	0.31 × 0.10	7.9 × 2.5	C C C C C C
)pen Area	28	%	
linge Style	Оре	en	
Rod Retention; Rod Type	Snap-lock	; headed	AL CONS
			ã Carta
Product	Notes		ر جمر جر _{میر} اعتراب کمر ادر ای کمر اطراب کر
 Contact Intralox for precise belt m before designing equipment or or 	lering a belt.	l stock status	httphtphtphtphtrun-
 Lightweight with smooth surface grid 			
 Transfer edge is an integral part of the 			10000000000000
 Built with nylon rods for superior weat 			
 Small pitch reduces chordal action a dead plate. 	0		111111111111111111111111111111111111111
 Each belt material has a default rod i available. Intralox can help identify th combination for your application. 			
 Detailed material information is prov 	ided in Product Lin	le.	308808868800000
 Recommended for use with EZ Track 		-	
Use sprockets with a pitch diameter	•	or larger.	יחירים מכומים מהימ לוהיה
 Designed for smooth, self-clearing, r belts. 	ight angle transfer	s onto takeaway	0.34" 4.45" (8.7 mm) (113.0 mm) 0.70"
 Addition of a fixed frame support car ensures that the transfer belt does no takeaway belt. Add support below th See 90-Degree Container Transfers. 	ot snag when it int	(17.8 mm) (17.8 mm) (17.9 mm)	
Also available in 6 in (152 mm) Mold	to Width.		
• For custom belt widths, contact Intra	lox Customer Serv		
 Molded tracking tabs fit into standard 	d 1.75 in (44.5 mm it.	3.58" 1-21/32" (90.9 mm)	

Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	trength		ure Range nuous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Acetal	Nylon	1,300	19,000	34 to 200	1 to 93	1.19	5.80				
FR TPES	Nylon	750	10,900	40 to 150	4 to 66	1.30	6.34				
HHR nylon	HHR nylon	1,100	16,100	-50 to 310	-46 to 154	1.20	5.80				

	Flu	sh Grid I	Nub Top™
	in	mm	
Pitch	0.60	15.2	
Minimum Width	3	76	
Width Increments	1.00	25.4	and the second second
Opening Size (approximate)	0.18 × 0.09	4.4 × 2.3	2
Open Area	159	%	
Product Contact Area	269	ю	
Hinge Style	Оре	en	
Rod Retention; Rod Type	Occluded edg	e; unheaded	
Product	t Notes		
 before designing equipment or o Nub pattern reduces contact betwee Available in acetal, polypropylene, a products). Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is products large e between the nubs. Flush Grid Nub Top flights are avail Standard nub indent: 1.0 in (25.4 nub standard nub standa	een belt surface and and polyethylene (fo d material. Other roo the best belt and ro povided in Product Lin enough to span the able.	$\begin{array}{c c} & 0.175^{"} & 0.05^{"} \\ \hline & & (4.4 \text{ mm}) & (1.3 \text{ mm}) \\ \hline & & & (5.1 \text{ mm}) & (1.4 \text{ mm}) & (1.3 \text{ mm}) \\ \hline & & & & (1.4 \text{ mm}) & (1.3 \text{ mm}) \\ \hline & & & & & (1.4 \text{ mm}) & (1.3 \text{ mm}) \\ \hline & & & & & & (1.4 \text{ mm}) & (1.4 \text{ mm}) & (1.4 \text{ mm}) \\ \hline & & & & & & (1.4 \text{ mm}) & (1.4 \text{ mm}) & (1.4 \text{ mm}) \\ \hline & & & & & & & (1.4 \text{ mm}) & (1.4 \text{ mm}) & (1.4 \text{ mm}) \\ \hline & & & & & & & & (1.4 \text{ mm}) & (1.4 \text{ mm}) & (1.4 \text{ mm}) & (1.4 \text{ mm}) \\ \hline & & & & & & & & & & & & & & & & & &$	
		Belt D	lata

Belt Data											
	Default Rod Material, Diameter 0.18 in	rength ^a		ure Range 1uous)	Belt Mass						
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²				
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.93	4.55				
Acetal	Polypropylene	1,300	19,000	34 to 220	7 to 93	1.36	6.65				
Polyethylene	Polyethylene	450	6,570	-50 to 150	-46 to 66	1.00	4.90				
Acetal	Polyethylene	1,200	17,500	-50 to 150	-46 to 66	1.36	6.65				

^a When using polyurethane sprockets, the belt strength for polypropylene, acetal, and nylon is750 lbf/ft (10,900 N/m), and the temperature range for the sprocket is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.



Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	rength ^a		ure Range nuous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Polyethylene	Polyethylene 300 4,380 -50 to 150 -46 to 66 0.96 4.6										
^a When using steel sprockets, the belt strength for polyethylene is 240 lbf/ft (3,400 N/m).											

		Cone 1	Гор™
	in	mm	
Pitch	0.60	15.2	all of the
Minimum Width	9	229	Join Concert
Width Increments	1.00	25.4	
Opening Size	-	-	
Open Area	0'	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	ge; unheaded	at the particular of the second se
			the works
			the hast
Produ	ct Notes		
Contact Intralox for precise bel before designing equipment or	t measurements and	d stock status	เกิดกิดกิดกิดกิดกิดกิดกิดกิดกิด
 Small pitch reduces chordal actio dead plate. 	on and the gap require	ed at the transfer	เกิดการการที่สุดการการที่สุดการการที่
 Each belt material has a default r available. Intralox can help identiti combination for your application. 			เลกกุลกุลกุลกุลกุลกุลกุลกุล
• Detailed material information is p	rovided in Product Lir	ne.	nananananananananan
 For information regarding sprocked offset table in Locked Sprocket Point 	et placement, see the osition on Shaft.	center sprocket	เกิดกันกันกันกันกันกันกันกันกันกันกันการ
• Can be used over 0.875 in (22.2 transfers.	mm) diameter noseba	r for tight	
Minimum nominal alternating edg mm).	ge indents: 2 in (51 m	m) and 3 in (76	เฉลากกลากกลาสสายแผน
			R 0.03" (0.7 mm)
			0.125" (3.2 mm) (7.2 mm) (15.2 mm) (15.2 mm) (15.2 mm) (15.2 mm) (15.2 mm) (15.2 mm) (15.2 mm) (15.2 mm)

Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²				
Acetal	Polypropylene	1,000	14,600	34 to 200	1 to 93	1.31	6.40				
HR nylon	Nylon	500	7,300	-50 to 240	-46 to 116	1.18	5.76				

Flush Gr	id Mold to	o Width,	38 mm and 46 mm Wide
	in	mm	
Pitch	0.60	15.2	
Molded Widths	1.5 & 1.8	38 & 46	
Minimum Opening Size (approximate)	0.17 × 0.10	4.3 × 2.5	
Maximum Opening Size (approximate)	0.31 × 0.10	7.9 × 2.5	
Open Area	26	i%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	· ····································	
Product	Notes	NUMBER OF STREET	
 Contact Intralox for precise belt m before designing equipment or ord 	easurements and lering a belt.	d stock status	
· Lightweight with smooth surface grid	1.		
Flush edges.			The second se
 Molded with robust tracking tabs to a loading applications 	support the belt in	heavy side-	
Standard nylon rodlets provide longe	r service life.		Liver August Liver State State
 Each belt material has a default rod available. Intralox can help identify th combination for your application. 			
Detailed material information is prov	ided in Product Lir	ne.	
Use only EZ Track sprockets.			THE REAL PROPERTY AND A RE
• Use one sprocket maximum per shaft	t for both widths.		
 Spacing between tracking tabs: 			
- 38-mm belt: 1.2 in (30.6 mm)			0.60" NOM. 0.60" NOM. 0.60" NOM. 0.60" NOM. 0.60" NOM. 0.60" NOM.
- 46-mm belt: 1.54 in (39.1 mm)			
• Can be used over 0.875 in (22.2 mm transfers.) diameter noseba	0.150" (3.8 mm)	
• Available in 10 ft (3 m) increments.			0.344" (8.7 mm)

Belt Data Temperature Range Default Rod Material, Belt Strength (continuous) **Belt Mass** Diameter 0.18 in **Belt Material** (4.6 mm) °F °C lb/ft² kg/m² lbf Ν Acetal (38 mm) -50 to 200 -46 to 93 0.275 Nylon 130 578 0.185 Acetal (46 mm) 150 -50 to 200 -46 to 93 0.216 Nylon 667 0.321

Belt Wid	Ith Range ^b	Minimum Number of Sprockets	Wear	strips		
in	mm	Per Shaft ^c	Carryway	Returnwayd		
3	76	1	2	2		
4	102	1	2	2		
6	152	2	2	2		
7	178	2	3	2		
8	203	2	3	2		
10	254	3	3	2		
12	305	3	3	2		
14	356	5	4	3		
15	381	5	4	3		
16	406	5	4	3		
18	457	5	4	3		
20	508	5	5	3		
24	610	7	5	3		
30	762	9	6	4		
32	813	9	7	4		
36	914	9	7	4		
42	1,067	11	8	5		
48	1,219	13	9	5		
54	1,372	15	10	6		
60	1,524	15	11	6		
72	1,829	19	13	7		
84	2,134	21	15	8		
96	2,438	25	17	9		
120	3,048	31	21	11		
144	3,658	37	25	13		
	, use an odd numb rline spacing. ^e	er of sprockets at maximum 4 in	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mi centerline spacing		

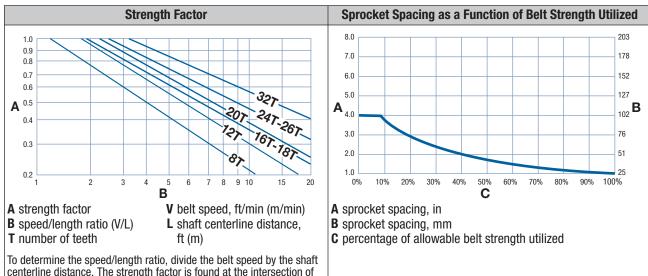
^aBecause of the single plate steel design, Intralox recommends using twice as many 8- and 12-tooth sprockets as indicated.

^b If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 3 in (76 mm). If the actual width is critical, contact Intralox Customer Service.

^c This number is a minimum. Heavy-load applications can require additional sprockets.

 $^{\rm d}$ For Friction Top applications, use caution and contact Intralox Customer Service.

^eLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.

							Мо	lded Sp	rocket		
Number of Teeth	Nom. Diam					A	Available Bore Sizes				
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
12 (3.41%)	2.3	58	2.3	58	0.75	19	1.0	1.0	25	25	Martine .
16 (1.92%)	3.1	79	3.1	79	1.0	25	1, 1.25	1.5	25 to 30	40	
18 (1.52%)	3.5	89	3.5	89	0.75	19		1.0, 1.5		25, 40	
20 (1.23%)	3.8	97	3.8	97	1.0	25		1.5		40	
24 (0.86%)	4.6	117	4.7	119	1.0	25	1 to 1.25	1.5 m 2.5	25 to 30	40, 60	
26 (0.73%)	5.1	130	5.1	130	1.0	25	1 to 1.25	1.5	25 to 30	40	
32 (0.48%)	6.1	155	6.2	157	1.0	25	1 to 1.25	1.5, 2.5	25 to 30	40, 60	

^a Round bore molded and split sprockets are frequently furnished with two keyways. Use of two keys is NOT REQUIRED nor recommended. Round bore sprockets do not have setscrews for locking the sprockets in place. As with square bore sprockets, only the center-most sprocket must be locked down. Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

						Abras	ion Resi	stant Me	etal Spr	ockets		
Number of Teeth	Nom. Diam		Nom. Diam	Outer neter	-	Nom. Hub Width				vailable I	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm		
8 (7.61%)	1.6	41	1.6	41	0.164	4.2	0.75	0.625	20			
12 (3.41%)	2.3	58	2.3	58	0.164	4.2	1.0	1.0	25	25		

^a The stainless steel sprockets have a male key in the round bore sizes. Since the key is part of the sprocket, only the center sprockets must be locked down to track the belt. The male key requires running the shaft keyway along the entire length of the shaft. Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

							Split	Metal S	procke	ts	
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter		Nom. Hub Width				Available Bore Sizes		
(Chordal			•		•.		Round	Square		Square	
Action)	in	mm	in	mm	in	mm	in ^a	in	mm ^a	mm	
18 (1.54%)	3.5	89	3.5	89	1.7	43		1.5		40	and the second sec
24 (0.86%)	4.6	117	4.7	119	1.7	43	1, 1-3/16, 1-1/4	1.5	30	40	R
26 (0.73%)	5.1	130	5.1	130	1.7	43	1, 1-3/16, 1-1/4	1.5, 2.5		40, 60	mano 1000
32 (0.48%)	6.1	155	6.2	157	1.7	43	1, 1-3/16, 1-1/4, 1-1/2	1.5, 2.5		40, 60	and the second sec

^a U.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

						E	Z Track	™ Molde	ed Spro	ckets
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	Available Bore Sizes		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
16 (1.92%)	3.1	79	3.1	79	1.0	25		1.5		40
18 (1.52%)	3.5	89	3.5	89	1.0	25		1.5		40
24 (0.86%)	4.6	117	4.7	119	1.0	25		1.5, 2.5		40, 60
32 (0.48%)	6.1	155	6.2	157	1.0	25		1.5, 2.5		40, 60

					EZ	Track	[™] Glass	-Filled N	lylon Sp	olit Spro
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	Available Bore Sizes		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
24 (0.86%)	4.6	117	4.7	119	1.5	38		1.5		40
32 (0.48%)	6.1	155	6.2	157	1.5	38		1.5, 2.5		40, 60

						EZ T	rack [™] a	nd EZ Cl	lean™ S	procket	S						
Number of Teeth	Nom. Diam			Outer neter		. Hub dth	A	vailable E	Bore Size	es							
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm							
12 (3.41%)	2.3	58	2.3	58	1.0	25	1.0	1.0	25	25			3	MA	hehee	hehedre	haded og
16 (1.92%)	3.1	79	3.1	79	1.0	25	1.0, 1-1/16, 1-1/8, 1-1/4		25, 30		. 4	1	2	R	R	R	C
18 (1.52%)	3.5	89	3.5	89	1.0	25	1.0	1.0		25	5		C.				in
20 (1.23%)	3.8	97	3.8	97	1.0	25		1.5		40		3		7	Y.		
24 (0.86%)	4.6	117	4.7	119	1.0	25	1.0, 1-1/8, 1-3/16, 1-1/4		25, 30			2	1	A			28
26 (0.73%)	5.1	130	5.1	130	1.0	25	1.0, 1-1/16, 1-1/8, 1-1/4	1.5	25, 30	40							
32 (0.48%)	6.1	155	6.2	157	1.0	25	1.0, 1-1/16, 1-1/8, 1-3/16, 1-1/4 1-1/2		25, 30, 40								

Flat Top Base Flights (Streamline)

Available F	light Height		
in	mm	Available Materials	
2	51	Polypropylene, polyethylene, acetal, detectable polypropylene A22	

Streamline flights are smooth on both sides.

- Each flight extends from the center of the module, molded as one part. No fasteners are required.
- Flat Top base Streamline flights are used in both Flat Top and Flush Grid belts.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- For recommended minimum indent, contact Intralox Customer Service.



		Flush Grid Nub Top Base	Flights (No-Cling)
Available Flight Height			
in	mm	Available Materials	
2	51	Polypropylene, polyethylene, acetal	
3 76 Polypropylene, acetal		Polypropylene, acetal	
The No-Cling vertical ribs are on both sides of the flight.			

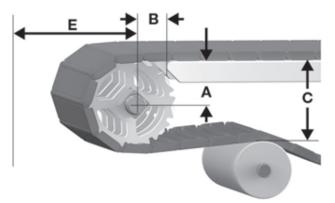
- Each flight extends from the center of the module, molded as one part. No fasteners are required.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- For recommended minimum indent, contact Intralox Customer Service.



		Sideguard	ls
Availab	le Sizes		
in	in mm Available Materials		
2	51	Polypropylene, polyethylene, acetal	
Fastens to be	elt with hinge rod	s. No other fasteners required.	
product. This	is called a produ	the back ends angled inward, toward the uct-friendly orientation. On request, the vard, toward the conveyor sides.	
fan out, open The sideguar	ling a gap at the	2-, 16-, and 18-tooth sprockets, sideguards top that can allow small products to fall out. Ity closed when wrapping around the 24-	
Standard gap	between sidegu	ards and flight edge: 0.2 in (5 mm)	
Minimum ind	lent: 1 in (25 mm).	0.00

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 46: A, B, C, and E drive dimensions

	S1100 Conveyor Frame Dimensions											
Sprocket Description					B	(C		E			
Pitch D	iameter	Number	Range (Bot	tom to Top)								
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm		
	Embedded Diamond Top, Flat Top, Flush Grid, Perforated Flat Top ^a											
1.6	41	8	0.53-0.59	13-15	1.02	26	1.70	43	1.00	25		
2.3	58	12	0.93-0.97	24-25	1.31	33	2.40	61	1.37	35		
3.1	79	16	1.31	33	1.51	38	3.20	81	1.75	44		
3.5	89	18	1.51	38	1.66	42	3.60	91	1.94	49		
3.8	97	20	1.70	43	1.77	45	3.79	96	2.13	54		
4.6	117	24	2.08	53	1.92	49	4.75	121	2.60	66		
5.1	130	26	2.28	58	1.96	50	5.14	131	2.73	69		
6.1	155	32	2.85	72	2.20	56	6.20	155	3.30	84		
			Flush Grid F	riction Top ^a , Flus	h Grid Fricti	on Top, No	Indent ^a					
1.6	41	8	0.53-0.59	13-15	1.04	27	1.61	41	1.08	27		
2.3	58	12	0.93-0.97	24-25	1.30	33	2.36	60	1.46	37		
3.1	79	16	1.31	33	1.55	39	3.12	79	1.84	47		
3.5	89	18	1.51	38	1.66	42	3.50	89	2.03	51		
3.8	97	20	1.70	43	1.77	45	3.88	98	2.22	56		
4.6	117	24	2.08	53	1.97	50	4.64	118	2.60	66		
5.1	130	26	2.28	58	2.06	52	5.02	127	2.79	71		
6.1	155	32	2.85	72	2.25	57	6.16	157	3.36	85		

Spro	cket Descri	ption	A	A Contraction of the second seco	E	3	()	E	
Pitch D	iameter	Number	Range (Bot	tom to Top)						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mn
				Flush Gr	id Nub Top ^a					
1.6	41	8	0.53-0.59	13-15	1.04	27	1.57	40	1.05	27
2.3	58	12	0.93-0.97	24-25	1.30	33	2.32	59	1.42	36
3.1	79	16	1.31	33	1.55	39	3.08	78	1.80	46
3.5	89	18	1.51	38	1.66	42	3.46	88	1.99	51
3.8	97	20	1.70	43	1.70	43	3.84	98	2.18	55
4.6	117	24	2.08	53	1.97	50	4.60	117	2.56	65
5.1	130	26	2.28	58	2.06	52	4.98	127	2.75	70
6.1	155	32	2.85	72	2.25	57	6.13	156	3.32	84
				Con	e Top ^a					
1.6	41	8	0.54-0.60	14-15	1.04	26	1.66	42	1.13	29
2.3	58	12	0.93-0.97	24-25	1.30	33	2.41	61	1.50	38
3.1	79	16	1.32	34	1.55	39	3.17	81	1.88	48
3.5	89	18	1.51	38	1.66	42	3.55	90	2.07	53
3.8	97	20	1.71	43	1.70	43	3.93	100	2.26	57
4.6	117	24	2.09	53	1.96	50	4.69	119	2.64	67
5.1	130	26	2.28	58	2.05	52	5.07	129	2.83	72
6.1	155	32	2.86	73	2.24	57	6.22	158	3.41	87

DEAD PLATE GAP Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Des

dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1100 Dead Plate Gap									
	Sprocket Description	Minim	um Gap							
Pitch D	iameter									
in	mm	Number of Teeth	in	mm						
1.6	41	8	0.058	1.5						
2.3	58	12	0.040	1.0						
3.1	79	16	0.029	0.7						
3.5	89	18	0.026	0.7						
3.8	97	20	0.024	0.6						
4.6	117	24	0.020	0.5						
5.1	130	26	0.018	0.4						
6.1	155	32	0.015	0.4						

Pitch Minimum Width Width Increments Opening Size	in 1.44 6 1.00 - 24	mm 36.6 152 25.4	
Open Area Hinge Style Rod Retention; Rod Type	Clos Slidelox; u		
 Product N Contact Intralox for precise belt me before designing equipment or orde Made of engineered resin for increase elongation through thermal expansion Slidelox are glass-reinforced polyprop Each belt material has a default rod m available. Intralox can help identify the combination for your application. Detailed material information is provid Belt strength depends on the run direction half. Molded split plastic sprockets availab Module thickness: 0.75 in (19.1 mm), strength and stiffness. 	easurements and ering a belt. ed stiffness and m h. pylene. naterial. Other rood e best belt and ro ded in Product Lin ction. When the b h, the belt strength le for easy installa	inimal belt materials are d material e. elt is not n is reduced by ation.	A preferred run direction

Belt Data									
Default Rod Material, Diameter 0.31 inTemperature RangeBelt Strengtha(continuous)Belt Mass									
Belt Material	Belt Material (7.9 mm) Ibf/ft N/m °F °C Ib/ft² kg/m²								
Polypropylene composite Polypropylene 3,300 48,200 34 to 220 1 to 104 2.87 14.01									
^a Belt strength rating depends on preferred belt run direction. If run in the opposite direction, the belt rating is 2,000 lbf/ft (29,000 N/m).									

		Flat 1	Гор
	in	mm	
Pitch	1.44	36.6	A B B B B B B B B B B B B B B B B B B B
Minimum Width	6	152	and a state
Width Increments	1.00	25.4	and the second states
Opening Size (approximate)	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Slidelox;	unheaded	the set of
Produ	ct Notes		
Contact Intralox for precise be before designing equipment or	t measurements an ordering a belt.	d stock status	madaqaa.
 Module thickness is 0.75 in (19.1 strength and stiffness. 	mm), which provide		
 Made of engineered resin for incle elongation through thermal expansion 	reased stiffness and r nsion.	mannann.	
· Slidelox are glass-reinforced poly	vpropylene.		
 Each belt material has a default r available. Intralox can help identi combination for your application. 	fy the best belt and ro		mann
• Detailed material information is p	rovided in Product Li	ne.	and the second se
Molded split plastic sprockets av	ailable for easy instal	lation.	
 Belt strength depends on the run installed in the preferred run dire half. 	direction. When the I ction, the belt strengt	belt is not th is reduced by	
Belt strength for narrow belts:			1.44" NOM1.44" NOM
 3,750 lbf/ft (54,700 N/m) for b Contact Intralox Customer Serv required. 	vice if a more precise	(36.6 mm) (36.6 mm) (36.6 mm) (36.6 mm) (36.6 mm) (36.75" (19.1 mm)	
- 3,250 lbf/ft (47,400 N/m) for b		· /	
- 2,750 lbf/ft (40,100 N/m) for b	eit wiaths under 12 ir	1 (305 mm)	
			A preferred run direction
		Belt D	ata

Belt Data								
Default Rod Material,	Belt Strength ^a		Temperature Range (continuous)		Belt Mass			
Diameter 0.31 in (7.9 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Polypropylene composite	4,000	58,400	-20 to 220	-29 to 104	3.17	15.45		
Polypropylene composite	4,000	58,400	-20 to 220	-29 to 104	3.2	15.66		
	Diameter 0.31 in (7.9 mm) Polypropylene composite	Default Rod Material, Diameter 0.31 in (7.9 mm)Belt StrPolypropylene composite4,000	Default Rod Material, Diameter 0.31 in (7.9 mm)Belt StrengthaPolypropylene composite4,00058,400	Default Rod Material, Diameter 0.31 in (7.9 mm) Belt Strength ^a Temperature (contin Ibf/ft Polypropylene composite 4,000 58,400 -20 to 220	Default Rod Material, Diameter 0.31 in (7.9 mm) Belt Strength ^a Temperature Range (continuous) Polypropylene composite 4,000 58,400 -20 to 220 -29 to 104	Default Rod Material, Diameter 0.31 in (7.9 mm) Belt Strength ^a Temperature Range (continuous) Belt Polypropylene composite 4,000 58,400 -20 to 220 -29 to 104 3.17		

^a Belt strength rating depends on preferred belt run direction. If run in the opposite direction, the belt rating is 2,000 lbf/ft (29,000 N/m). The belt strength for narrow belts is reduced to 3,750 lbf/ft (54,700 N/m) for belt widths under 60 in (1524 mm), 3,250 lbf/ft (47,400 N/m) for belt widths under 30 in (762 mm), and 2,750 lbf/ft (40,100 N/m) for belt widths under 12 in (305 mm). Contact Intralox Customer Service if a more precise belt strength is required for belt widths under 60 in (1,524 mm).

Raised Rib					
Pitch Minimum Width Width Increments Open Area Product Contact Area Hinge Style Rod Retention; Rod Type	in 1.44 6 1.00 24 24 Clos Slidelox; t	% sed			
 Product Contact Intralox for precise belt m before designing equipment or ore Made of engineered resin for increas elongation through thermal expansion Slidelox are glass-reinforced polyprot Each belt material has a default rod available. Intralox can help identify th combination for your application. Detailed material information is prov Belt strength depends on the run dirrinstalled in the preferred run direction half. Molded split plastic sprockets availa Module thickness: 1.0 in (25.4 mm), strength and stiffness. 	heasurements and dering a belt. sed stiffness and mon. pylene. material. Other roo he best belt and ro ided in Product Lir ection. When the b in, the belt strengt ble for easy install	ninimal belt I materials are d material ne. elt is not h is reduced by ation.	A preferred run direction		

Belt Data								
	Default Rod Material, Diameter 0.31 in	Belt Strength ^a		Temperature Range (continuous)		Belt Mass		
Belt Material	(7.9 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Polypropylene composite	Polypropylene	3,300	48,200	34 to 220	1 to 104	3.3	16.11	
^a Belt strength rating depends on preferred belt run direction. If run in the opposite direction, the belt rating is 2000 lbf/ft (29,000 N/m).								

		Non S	Skid
	in	mm	こう マンスとう ちょうきの シャント 石田
Pitch	1.44	36.6	
Minimum Width	6	152	
Width Increments	1.00	25.4	
Opening Size (approximate)	-	-	
Open Area	09	6	
Hinge Style	Closed		
Rod Retention; Rod Type	Slidelox; u	nheaded	the second and the se
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or of Made of engineered resin for incre- elongation through thermal expans dissipative material that does not i charge, so it is effective in all envii Slidelox are glass-reinforced polyp Each belt material has a default ro available. Intralox can help identify combination for your application. Detailed material information is pri Molded split plastic sprockets avai Belt strength depends on the run of installed in the preferred run direct half. 	ordering a belt. ased stiffness and m sion. Engineered resi rely on moisture to di ronments. oropylene. d material. Other rod the best belt and roo ovided in Product Lin lable for easy installa lirection. When the b- tion, the belt strength	inimal belt n is a static ssipate a materials are d material e. ation. elt is not n is reduced by	
 1.44 in (36.6 mm) pitch allows use of smaller drive sprockets than traditional moving-platform belts, providing tighter transfers and requiring shallower floor trenches for installation. Module thickness: 0.75 in (19.1 mm) provides superior belt strength and stiffness. In the preferred run direction, S1200 belts are rated 4,000 lbf/ft (58,400 N/m). Non Skid indent: 1.0 in (25.4 mm). 			1.44" NOM. (36.6 mm) (36.6 mm) (36.6 mm) (36.6 mm) (36.8 mm) (36.8 mm) (36.8 mm) (21.3 mm)
			A preferred run direction
		Belt D	lata

Belt Data							
	Default Rod Material, Diameter 0.31 in	Dell Oliver alla?		Temperature Range (continuous)		Belt Mass	
Belt Material	(7.9 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
EC polypropylene composite	Polypropylene composite	4,000	58,400	-20 to 220	-29 to 104	3.21	15.65
a Delta shought when a standard a providence of the standard in the approximation of the balk standard in the							

^a Belt strength rating depends on preferred belt run direction. If run in the opposite direction, the belt rating is 2,000 lbf/ft (29,000 N/m). The belt strength for narrow belts is reduced to 3,750 lbf/ft (54,700 N/m) for belt widths under 60 in (1524 mm), 3,250 lbf/ft (47,400 N/m) for belt widths under 30 in (762 mm), and 2750 lbf/ft (40,100 N/m) for belt widths under 12 in (305 mm). Contact Intralox Customer Service if a more precise belt strength is required for belt widths under 60 in (1,524 mm).

in mm Pitch 1.44 36.6 Minimum Width 6 152 Width Increments 1.00 25.4 Opening Size - - Open Area 0% - Product Contact Area 10% - Hinge Style Closed - Rod Retention; Rod Type Slidelox; unheaded - Product Notes - - Product Notes - - Product Notes - - Product Notes - - Slidelox; unheaded - - Product Notes - - Product Notes - - Made of enging equipment or ordering a belt. - Slidelox are glass-reinforced polypropylene. - Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material combination for your application.		
Minimum Width 6 152 Width Increments 1.00 25.4 Opening Size - - Open Area 0% Product Contact Area 10% Hinge Style Closed Rod Retention; Rod Type Slidelox; unheaded Product Notes Product Notes Product Notes Product Notes Slidelox; unheaded Slidelox; unheaded Description: Slidelox; unheaded Description: Product Notes Product Notes Product Notes Product Notes Open Area O% Product Notes Product Notes Notes Slidelox; unheaded Slidelox; unheaded Slidelox; unheaded Slidelox; unheaded Slidelox; unheaded Slidelox; unheaded <td col<="" th=""><th></th></td>	<th></th>	
Width Increments 1.00 25.4 Opening Size - - Open Area 0% - Product Contact Area 10% - Hinge Style Closed - Rod Retention; Rod Type Slidelox; unheaded - Product Notes - - - • Contact Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. - • Tread pattern provides a non-skid walking surface to increase safe - • Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. - • Slidelox are glass-reinforced polypropylene. - • Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a statio dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Opening Size - - Open Area 0% Product Contact Area 10% Hinge Style Closed Rod Retention; Rod Type Slidelox; unheaded Product Notes Product Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. • Tread pattern provides a non-skid walking surface to increase saf • Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. • Slidelox are glass-reinforced polypropylene. • Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Open Area 0% Product Contact Area 10% Hinge Style Closed Rod Retention; Rod Type Slidelox; unheaded Product Notes Product Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. • Tread pattern provides a non-skid walking surface to increase saf • Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. • Slidelox are glass-reinforced polypropylene. • Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Product Contact Area 10% Hinge Style Closed Rod Retention; Rod Type Slidelox; unheaded Product Notes Slidelox; unheaded Example: Product Notes • Contact Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. • Tread pattern provides a non-skid walking surface to increase saf Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. • Slidelox are glass-reinforced polypropylene. Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Hinge Style Closed Rod Retention; Rod Type Slidelox; unheaded Product Notes Slidelox; unheaded • Contact Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. • • Tread pattern provides a non-skid walking surface to increase saf • Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. • Slidelox are glass-reinforced polypropylene. • • Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Rod Retention; Rod Type Slidelox; unheaded Product Notes Product Notes • Contact Intralox for precise belt measurements and stock stabefore designing equipment or ordering a belt. • Tread pattern provides a non-skid walking surface to increase saf • Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. • Slidelox are glass-reinforced polypropylene. • Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. • Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
Product Notes Contact Intralox for precise belt measurements and stock state before designing equipment or ordering a belt. Tread pattern provides a non-skid walking surface to increase safe Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. Slidelox are glass-reinforced polypropylene. Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a static dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material		
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 before designing equipment or ordering a belt. Tread pattern provides a non-skid walking surface to increase saf Staggered yellow edges make it easy to distinguish the moving be from the stationary floor. Slidelox are glass-reinforced polypropylene. Made of engineered resin for increased stiffness and minimal belt elongation through thermal expansion. Engineered resin is a statio dissipative material that does not rely on moisture to dissipate a charge, so it is effective in all environments. Each belt material has a default rod material. Other rod materials available. Intralox can help identify the best belt and rod material 		
 Detailed material information is provided in Product Line. Belt strength depends on the run direction. When the belt is not installed in the preferred run direction, the belt strength is reduced half. Not recommended for product accumulation conditions. For information about friction values between product and belt, collintralox Customer Service 1.44 in (36.6 mm) pitch allows use of smaller drive sprockets that traditional moving-platform belts, providing tighter transfers and requiring shallower floor trenches for installation. Rib indent: 1.0 in (25 mm). 	A 1.44" NOM 1.44" NOM (36.6 mm) (36.6 mm)	

	Beit Data												
	Default Rod Material, Diameter 0.31 in	Belt St	rength ^a		ure Range nuous)	Belt Mass							
Belt Material	(7.9 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²						
EC polypropylene composite	Polypropylene composite	4,000	58,400	-20 to 220	-29 to 104	3.58	17.48						
UV resistant acetal ^b	Acetal	2,500	36,500	-50 to 150	-46 to 66	4.51	22.02						
-													

^a Belt strength rating depends on preferred belt run direction. If run in the opposite direction, the belt rating is 2,000 lbf/ft (29,000 N/m). The belt strength for narrow belts is reduced to 3,750 lbf/ft (54,700 N/m) for belt widths under 60 in (1,524 mm), 3,250 lbf/ft (47,400 N/m) for belt widths under 30 in (762 mm), and 2,750 lbf/ft (40,100 N/m) for belt widths under 12 in (305 mm). Contact Intralox Customer Service if a more precise belt strength is required for belt widths under 60 in (1,524 mm).

^bUV resistant acetal requires special sprockets. Contact Intralox Customer Service when ordering sprockets for this belt.

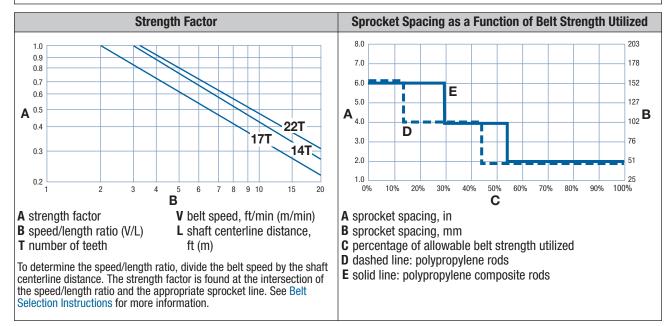
Belt Wid	th Range ^a	Minimum Number of Sprockets	Quantity Reference Wearstrips				
in	mm	Per Shaft ^b	Carryway	Returnway			
6	152	2	2	2			
7	178	2	2	2			
8	203	2	2	2			
9	229	2	2	2			
10	254	2	3	2			
12	305	3	3	2			
14	356	3	3	3			
15	381	3	3	3			
16	406	3	3	3			
18	457	3	3	3			
20	508	3	4	3			
24	610	5	4	3			
30	762	5	5	4			
32	813	5	5	4			
36	914	7	5	4			
42	1,067	7	6	5			
48	1,219	9	7	5			
54	1,372	9	7	6			
60	1,524	11	8	6			
72	1,829	13	9	7			
84	2,134	15	11	8			
96	2,438	17	12	9			
120	3,048	21	15	11			
144	3,658	25	17	13			
145	3,683	25	18	14			
146	3,708	25	18	14			
147	3,734	25	18	14			
148	3,759	25	18	14			
149	3,785	25	18	14			
150	3,810	25	18	14			
151	3,835	25	18	14			
152	3,861	25	18	14			
53	3,886	25	18	14			
54	3,912	25	19	14			
155	3,937	25	19	14			
156	3,962	27	19	14			
157	3,988	27	19	15			
158	4,013	27	19	15			
159	4,039	27	19	15			
160	4,064	27	19	15			
161	4,089	27	19	15			
162	4,115	27	19	15			
163	4,140	27	20	15			
164	4,166	27	20	15			
165	4,191	27	20	15			
166	4,216	27	20	15			

		Sprocket and Support	t Quantity Reference				
Belt Wid	Ith Range ^a	Minimum Number of Sprockets	Wearstrips				
in	mm	Per Shaft ^b	Carryway	Returnway			
167	4,242	27	20	15			
168	4,267	29	20	15			
169	4,293	29	20	16			
170	4,318	29	20	16			
171	4,343	29	20	16			
172	4,369	29	21	16			
173	4,394	29	21	16			
174	4,420	29	21	16			
175	4,445	29	21	16			
176	4,470	29	21	16			
177	4,496	29	21	16			
178	4,521	29	21	16			
179	4,547	29	21	16			
180	4,572	31	21	16			
181	4,597	31	22	17			
182	4,623	31	22	17			
183	4,648	31	22	17			
184	4,674	31	22	17			
185	4,699	31	22	17			
	, use an odd numbe line spacing. ^c	er of sprockets at maximum 6 in	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mm centerline spacing			

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 6 in (152 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^c Lock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



	Plastic Split Sprocket												
Number of Teeth		Nom. PitchNom. OuterNom. HubDiameterDiameterWidth			A	vailable E	Bore Size	es					
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in ^b	Round mm ^a	Square mm			
14 (2.51%)	6.5	165	6.3	161	1.5	38		1.5, 2.5					
17 (1.70%)	7.9	201	7.7	196	1.5	38		2.5					
22 (1.02%)	10.2	259	10.1	255	1.5, 1.67	38, 44	3.5	2.5, 3.5		90			

^a Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885. ^b The 2.5 in square bore is created by using a bore adapter in the 3.5 in square bore sprocket.

	Split Metal Sprockets												
Number of Teeth		Nom. Pitch Diameter		Nom. Outer Diameter				A	vailable I	Bore Size	es		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm			
12 (3.41%)	5.6	142	5.4	137	1.7	43		2.5			and and		
14 (2.51%)	6.5	165	6.3	161	1.7	43		1.5, 2.5			0 0		
22 (1.70%)	10.2	259	10.1	255	1.7	43		2.5, 3.5					

Hold Down Tabs

- Available for Non Skid and Flat Top belts.
- Carryway wearstrips or rollers that engage the tabs are only required at the transition between the horizontal sections and angled sections. This approach reduces initial system cost, as well as ongoing maintenance cost and effort.
- Ensure that adequate lead-in radii and/or angles are used to prevent the possibility of snagging the tab on the frame.
- Place tabs in every other row (2.9 in [73.2 mm]) along the length of the belt. Tabs can be placed every fourth row (5.8 in [146.3 mm]) for lightly loaded applications.
- Each line of tabs along the length of the belt reduces the available number of sprockets by two. Belt rating is reduced by 1,300 lbf (5,780 N) for each line of tabs.
- When designing conveyors, include a carryway radius at the transition between horizontal sections and angled sections. This radius must be at least 48 in (1.22 m) for belts that are loaded near the belt strength rating. This radius is one of the most important factors to consider when designing highly loaded conveyors that utilize hold down tabs.
- Strength rating for each hold down tab: 100 lbf (445 N) of force perpendicular to the hold down surface.



				Insert Nuts	3	
Available	Base Belt Style	- Material	Available Ins	ert Nut Sizes		
Flat Top ·	Flat Top - Polypropylene Composite			8 in (8 mm to mm)		
	Maximum Fixture Weight		Fastener Specifi		G . 3	
Belt Material	lb/nut ^a	kg/nut ^a	in-lbf	N-m		
Polypropylene Composite	355	155	100	11.3		
Insert Nuts a	low easy attachn	nent of fixtures to	o the belt.			
when placing	nent dimensions an order. Contac able for your appl	ct Intralox Custon				No ca
	nments connecte nd the sprockets.		ne row do not p	prohibit belt		
Do not locate	sprockets in-line	e with the insert	nuts.			
	nt bases that ext considered during		ple rows, ensur	re reduced		
	nt from the edge n (47 mm) for ev		3 in (21 mm) fo			
 Minimal dista mm). 	ince between nut	ts across the wid	th of the belt: 1	.33 in (34		
Spacing alon	g the length of th	e belt: 1.44 in (3	6.6 mm) incren	nents.		

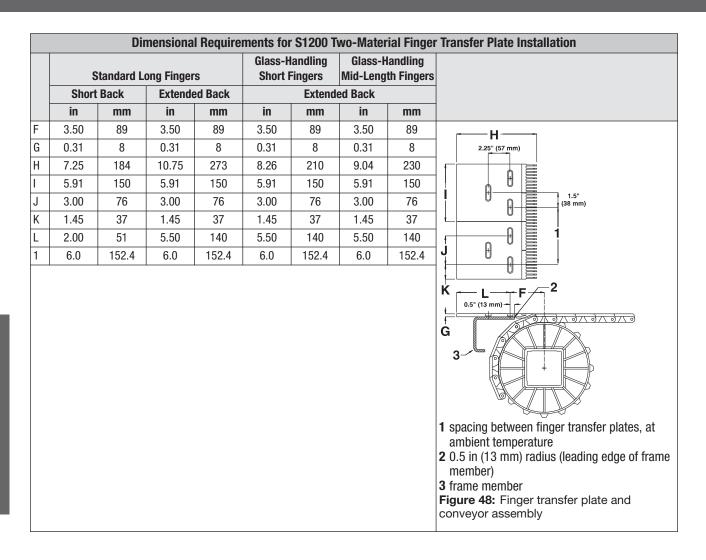
^a Fixture weight	only. Product weigh	nt need not be inclu	ded.		
	Fixture weight only. Product weight need not be included. Finger Transfer Plates Available Widths Number of in mm Fingers Available Materials 6 152 18 Polypropylene Identical to Series 400 finger transfer plates. Eliminates product transfer and tipping problems. The fingers extend between the belt ribs to allow a smooth continuation of the product flow as the belt engages the sprockets. The product flow as the belt engages the sprockets. Easily installed on the conveyor frame with the supplied shoulder bolts. Caps easily snap into place over the bolts, and keep foreign materials out of the slots. Image: Capse asily snap into place over the bolts, and keep foreign materials out of the slots.				
Available	e Widths	Number of			
in	mm	Fingers	Available Materials		
6	152	18	Polypropylene		
 Identical to S 	eries 400 finger	transfer plates.			
between the	belt ribs to allow	a smooth continu	ns. The fingers extend uation of the product flow		
•				FEBRICA STREET	111111111111111111111111111111111111111

•



	Dimensional Requirements for S1200 Finger Transfer Plate Installation										
	in	mm									
F	3.50	89	رمــــــ H ــــــم								
G	0.31	8									
Н	7.25	184									
I	5.91	150									
J	3.00	76									
К	1.45	37									
L	2.00	51									
Μ	6.000	152.4									
			Ġ								
			M spacing between finger transfer plates, at ambient temperature								
			Figure 47: Finger transfer plate and conveyor assembly								

		Two	o-Material Finger Trans	
Av	ailable Widths	No. of		
in	mm	Fingers	Available Materials	
6	152	18	Glass-filled thermoplastic fingers, acetal backplate	
	Available Con	figuration	IS	
Standard	Standard Extended Back	G	ilass-Handling	
		Short	fingers with extended backplate	
Long fingers	Long fingers with an	short fingers with short backplate ^a		
with a short backplate	extended backplate	mid-ler	ngth fingers with a short backplate	
		mid-length fingers with extended backplate		
Provides high	h-strength fingers combined	with a low-	friction backplate.	
 Eliminates problem between the engages the 	roduct transfer and tipping p belt ribs allowing a smooth sprockets.	problems. Th , continuous	e 18 fingers extend product flow as the belt	
00	backplate is permanently at	tached to th	e two high-strength finger	
	lder bolts and bolt covers an I finger transfer plates (FTPs		or installing the standard	
separately. N	rdware for the glass-handlir Aounting hardware consists give more secure fastening	of stainless	steel oval washers and	
single-mater	ons that require better chen rial polypropylene standard l e includes plastic shoulder b	TP. Mountin	g hardware for this finger	
and cans. Sh These finger	provide good support for un ort fingers are sturdy enoug s are designed to resist brea lass, the individual fingers y ge.	jh for harsh, aking, but if	broken-glass applications. confronted with deeply	
Short backpl three attach	late has two attachment slot ment slots.	s and the ex	tended backplate has	
	200 use the same FTPs.			
glass-handli	duct transfer, use 10.2 in (29 ng finger transfer plates. 10 mum-size sprockets to use es.	.2 in (259 m	m) PD 22-tooth sprockets	
^a Contact Intralox	x Customer Service for lead tim	es.		



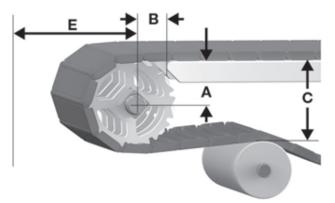
				Se	elf-Clearing Finger T	ransfer Plates ^a
	Availal	ble Width	No. of	f		
	in	m	m Finger	s A	vailable Materials	
	6	15	2 18	Glas	s-Filled Thermoplastic	
d	lesigned to	work toge			-	F- N TN
lo	oading appl	lications	acking tabs to sup			Land Cleve L
С	containers.		ce provides excell			
S	superior we	ar resistan		-	-	T - I - I - I - I - I - I - I - I - I -
р	olates. Trans	sfers are s	r a sweeper bar, a mooth and 100% all container types	self-cleari	rm, or wide transfer ng, making right angle	
			••	-	product changeovers.	
а	and right-ha	ind transfe	ers.		e for both left-hand	
ii	nfeed conve	eyors.	-		It on the discharge and	
• (1	Capable of t 200, and S	ransferring Series 1900	g product to and f D Raised Rib belts	rom Intralo	x Series 400, Series	
		-	ability in tough, gla			
• E	asily instal	led and se	cured to mounting	g plates of	any thickness with ovement with belt	
	expansion a					
• 5	Stainless ste	eel hardwa	are is sold separat	ely.		
aLi	censed unde	r Rexnord U	J.S. Patent Nos. 7,31	14,130 and	7,448,490	
	0.16.01		nensional Requ	uirement	s for S1200 Self-Cle	aring Finger Transfer Plate Installation ^a
	Self-Cl in		-			
F	5.25	mm 133.4				
г G	1.15	29.2	│ ┌───┣	1.75" ₄.5 mm)		
H	8.05	29.2		4.5 mm)		
- I 	5.93	150.6	┤╷╵ <u>↓ ⋔</u> Ü			
ı J	2.92	74.2	1.46" (37.1 mm)			
J K	1.51	38.4			-	
L	2.71	68.8				
L 1	6.000	152.4				
1	0.000	132.4				
			- L-+	_F		
				0.59" (15.0 mm)		
			G G			
				<u>selle</u>		
			2_ 1	6		
			同		LJ S	
					er transfer plates, at a	umbient temperature
			2 frame memb		sfer plate and conv	aver accombly
			Figure 49: Fil	iger tran	sier plate and conve	eyor assembly

^aLicensed under Rexnord U.S. Patent Nos. 7,314,130 and 7,448,490

ē,

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 50: A, B, C, and E drive dimensions

S1200 Conveyor Frame Dimensions												
Spro	cket Descri	ption			В	(;	E				
Pitch D	iameter	Number	Range (Bot									
in	mm	of Teeth	in mm		in	mm	in	mm	in	mm		
Flat Top, Flush Grid												
5.6	142	12	2.31-2.41	59-61	2.15	55	5.56	141	3.22	82		
6.5	165	14	2.78-2.87	71-73	2.35	60	6.48	165	3.87	98		
7.9	201	17	3.48-3.55	88-90	2.62	67	7.85	199	4.55	116		
10.2	259	22	4.64-4.69	118-119	3.02	77	10.13	257	5.69	145		
Non Skid Raised Rib, Raised Rib												
5.6	142	12	2.31-2.41	59-61	2.15	55	5.81	148	3.47	88		
6.5	165	14	2.78-2.87	71-73	2.35	60	6.73	171	4.12	105		
7.9	201	17	3.48-3.55	88-90	2.62	67	8.10	206	4.80	122		
10.2	259	22	4.64-4.69	118-119	3.02	77	10.38	264	5.94	151		
Non Skid												
5.6	142	12	2.31-2.41	59-61	2.15	55	5.65	144	3.30	84		
6.5	165	14	2.78-2.86	71-73	2.34	59	6.56	167	3.76	96		
7.9	201	17	3.51-3.58	89-91	2.57	65	7.99	203	4.47	114		
10.2	259	22	4.67-4.73	119-120	3.02	77	10.29	261	5.62	143		
^a For genera	l applications	and applicatio	ons where end transf	er of tip-sensitive pro	oduct is not c	ritical, use the	bottom of the	range.				

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S1200 Dead Plate Gap							
	Sprocket Description			ım Gap			
Pitch Diameter							
in	mm	Number of Teeth	in	mm			
5.6	142	12	0.095	2.4			
6.5	165	14	0.081	2.1			
7.9	201	17	0.067	1.7			
10.2	259	22	0.052	1.3			

		Flat ⁻	Гор
	in	mm	1 1 1 1 2 2 1 1 1 1 1 1 1 1 1 2 3 2 3 2
Pitch	1.00	25.4	
Minimum Width	5	127	
Width Increments	1.00	25.4	
Opening Size	-	-	
Open Area	0'	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Slidelox;	unheaded	and and
Produ	ct Notes		
 Contact Intralox for precise be before designing equipment of Smooth, closed surface with fully Flat Top surface provides excelle Ideal for container handling. Slidelox are available in polypropy PLUS belts, use polypropylene SI polypropylene belts, use detecta Each belt material has a default available. Intralox can help ident combination for your application Detailed material information is portion of the sum of	r ordering a belt. y flush edges. Int lateral movement of ylene or acetal. For Ea idelox. For Easy Relea ble polypropylene Slid rod material. Other roo fy the best belt and roo provided in Product Ling ge lug teeth for excell	of containers. Asy Release lise traceable elox. d materials are od material ne. ent durability	
 Most sprockets feature a split de removed for retrofits and change 	sign, so shafts do not overs.	nave to be	A Inset: Slidelox edge
 Robust design offers excellent belt and sprocket durability, especially in tough glass applications. 			0.25" (6.4 mm) (6.4 mm) (7.5 m

Belt Data								
	Default Rod Material, Diameter 0.24 in			Temperature Range (continuous)		Belt Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Acetal	Nylon	2,500	36,500	-50 to 200	-46 to 93	2.75	13.43	
Polypropylene	Nylon	1,800	26,300	34 to 220	1 to 104	1.85	9.03	
HHR nylon	HHR Nylon	2,000	29,200	-50 to 310	-46 to 154	2.32	11.33	
HSEC acetal	Nylon	1,600	23,400	-50 to 200	-46 to 93	2.69	13.13	

	Mol	d to Widt
	in	mm
Pitch	1.00	25.4
Molded Widths	3.25	83
	4.5	114
	6.0	152
	7.5	191
	-	85.0
Opening Size (approximate)	-	-
Open Area	C	1%
Hinge Style	Clo	osed
Rod Retention; Rod Type	Slidelox;	unheaded
Produ	rt Notes	

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Smooth, closed surface with fully flush edges.
- Flat Top provides excellent lateral movement of containers. Ideal for container handling.
- Molded with robust tracking tabs to support the belt in heavy side-loading applications
- Slidelox are available in polypropylene or acetal.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprockets are all plastic.
- Most sprockets use a split design, so shafts do not have to be removed for retrofits and changeovers.
- Split sprockets are designed with thick, lug-style teeth for excellent durability and wear life.
- Robust design offers excellent belt and sprocket durability, especially in tough, glass applications.
- Sprocket placement:
 - Use one sprocket on 3.25 in (83 mm) mold to width belts, and on 4.5 in (114 mm) tabbed mold to width belts.
 - Use one or two sprockets on 4.5 in (114 mm) no tab mold to width belts.
 - Use up to three sprockets on 6.0 in (152 mm) belts, and on 7.5 in (191 mm) mold to width belts.
- Optional tracking tabs fit into single barreled belt wearstrip with 1.75 in (44.5 mm) spacing.
- Width tolerances: +0.000/-0.020 in (+0.000/-0.500 mm).
- Available in 10 ft (3 m) increments.





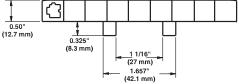
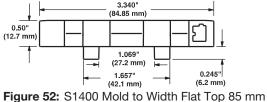


Figure 51: S1400 Mold to Width Flat Top





					Temperature Range		ure Range	Belt Mass			
Belt \	Vidth		Default Rod Material,	Belt Sti	rength ^a	(contin	nuous)	Ta	ab	No	Tab
in	mm	Belt Material	Diameter 0.24 in (6.1 mm)	lbf	N	°F	°C	lb/ft	kg/m	lb/ft	kg/m
3.25	83	Acetal	Nylon	700	3,110	-50 to 200	-46 to 93	0.80	1.19	0.75	1.12
-	85	Acetal	Nylon	700	3,110	-50 to 200	-46 to 93	0.80	1.19	-	-
4.5	114	Acetal	Nylon	850	3,780	-50 to 200	-46 to 93	1.13	1.68	1.07	1.59
6.0	152	Acetal	Nylon	1,200	5,340	-50 to 200	-46 to 93	1.40	2.08	1.35	2.01
7.5	191	Acetal	Nylon	1,550	6,890	-50 to 200	-46 to 93	1.75	2.60	1.71	2.54
6.0	152	Polypropylene	Nylon	850	3,780	34 to 220	1 to 104	0.95	1.14	0.90	1.34
3.25	83	HHR nylon	Nylon	700	3,110	-50 to 310	-46 to 154	0.85	1.27	-	-
4.5	114	HHR nylon	Nylon	850	3,780	-50 to 310	-46 to 154	0.95	1.41	1.07	1.59
6.0	152	HHR nylon	Nylon	1,200	5,340	-50 to 310	-46 to 154	1.18	1.76	1.35	2.01
7.5	191	HHR nylon	Nylon	1,550	6,890	-50 to 310	-46 to 154	1.47	2.19	1.71	2.54

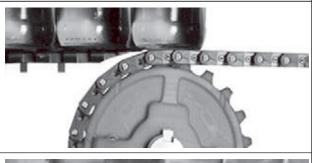
SERIES 1400

ONEPIECE[™] Live Transfer Flat Top

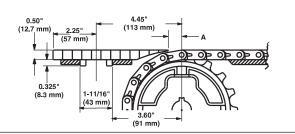
	in	mm
Pitch	1.00	25.4
Molded Width	6	152
Width Increments	-	-
Open Area	00	%
Hinge Style	Clos	sed
Rod Retention; Rod Type	Slidelox; ı	unheaded

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Smooth, flat surface with fully flush edges.
- Transfer edge is an integral part of the belt.
- Molded with robust tracking tabs to support the belt in heavy sideloading applications
- Nylon rods provide superior wear resistance.
- Slidelox are available in polypropylene or acetal.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprockets are all plastic, with large lug teeth for excellent durability and wear life.
- Most sprockets use the split design, so shafts do not have to be removed for retrofits and changeovers.
- Designed for smooth, self-clearing, right angle transfers onto takeaway belts.
- Provides excellent lateral movement of PET, glass, and other containers. Provides excellent belt and sprocket durability, especially in tough, glass applications.
- Addition of a fixed frame support can be necessary. The support ensures that the transfer belt does not snag when it intersects with the takeaway belt. Add support below the transfer belt, before the transfer. See 90-Degree Container Transfers.
- When moving products from transfer belt to takeaway belt, ensure the transfer belt surface is no more than 0.06 in (1.5 mm) above the takeaway belt surface. When product is moving from the infeed belt onto the transfer belt, ensure the belts surfaces are level.
- Available in 10 ft (3 m) increments.







Belt Data								
	Default Rod Material, Diameter 0.24 in	Belt St	rength		ure Range 1uous)	Belt	Mass	
Belt Material	(6.1 mm)	lbf	N	°F	0°	lb/ft	kg/m	
Acetal	Nylon	850	3,780	-50 to 200	-46 to 93	1.25	1.86	

6 in (152 r	nm) Flat To	p Mold t	o Width Self-Clearing Edge		
	in	mm			
Pitch	1.00	25.4	2555 5 8		
Minimum Width	6	152	55 5 S		
Width Increments	-	-	and shares of sh		
Opening Size	-	-			
Open Area	(1%	States States		
Hinge Style	Clo	osed	CO STORE AND AND		
Rod Retention; Rod Type	Snap-loc	k; headed			
	ct Notes				
 Contact Intralox for precise be before designing equipment or 		d stock status			
 Fully flush edges. 					
 Robust design offers excellent be in tough, material-handling appli 	elt and sprocket dura ications.	oility, especially			
 Belt is bi-directional. It can be us transfers. 	sed for left-hand and	right-hand			
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and r				
 Detailed material information is presented and the second s	provided in Product L	ne.			
 All sprockets are plastic. 					
	Most sprockets feature a split design, so shafts do not have to be removed for retrofits and changeovers.				
 Provides 100% self-clearing tran energy drink cans, when used w 			1.00" NOM. (25.4 mm) (6.4 mm) (6.4 mm) (6.4 mm) (100 mm) (10		

Belt Data							
	Default Rod Material, Diameter 0.24 in	Belt S	trength	Temperati (contii	0	Belt I	Mass
Belt Material	(6.1 mm)	lbf	N	°F	0°	lb/ft	kg/m
Acetal	Nylon	1,000	4,450	-50 to 200	-46 to 93	1.08	1.61

6

0.5" NOM. (12.7 mm)

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0.8" (21 mm)

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ONEPIECE[™] 9.3 in (236 mm) Live Transfer Flat Top

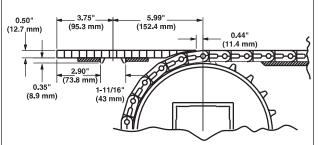
	in	mm
Pitch	1.00	25.4
Molded Width	9.3	236
Width Increments	-	-
Open Area	00	%
Hinge Style	Clos	sed
Rod Retention; Rod Type	Slidelox; ı	unheaded

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Smooth, flat surface with fully flush edges.
- Transfer edge is an integral part of this belt.
- Molded with robust tracking tabs to support the belt in heavy sideloading applications
- Nylon rods provide superior wear resistance.
- Slidelox are available in polypropylene or acetal.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprockets are all plastic, with large lug teeth for excellent durability and wear life.
- Most sprockets feature a split design, so shafts do not have to be removed for retrofits and changeovers.
- Designed for smooth, self-clearing, right angle transfers onto takeaway belts.
- Provides excellent lateral movement of PET, glass, and other containers. Provides excellent belt and sprocket durability, especially in tough, glass applications.
- Addition of a fixed frame support can be necessary. The support ensures that the transfer belt does not snag when it intersects with the takeaway belt. Add support below the transfer belt, before the transfer. See 90-Degree Container Transfers.
- When moving products from transfer belt to takeaway belt, ensure the transfer belt surface is no more than 0.06 in (1.5 mm) above the takeaway belt surface. When product is moving from the infeed belt onto the transfer belt, ensure the belts surfaces are level.
- Tracking tab height: 0.35 in (8.9 mm).
- Tab spacing: 1.6875 in (43 mm).
- Available in 10 ft (3 m) increments.







Belt Data							
	Default Rod Material, Diameter 0.24 in	Belt St	rength	•	ure Range 1uous)	Belt I	Mass
Belt Material	(6.1 mm)	lbf	N	°F	0°	lb/ft	kg/m
Acetal	Nylon	1,550	6,890	-50 to 200	-46 to 93	1.86	2.77

		Flush	Grid
	in	mm	
Pitch	1.0	25.4	3030 J. J. J. M.
Minimum Width	9	229	and to I will be the
Width Increments	1.0	25.4	
Opening Size (approximate)	0.17 × 0.30	4.2×7.6	
Open Area	21	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; ι	inheaded	
Product	Notes		
 Product Notes Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Fully flush edges. Polypropylene belts are grey with blue polypropylene Slidelox. Acetal belts are grey with yellow acetal Slidelox. Slidelox are available in polypropylene or acetal. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Minimum sprocket spacing: 3 in (76.2 mm). Maximum recommended sprocket spacing: 6 in (152.4 mm). Installation is the same as current S1400 belts, with the addition of a locked sprocket location chart and preferred run direction. Recommended adjusted belt pull: greater than 900 lbf/ft (13,100 N/m). 			A run direction
			1.00" NOM. 1.00" NOM. 1.00" NOM. (25.4 mm) (25.4 mm) (2

Belt Data											
	Default Rod Material, Diameter 0.24 in Belt Strength ^a			•	ure Range 1uous)	Belt Mass					
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²				
Polypropylene	Polypropylene	1,800	26,300	34 to 220	1 to 104	1.61	7.86				
Polypropylene	Nylon	1,800	26,300	34 to 220	1 to 104	1.66	8.10				
Acetal	Nylon	2,500	36,500	-50 to 200	-46 to 93	2.52	12.30				
^a Belt strength is divided by 2 when using 6 in (15.2 cm) sprocket spacing; full strength when using 3 in (7.6 cm) sprocket spacing.											

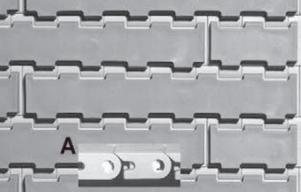
		F	lat Fricti	on Top
		in	mm	
	Pitch	1.00	25.4	and the second
	Minimum Width	5	127	6775 To 14
1	Width Increments	1.00	25.4	ATTA A COL
	Hinge Style	Clos	sed	SILIA SAL
	Rod Retention; Rod Type	Slidelox; u	unheaded	the for the for the former of
	Product	Notes		
•	 Contact Intralox for precise belt n before designing equipment or or 		and the second secon	
•	 Fully flush edges. 			Contraction of the second second
•	 Available in grey polypropylene with with black rubber, white polypropyle polyethylene with black rubber. 	grey rubber, grey p ne with white rubb	polypropylene er, and black	┉┲╾╼╼╼╼╼╧┶╴
•	 Slidelox are available in polypropylei 	ne or acetal.		
•	 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
•	 Detailed material information is prov 	rided in Product Lin	ie.	
•	 Most sprockets feature a split design removed for retrofits and changeove 		have to be	
	 Robust design offers excellent belt a in tough, material-handling application 	ons.	5/ 1 5	A Inset: Slidelox rod retention feature
•	 When using this belt on a center-driv retain the belt laterally, by placing co the drive. 			
•	 Temperature, environmental condition affect the maximum degree of inclin designing conveyor systems using the 	e. Consider these f	1.00" NOM. 1.00" NOM. 1.00" NOM. 1.00" NOM. (25.4 mm) (25.4 mm) (25.4 mm) (25.4 mm)	
•	 Standard indents for Friction Top sur (5.6 mm). Indent availability varies b 			

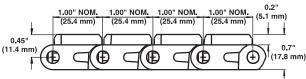
Belt Data Temperature Range Agency **Default Rod Belt Strength** (continuous) Belt Mass Acceptability Material, **Base Belt** Diameter **Friction Top** FDA EU MC^a °F Material **Base/Friction Top** 0.24 in (6.1 mm) lbf/ft N/m °C lb/ft² kg/m² Hardness (USA) Polypropylene 1,800 26,300 34 to 150 1 to 66 64 Shore A Grey/grey Nylon 2.62 12.79 Polypropylene Grey/black 1,800 34 to 150 Nylon 26,300 1 to 66 2.62 12.79 55 Shore A b Polypropylene White/white Nylon 1,800 26,300 34 to 150 1 to 66 2.62 12.79 55 Shore A b С Black/TPV 65A Polypropylene Nylon 1,800 26,300 34 to 150 1 to 66 2.62 12.79 65 Shore A black Polyethylene Black/black Nylon 1,000 14,600 -50 to 120 -46 to 49 2.70 13.18 50 Shore A b

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

^b FDA compliant with restriction: Do not use in direct contact with fatty foods.

^CEU compliant with restriction: Do not use in direct contact with fatty foods.





Customer Service for more information.

			Squ	are F	riction	Тор					
		in		mm		TE YE KE Y	1		alle alle	CHIP*	SEP. S
Pitch		1.00		25.4		3	1. M	l'and	aller	A.S.	5.5
Minimum Widt	h	6		152			23	10 m		Si	82
Width Increme	nts	1.00		25.4			35	"Sa	Te	de l	19
Hinge Style			Closed	k			200	1%	1	1	9
Rod Retention;	Rod Type	Slide	elox; unh	neaded				V	Mai	9	9
	Produ	uct Notes			Thomas		-	and a			
Contact Interpretended	ralox for precise b gning equipment c	elt measurement	s and s	tock stat	us 🔀		888	8			
 Fully flush e 	• • • • •	n ordernig a bell	•		in the second	Con C	E	a Fa	Anad		l:
Available in	grey polypropylene with black rubber.	with black rubber	R\$		\sim	$\langle X \rangle$					
Slidelox are	available in polypro	pylene or acetal.			XXX	00000	000	0C			
available. Int	aterial has a default tralox can help iden for your applicatior	tify the best belt a			re	E		<u>مح</u> مہ	30030	<u>. </u>	(
Detailed mat	terial information is	provided in Produ	ct Line.				-		00000		
 Sprockets ar 	re all plastic.					O PO	9	FAT			
 Most sprock removed for 	ets feature a split d retrofits and chang	esign, so shafts d eovers.	o not ha	ve to be	XXX XXX	MYM	YVY				2
in tough, ma	gn offers excellent b iterial-handling app	lications.			A Inse	t: Slidelox ro	d reten	tion fea	ture		
 When using retain the be the drive. 	this belt on a cente elt laterally, by placi	r-drive conveyor, i ng collars at the b	t can be ackbend	necessa d roller be	ry to fore					0.:	2"
affect the m	e, environmental col aximum degree of i onveyor systems usi	ncline. Ćonsider tl				1.00" NON (25.4 mm)) (25.4	mm) (2	0" NOM. 1.00" N 5.4 mm) (25.4 m	OM. 1m) (5.1	mm) t 0.7"
 Minimum no mm). 	ominal alternating e	dge indents: 2 in (51 mm)	and 3 in	(76		⊕ c	7(@	$q_{(\oplus)}$	[⊕)'	(17.8 m
				В	elt Data						
		Default Rod Material.	Belt Strength (Temperatu (contin	-	Belt Mass			Age Accep	ency tability
Base Belt Material	Base/Friction Top	Diameter			°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/black	Nylon	1,800	26,300	34 to 150	1 to 66	2.60	12.69	50 Shore A	b	

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

 $^{\rm b}{\rm FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

	3.25 i	n Mold to	Wio	dth F	lat	Fric	tion To	p w	ith T	abs		
		in		mm				5.5	25	20		
Pitch		1.00		25.4				-	2.5	23/2		
Molded Width		3.25		83					1	in sound -		
Opening Size (a	pproximate)	-		-					1	· 12 12		
Open Area			0%					dia.		(F)	5	
Hinge Style			Closed				1	120	15 teres		13	
Rod Retention; I			lox; unh	neaded			-	1.45	3.9	100	1	
	Prod	uct Notes						-	S)]]	1-1	0	
 Contact Intra before desig Fully flush ed 	ning equipment o	elt measurement or ordering a belt	tus			j (
-	obust tracking tab	os to support the b	elt in he	-			-					
• • • •	lue acetal with bla	ick rubber.					3 21				100	
available. Intr		t rod material. Othe tify the best belt a n.			are		1-	H	-		B.Co.s	
Detailed mate	erial information is	provided in Produ	ct Line.						180		1000	
Sprockets are	e all plastic.											
	ts feature a split d etrofits and chang	lesign so shafts do jeovers.	not hav	ve to be					_			
One sprocket tabbed belt.	can be placed on	the 3.25 in (83 mr	n) Mold	To Width	1				<u> </u>			
 Robust design in tough, mat 	n offers excellent t erial-handling app	pelt and sprocket d lications.	lurability	/, especi	ally	¥						
		accumulation cond						⊒				
For information Intralox Custor	on about friction va mer Service	alues between prod	duct and	d belt, co	ntact							
affect the ma designing cor	ximum degree of i iveyor systems us	nditions, and produ ncline. Consider th ing these belts. 20 in (+0.000/-0.50	lese fact	tors whe	n n	0.500 in 12.70 mm	0.325 in 8.26 mm			73 in 5 mm		
	tion Top surface:		50 mm).						21.2			
	0 ft (3 m) increme	. ,						-		56 in 6 mm		
							1.00" NOM. (25.4 mm)	-1.00" NC (25.4 mi)" NOM. 1.00" NOF .4 mm) (25.4 mm		
						0.45" (11.4 mm)					9	Ť
				E	elt Da	ta						
		Default Rod Material,	Belt St	trength	Т	emperatu (contin	ire Range iuous)	Belt	Mass			ency tability
Base Belt Material	Base/Friction Top	Diameter	lbf	N		°F	°C	lb/ft	kg/m	Friction Top Hardness	FDA (USA)	EU MC ^a
A + - 1	Dive /late at:	Mislaw	700	0 1 1 0	10	4- 400	00 1 54	0.04	1 10	F4 01 4		1

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

700

3,110

-10 to 130

-23 to 54

0.94

1.40

54 Shore A

b

 $^{\rm b}\,{\rm FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

Nylon

Blue/black

Acetal

			Square Fricti	оптор	
Pitch	in 1.00	mm 25.4	and the second s	1179	Edite .
Molded Width	6	152	53. 15		all all a
	0			and and	all set,
Open Area		0%		and the second	
Hinge Style	0"	Closed	53	35 0	
Rod Retention; Rod Type	Sh	delox; unheaded	217		
Pr	oduct Notes		I B		
Contact Intralox for precise before designing equipment	se belt measuremei ent or ordering a be	nts and stock sta lt.	tus	XXXXX	66866
 Fully flush edges. 					
Available in grey polypropyl					
 Slidelox are available in pol 				XXXX	KAXAA
 Each belt material has a de available. Intralox can help combination for your applic 	identify the best belt		are	\simeq	
Detailed material information	on is provided in Proc	luct Line.		O D	1 Bush
 Sprockets are all plastic. 				$\infty \infty \infty \infty$	
 Most sprockets feature a sp removed for retrofits and ch 	olit design so shafts o nangeovers.	lo not have to be			
 Up to three sprockets can b width belt. 	e placed on the 6.0 i	n (152 mm) mold	to	010	- And
 Robust design offers excelle in tough, material-handling 		t durability, espec	ally		
• When using this belt on a cretain the belt laterally, by p the drive.					
 Temperature, environmenta affect the maximum degree designing conveyor system 	e of incline. Consider	duct characterist these factors who	n _1.00"		0.2" 00" NOM. 1.00" NOM. (5.1 mn 25.4 mm) (25.4 mm)
• Width tolerances: +0.000/-	0.020 in (+0.000/-0.	500 mm).	0.45"		
• Rubber indent: 1.0 in (25.4	mm).		(11.4 mm)		
Available in 10 ft (3 m) increase	ements.				
			Belt Data		
	Default Rod		Temperature Range		Ageno
	Bolduit fiod	Polt Strongth	(continuous)	Rolt Mass	Accontal

					Belt Data							
		Default Rod Material,	Belt Strength		Belt Strength (continuous		•	•				ency tability
Base Belt	Base/Friction	Diameter							Friction Top	FDA		
Material	Тор	0.24 in (6.1 mm)	lbf	N	°F	°C	lb/ft	kg/m	Hardness	(USA)	EU MC ^a	
Polypropylene	Grey/black	Nylon	800	3,560	34 to 150	1 to 66	1.15	1.71	50 Shore A	b		
^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011. ^b FDA compliant with restriction: Do not use in direct contact with fatty foods.												

			Oval Fri	ction Top			
		in	mm	SAN DE SAT ME SAN DE	HE HE HE HE HE		311-828
Pitch		1.00	25.4			CH H H	
Minimum Width		5	127		D. H. H. H. H. H.	金.雷.雷温	81
Width Increments		1.00	25.4	5.0	Tatata 2 .		¥
Open Area			0%	25	2236		
Hinge Style			Closed	1.55	Sec. I	1.1	
Rod Retention; Rod	d Type	Slidelo	ox; unheaded	1.1.1.1		1. 1. 1.	
	Produ	ct Notes					
 Contact Intralo before designin 	x for precise be ng equipment o	It measurements r ordering a belt.					
 Fully flush edges 	S.				000		
 Available in grey 	/ polypropylene v	vith black rubber.		000		0	
 Slidelox are available 	ilable in polyprop	ylene or acetal.		92		-	
available. Intralc		rod material. Other ify the best belt an		3737	33	222	S
Detailed materia	al information is p	provided in Product	t Line.		Julie Car	T	-
 Sprockets are al 	ll plastic.						<u>e</u> ee
removed for retr	rofits and change				0,50	5°°	O _e
0,	al-handling appli	cations.					100
 When using this retain the belt la the drive. 		-drive conveyor, it o g collars at the bac					
		cline. Consider the	(25.	NOM	0" NOM. 1.00" NOM. 54 mm) (5 54 mm) (25.4 mm)	0.20' 1 mm)	
Rubber indent: 1	1.0 in (25.4 mm).			re_	릭아력이	<u> </u>	(12.7 mm)
			Bel	Data			
		Default Rod	D 11 01	Temperature Range	D. 11		Age
		Material,	Belt Strength	(continuous)	Belt Mass	-	Accept

	Belt Data											
		Default Rod Material,	Belt St	rength		ure Range nuous)	Belt	Mass			ency tability	
Base Belt Material	Base/Friction Top	Diameter 0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a	
Polypropylene	Grey/black	Nylon	1,800	26,300	34 to 150	1 to 66	2.29	11.18	55 Shore A	b		
^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.												

^bFDA compliant with restriction: Do not use in direct contact with fatty foods.

		Mold	to Width	Oval Frict	ion 1	Гор		
		in	mm			A		2225
Pitch		1.00	25.4			13/2/00		15 St.
Molded Width		6	152		Cin	1 + 1 - 100		State in
Open Area			0%		141	the de	1. 18	
Hinge Style			Closed		de la	The state		
Rod Retention; Rod Type	9	Slide	lox; unheaded				31	
	Produ	uct Notes		-				
• Contact Intralox for before designing eq				us P				2
• Fully flush edges.					32	100		10
• Available in grey poly	propylene	with black rubber.						
Slidelox are available	in polypro	pylene or acetal.		2				- C '
 Each belt material has available. Intralox can combination for your 	help iden	tify the best belt a		re				
Detailed material info	rmation is	provided in Produ	ct Line.	D D				
 Sprockets are all plas 	tic.				24			20
 Most sprockets feature removed for retrofits and the second second			o not have to be	E		ryy.		22
• Up to three sprockets width belt.	can be pla	aced on the 6.0 in	(152 mm) mold					
 Robust design offers of in tough, material-hait 			lurability, especia	lly				
• When using this belt or retain the belt laterall the drive.	on a cente y, by placii	r-drive conveyor, i ng collars at the b	t can be necessa ackbend roller be	y to fore				
 Temperature, environ affect the effective may when designing convergence 	aximum de	egree of incline. C	onsider these fac	ors	1.00" NOM. (25.4 mm)		00" NOM. 1.00" No 5.4 mm) (25.4 m	
• Width tolerances: +0.				0.45"				
Rubber indent: 1.0 in		`	,	(11.4 mm)	d			(17.8)
• Available in 10 ft (3 m								
			В	lt Data				
		Dofoult Dod		Temperature Ra	nge			Agency
		Default Rod	Polt Strongth	(continuous)		Dolt Maga		Accontabil

	Belt Data											
		Default Rod Material, Belt Strength		rength	Temperature Range (continuous)		Belt Mass				ency tability	
Base Belt Material	Base/Friction Top	Diameter	lbf	N	°F	°C	lb/ft	kg/m	Friction Top Hardness	FDA (USA)	EU MC ^a	
Polypropylene	Grey/black	Nylon	800	3,560	34 to 150	1 to 66	1.15	1.71	55 Shore A	b		
^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011. ^b FDA compliant with restriction: Do not use in direct contact with fatty foods.												

		Roller	Тор
	in	mm	
Pitch	1.00	25.4	
Minimum Width	5	127	
Width Increments	1.00	25.4	
Roller Diameter	0.70	17.8	
Roller Length	0.83	21.0	
Open Area	00	6	
Hinge Style	Clos	sed	CARLEN TO AN
Rod Retention; Rod Type	Slidelox; ι	inheaded	
			to to to to to to
			to to to to
Product	Notes		
 Contact Intralox for precise belt m before designing equipment or or Flush edges. Available in white or grey acetal. 144 rollers per square foot of belt per contact. Slidelox are available in polypropyle Each belt material has a default rod 	dering a belt. rovide greater prod ne or acetal.		
 available. Intralox can help identify t combination for your application. Detailed material information is provide Stainless steel roller axle pins provide Robust design offers excellent belt at Allows low back-pressure accumulation 	the best belt and ro vided in Product Lin de durability. and sprocket durab	d material ie. ility.	
 Allows low back-pressure accumulation Product accumulation load: 5%–10⁶ Roller spacing: 1 in (25.4 mm). Standard roller indent: 0.75 in (19 mm) 	% of product weigh	1.00" NOM. 1.00" NOM. 1.00" NOM. 1.00" NOM. (25.4 mm) (25.4 mm) (33.02 m	

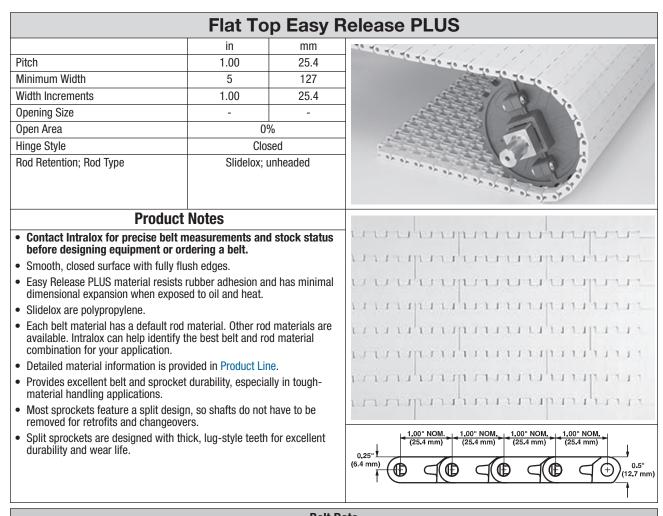
Belt Data											
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperat (contin	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²				
Acetal	Nylon	2,500	36,500	-50 to 200	-46 to 93	5.83	28.47				

		Non S	Skid
	in	mm	
Pitch	1.00	and the second	
Minimum Width	9	229	the second second
Width Increments	1.00	25.4	
Opening Size	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	CITATION ()
Rod Retention; Rod Type	Slidelox;	unheaded	to to to a la La
Produ	ict Notes		NGCH SMIRIN
 before designing equipment of Robust design offers excellent be Diamond tread pattern provides safety. Staggered yellow edges make it from the stationary floor. Edges have a Flat Top surface, w Slidelox are available in polyprop Each belt material has a default available. Intralox can help ident combination for your application Detailed material information is p 1.00 (25.4 mm) pitch accommod profile people carriers. Minimum nominal alternating ed mm). 	elt and sprocket durab a non-skid walking su easy to distinguish the vithout treads. oylene or acetal. rod material. Other rod ify the best belt and ro provided in Product Lin dates small drive sproo	rface to increase e moving belt d materials are od material ne. ckets for low-	1.00" NOM. (25.4 mm) (2.5" (6.4 mm) (1.3 mm) (1.4 mm) (1.4 mm)

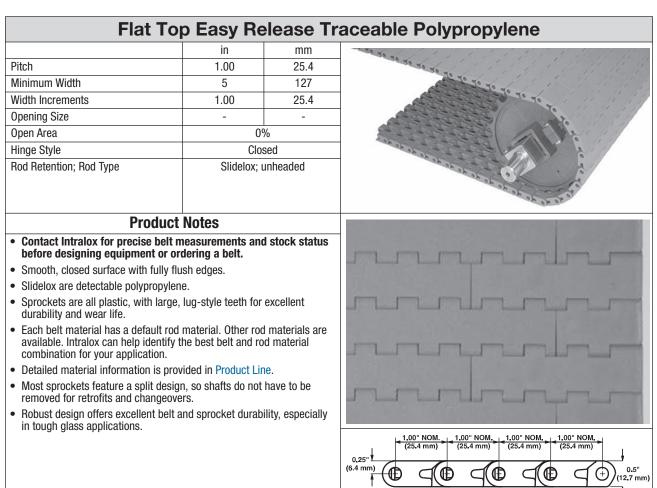
Belt Data											
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt Mass					
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²				
HSEC acetal	Nylon	1,875	27,400	-50 to 200	-46 to 93	2.78	13.57				
Polypropylene	Nylon	1,800	26,300	34 to 220	1 to 104	2.32	11.33				

	Emb	edded Di	amond Top
	in	mm	
Pitch	1.00	25.4	and the second s
Minimum Width	12.0	304.8	Elilia .
Opening Size	-	-	
Open Area	()%	
Hinge Style	Clo	osed	
Rod Retention; Rod Type	Slidelox;	unheaded	
Product	Notes		
Contact Intralox for precise belt n before designing equipment or or		nd stock status	
 Smooth, closed surface with fully flu 	0		
 Robust design offers excellent belt a 		,	
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
 Detailed material information is prov 	ided in Product L	ine.	
 Most sprockets feature a split design removed for retrofits and changeove 		t have to be	
 Split sprockets are designed with the durability and wear life. 	ick, lug-style teet	h for excellent	
Minimum nominal alternating edge i mm).	ndents: 3 in (76 n	nm) and 4 in (102	
			0.25" (6.4 mm)

Belt Data												
	Default Rod Material, Diameter 0.24 in	Belt St	rength	•	ure Range 1uous)	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²					
Polypropylene	Nylon	1,800	26,300	34 to 220	1 to 104	1.70	8.30					
Easy Release traceable polypropylene	Orange polypropylene (non-FDA)	1,200	17,500	34 to 220	1 to 104	1.86	9.08					



Beit Data												
	Default Rod Material, Diameter	Belt St	rength	•	ure Range 1uous)	Belt Mass						
Belt Material	0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²					
Easy Release PLUS	Orange polypropylene (non-FDA)	1,600	23,400	34 to 220	1 to 104	2.00	9.78					



Belt Data												
	Default Rod Material, Diameter	Belt St	rength	Temperatı (contir	Belt Mass							
Belt Material	0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²					
Easy Release Traceable PP	Orange polypropylene (non-FDA)	1,200	17,500	34 to 220	1 to 104	1.86	9.08					

	Pr	oTrax [™] v	vith Tabs
	in	mm	
Pitch	1.00	25.4	
Molded Widths	4.5	114.3	
Opening Size (approximate)	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Slidelox;	unheaded	
Product	Notes		
 Contact Intralox for precise belt n before designing equipment or or 	neasurements an dering a belt.	d stock status	
 Powerful magnets are embedded in Customer Service for guidance on h strength. 	the belts. Contact ow temperature af		
 The standard belt configuration con S1400 Raised Flat Top modules alte maximize wear resistance. 			
 Molded with robust tracking tabs to loading applications 	support the belt in	heavy side-	
 Tabs fit into a straight track style ca spacing. 	rryway with 1.75 ir	n (44.5 mm)	
 Slidelox provide rod and cap retention 	on.		
 Each belt material has a default rod available. Intralox can help identify combination for your application. 			
Detailed material information is prov	vided in Product Lii	ne.	
 Needs only one drive sprocket and one 	• •		0.551 in 0.551 in 0.501 in 0.5
 Sprockets are all plastic with stainle style teeth for excellent durability and 	ess steel fasteners nd wear life.	and large, lug-	(12.7 m)
 Most sprockets feature a split desig removed for retrofits and changeover 			
 Ideal for incline, decline, vertical sw applications. 	itch, pan indexing,	and metering	(42.1 mm)
 Install belt strands to run in the same 	e direction.		
 Determine belt spacing based on m the bottom surface of the conveyed 	aximum surface ar product.		

Belt Data											
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contir	ure Range 1uous)	Belt Mass					
Belt Material	(4.6 mm)	lbf	N	°F	0°	lb/ft	kg/m				
Acetal	Nylon	550	2,450	-50 to 200	-46 to 93	1.46	2.18				
HHR nylon	HHR Nylon	550	2,450	-50 to 310	-46 to 154	1.296	1.95				

	Sprocket and Support Quantity Reference										
Belt Wi	dth Range ^a	Minimum Number of Sprockets	Wea	rstrips							
in	mm	Per Shaft ^b	Carryway	Returnway ^c							
5	127	2	2	2							
6	152	2	2	2							
7	178	2	3	2							
8	203	2	3	2							
10	254	2	3	2							
12	305	3	3	2							
14	356	3	4	3							
16	406	3	4	3							
18	457	3	4	3							
20	508	5	5	3							
24	610	5	5	3							
30	762	5	6	4							
32	813	7	7	4							
36	914	7	7	4							
42	1,067	7	8	5							
48	1,219	9	9	5							
54	1,372	9	10	6							
60	1,524	11	11	6							
72	1,829	12	13	7							
84	2,134	15	15	8							
96	2,438	17	17	9							
or other widths 52 mm) cente	s, use an odd numb rline spacing. ^{de}	er of sprockets at Maximum 6 in	Maximum 6 in (152 mm) centerline spacing Centerline spacing								

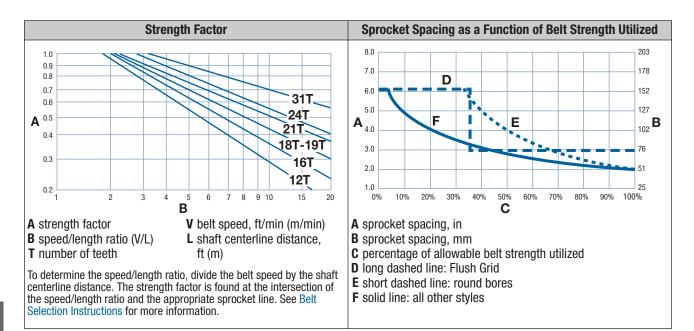
^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

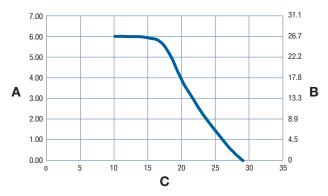
^c For Friction Top applications, use caution and contact Intralox Customer Service.

^dLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.

^e For Flush Grid, see the locked sprocket location table in the Installation Instructions or contact Intralox Customer Service.



MAGNET FORCE VS. METAL THICKNESS



A magnet force (lbf)

- **B** magnet force (N)
- **C** metal thickness (steel gauge)

Figure 53: S1400 ProTrax with Tabs magnet force vs. metal thickness

NOTE: The magnet force shown is typical for an aluminized steel product with a flat surface and maximum surface area contact. Results can vary based on material, surface texture, and temperature.

2025 Engineering Manual-Modular Plastic Belts

							Machir	ed Spro	ckets		
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter		Nom Wie		Available Bore Sizes				
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
18 (1.52%)	5.7	145	5.8	148	0.75	19			30, 40		

Number of Teeth	Nom. Diam		Nom. Outer Diameter			. Hub dth	A	Available Bore Sizes			
(Chordal Action)	in	mm	in		in		Round in	Square in		Square	
ACTION)		mm		mm		mm			mm	mm	
12 (3.41%)	3.9	99	3.9	99	1.5	38		1.5		40	
15 (2.19%)	4.9	124	4.9	124	1.5	38		2.5		60	
18 (1.52%)	5.7	145	5.8	148	1.5	38	2	2.5	50	60	
24 (0.86%)	7.7	196	7.8	198	1.5	38		2.5		60	

						Glas	ss-Filled	Nylon S	Split Sp	rocket	
Number of Teeth	-	Pitch neter		Outer neter	-	. Hub dth	A	Available Bore Sizes		es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^b	Square mm	
16 (1.92%)	5.1	130	5.2	132	2.0	51	1 to 2°	1.5	25 to 50 ^d	40	
18 (1.52%)	5.7	145	5.8	148	2.0	51	1 to 2 ^c	1.5, 2.5	25 to 50 ^d	40, 60	MON MADE
21 (1.12%)	6.7	170	6.8	172	2.0	51	1 to 2 ^{b,}	1.5, 2.5	25 to 50 ^d	40, 60	
^a Imperial k ^b Tight fit ro ^c Available i ^d Available i	ound bor in 1/16 i	es are a n increm	vailable i ients						7 (R1989)	and metric	c key sizes are based on DIN standard 6885.

SERIES 1400

P	Maximu	m Belt R	ating fo	r Glass-	Filled Ny	lon Rou	nd Bore	Split Sp	rockets	Based o	n Round B	ore Size	e Range ^a	
		Pitch			1-1/4			6 in to						
Number	Dian	neter	1 in to 1	-3/16 in	1-3/	8 in	1-3/	/4 in	1-13/16 i	n to 2 in	25 mm to	35 mm	40 mm te	o 50 mm
of Teeth	in	mm	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m
16	5.1	130	1500	21,900	1740	25,400	2100	30,600	2160	31,500	1140	16,600	2160	31,500
18	5.7	145	1800	26,300	2040	29,800	2400	35,000	3240	47,300	1440	21,000	2460	35,900
21	6.7	170	1350	19,700	1650	24,100	2100	30,600	3000	43,800	1050	15,300	2400	35,000

^a The belt rating based on round bore sprocket size is used to determine sprocket spacing as a function of belt strength utilized. It can also be used for all other calculations. However, if the rating for the belt material and belt style is lower then the belt rating based on the round bore sprocket size, then the lower rating must be used for all calculations other than sprocket spacing.

Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter				Nom. Hub Width		Av	vailable l	Bore Siz	:es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm			
12 (3.41%)	3.9	99	3.9	99	0.75	19	1.25	1.5		40			
16 (1.92%)	5.1	130	5.2	132	1.5	38	1.25, 1.5	1.5	30	40	states states		
18 (1.52%)	5.7	145	5.8	148	1.5	38	1.25	1.5	25, 30, 40	40			

^aU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

	Enduralox Polypropylene Composite Split Sprocket											
Number of Teeth	-	Pitch neter	Nom. Dian	Outer 1eter	-	. Hub dth	A	vailable E	Bore Size	es		
(Chordal			in		i					-		
Action)	in	mm	in	mm	in	mm	in	in	mm	mm		
16 (1.92%)	5.1	130	5.2	132	2.0	51		1.5		40		
18 (1.52%)	5.7	145	5.8	148	2.0	51		1.5, 2.5		40, 60	SUD 2	
21 (1.12%)	6.7	170	6.8	172	2.0	51		1.5, 2.5		40		
31 (0.51%)	9.9	251	10.1	257	2.0	51		3.5				

	Polyurethane Composite Split Sprocke										
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	Av	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
31 (0.51%)	9.9	251	10.1	257	1.50, 1.67	38, 44		3.5, 2.5 ^a			

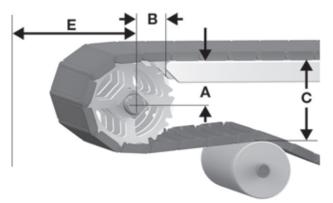
^aThe 2.5 in square bore is created by using a bore adapter in the 3.5 in square bore sprocket.

		Flat Top Base Flights (Streamline)	
Available Fl	ight Height		
in	mm	Available Materials	
0.43	11	Easy Release traceable polypropylene	
 Streamline flights a 	are smooth on both si	des.	
 Each flight extends required. 	from the center of th	e module, molded as one part. No fasteners are	612
 The minimum inde indent increments. 		width. Contact Intralox Customer Service for valid	80000 0000 0000 0000000000000000000000

			Self-Clearing Finger T	ransfer Plates ^a
Availa	ble Width	No. of		
in	mm	Fingers	Available Materials	
6	152	18	Glass-filled thermoplastic	
	a finger transfer pl work together.	ate and a trar	sfer edge belt that are	#4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Molded wit loading app		abs to support	the belt in heavy side-	
• Flat, smoot containers.	h top surface provi	des excellent	lateral movement of	The second secon
	edges, headed rod ear resistance.	retention syst	em, and nylon rods for	T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-T-
plates. Trar		ind 100% self	sher arm, or wide transfer -clearing, making right angle	
 Ideal for water 	armer/cooler applic	ations with fre	equent product changeovers.	
	al system allows s and transfers.	ame transfer	belt use for both left-hand	
Compatible infeed conv		d style of Intra	alox belt on the discharge and	
Capable of Series 1900	transferring produc D Raised Rib belts.	ct to and from	Series 400, Series 1200, and	
Robust des	ign for durability in	tough, glass a	applications.	
stainless st	lled and secured to eel bolts and oval v and contraction.) mounting pla washers that a	ates of any thickness with allow movement with belt	
Stainless st	eel hardware is so	ld separately.		
^a Licensed und	er Rexnord U.S. Pater	nt Nos. 7,314,13	30 and 7,448,490	l

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 54: A, B, C, and E drive dimensions

Spro	cket Descri	iption	1	4	1	B	0	;	E	E
Pitch D	iameter	Number	Range (Bot	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mn
	<u>I</u>		Embe	dded Diamond	Top, Flat Top	, Flush Grid	. <u></u>			
3.9	99	12	1.62-1.68	41-43	1.80	46	3.86	98	2.24	57
4.9	124	15	2.10-2.15	53-55	2.06	52	4.81	122	2.72	69
5.1	130	16	2.26-2.32	57-59	2.11	54	5.13	130	2.88	73
5.7	145	18	2.59-2.63	66-67	2.22	56	5.76	146	3.19	81
6.7	170	21	3.07-3.10	78-79	2.44	62	6.71	170	3.75	95
7.7	196	24	3.55-3.58	90-91	2.64	67	7.66	195	4.14	10
9.9	251	31	4.67	119	3.07	78	9.88	251	5.25	13
			Flat Friction	on Top, Oval Fric	tion Top, Squ	are Frictio	n Top			
3.9	99	12	1.62-1.68	41-43	1.80	46	4.06	103	2.44	62
4.9	124	15	2.10-2.15	53-55	2.06	52	5.01	127	2.92	74
5.1	130	16	2.26-2.31	57-59	2.11	54	5.33	135	3.08	78
5.7	147	18	2.59-2.63	66-67	2.22	56	5.96	151	3.39	86
6.7	170	21	3.07-3.10	78-79	2.44	62	6.91	176	3.87	98
7.7	196	24	3.55-3.58	90-91	2.64	67	7.86	200	4.34	11
9.9	251	31	4.67	119	3.07	78	10.08	256	5.45	13
				Roll	er Top					
3.9	99	12	1.62-1.68	41-43	1.80	46	4.66	118	3.04	77
4.9	124	15	2.10-2.15	53-55	2.06	52	5.61	142	3.52	89
5.1	130	16	2.26-2.31	57-59	2.11	54	5.93	151	3.68	93
5.7	145	18	2.59-2.63	66-67	2.22	56	6.56	167	3.99	10
6.7	170	21	3.07-3.10	78-79	2.44	62	7.51	191	4.47	11
7.7	196	24	3.55-3.58	90-91	2.64	67	8.46	215	4.94	12
9.9	251	31	4.67	119	3.07	78	10.68	271	6.05	15
				Non Ski	d, ProTrax					
3.9	99	12	1.62-1.68	41-43	1.80	46	3.91	99	2.29	58
4.9	124	15	2.05-2.10	52-53	2.06	52	4.86	123	2.77	70
5.1	130	16	2.26-2.31	57-59	2.11	54	5.18	132	2.93	74
5.7	145	18	2.59-2.63	66-67	2.22	56	5.81	148	3.24	82
6.7	170	21	3.07-3.10	78-79	2.44	62	6.76	172	3.72	94
7.7	196	24	3.55-3.58	90-91	2.64	67	7.71	196	4.19	10
9.9	251	31	4.67	119	3.07	78	9.93	252	5.30	13

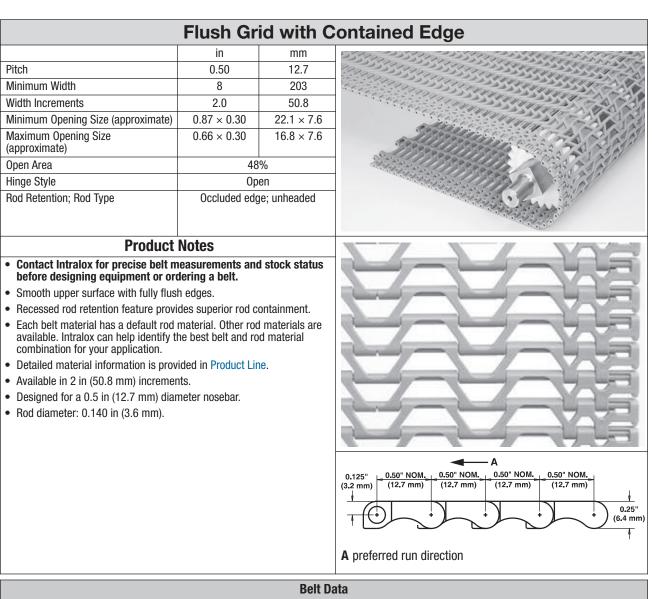
DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

		S1400 Dead Plate Gap				
	Sprocket Description	Minim	Minimum Gap			
Pitch I	Diameter					
in	mm	Number of Teeth	in	mm		
3.9	99	12	0.066	1.7		
4.9	124	15	0.053	1.3		
5.1	130	16	0.050	1.3		
5.7	145	18	0.044	1.1		
6.7	170	21	0.038	1.0		
7.7	196	24	0.033	0.8		
9.9	251	31	0.025	0.6		

		Flush	I GI	rid				
	in	mm		11. 444			- 1 A N	CATA
Pitch	0.50	12.7		(1))	111111	11111	1460	8.64
Minimum Width	8	203		1111	11111	0000000	-1.	1.200
Width Increments	0.50	12.7	Y.	1.1.1.1	1111	1445	17.41	Da
Opening Sizes (approximate)	0.87 × 0.30	22.1 × 7.6			1.4.4.4.4.4.	1000	180	SI
	0.66 × 0.30	16.8 × 7.6				19.25 OA	- NAV	<i>y</i>
Open Area	48	8			4442	And and	EN	
Hinge Style	Ор	en		1	1111	11 And	NOV	
Rod Retention; Rod Type	Occluded edg	ge; unheaded		A.				
Produ	uct Notes		F	1			V . 1	
 available. Intralox can help iden combination for your applicatior Detailed material information is Detailed material information is Rod diameter: 0.140 in (3.6 mm) Designed for a 0.5 in (12.7 mm) 	n. provided in Product Lir provided in Product Lir n).	10.	(3.	0.125" 2 mm) (12.7 r (12.7 r (12.7 r) (12.7 r) (12.7 r) (12.7 r	12.7 mm)	-A 0.50° NOM. (12.7 mm)	0.50" NOM. (12.7 mm)	0.25 (6.4 m
		Rolt	Data					
	Default Rod Ma Diameter 0.14	terial,		strength		ure Range nuous)	Belt	Mass
Belt Material	(3.6 mm)	lb	i/ft	N/m	°F	°C	lb/ft ²	kg/m ²
Polypropylene	Polypropylene	1	25	1,820	34 to 220	1 to 104	0.44	2.12
Polypronylene	Acetal		50	2 190	34 to 200	1 to 93	0.51	2 40

		Belt Data						
	Default Rod Material, Diameter 0.14 in	Belt S	trength		ure Range 1uous)	Belt Mass		
Belt Material	(3.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Polypropylene	Polypropylene	125	1,820	34 to 220	1 to 104	0.44	2.12	
Polypropylene	Acetal	150	2,190	34 to 200	1 to 93	0.51	2.40	
РК	РК	240	3,500	-40 to 176	-40 to 80	0.725	3.54	
HR nylon	Nylon	175	2,550	-50 to 240	-46 to 116	0.58	2.83	
HHR nylon	HHR nylon	175	2,550	-50 to 310	-46 to 154	0.58	2.83	
Acetal	Acetal	240	3,500	-50 to 200	-46 to 93	0.73	3.56	
Detectable acetal	Acetal	200	2,920	-50 to 200	-46 to 93	0.69	3.35	
Detectable polypropylene A22	Acetal	80	1,170	0 to 150	-18 to 66	0.57	2.78	
X-ray detectable acetal ^a	Acetal	240	3,500	-50 to 200	-46 to 93	0.78	3.66	
^a Designed specifically for detection by	X-ray machines.							



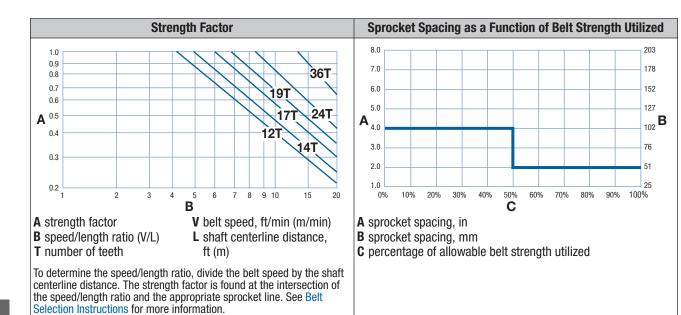
	Belt Data								
	Default Rod Material, Diameter 0.14 in	Belt St	trength	•	ure Range 1uous)	Belt Mass			
Belt Material	(3.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²		
HR nylon	Nylon	175	2,550	-50 to 240	-46 to 116	0.58	2.83		

Belt Wi	dth Range ^a	Minimum Number of Sprockets	Wear	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway
8	203	3	3	2
10	254	3	3	2
12	305	3	3	2
14	356	3	4	3
16	406	5	4	3
18	457	5	4	3
20	508	5	5	3
22	559	5	5	3
24	610	7	5	3
26	660	7	6	4
28	711	7	6	4
30	762	7	6	4
32	813	9	7	4
34	864	9	7	4
36	914	9	7	4
38	965	9	8	5
40	1,016	11	8	5
42	1,067	11	8	5
44	1,118	11	9	5
46	1,168	11	9	5
48	1,219	13	9	5
50	1,270	13	10	6
52	1,321	13	10	6
54	1,372	13	10	6
56	1,422	15	11	6
58	1,473	15	11	6
60	1,524	15	11	6
62	1,575	15	12	7
64	1,626	17	12	7
her width	s, use an odd numl rline spacing. ^c	per of sprockets at Maximum 4 in	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 m centerline spacing

^a Belts are available in 0.50 in (12.7 mm) increments beginning with 8 in (203 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^c Lock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



							Мо	Ided Sp	rocket		
Number of Teeth		Pitch neter		Outer neter	Nom Wie		Av	Available Bore Sizes		es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
10 (4.89%)	1.6	41	1.8	46	0.65	17		5/8			
12 (3.41%)	1.9	48	2.1	53	0.65	17	1	1.0	25		1
14 (2.51%)	2.3	58	2.4	61	0.75	19	3/4, 1, 1-3/16, 1-1/4	1.0	25		
17 (1.70%)	2.7	69	2.9	73	0.75	19	3/4, 1, 1-3/16, 1-1/4, 1-3/8		25		
19 (1.36%)	3.1	79	3.2	82	0.75	19	1, 1-3/8				
24 (0.86%)	3.8	97	4.0	101	0.75	19	1	1.5	25	40	
36 (0.38%)	5.7	145	5.9	150	0.75	19	1	1.5, 2		40	
^a U.S. key s	S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.										

	Nylon FDA Split Sprockets									
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
24 (0.86%)	3.8	97	4.0	101	1.5	38				40
36 (0.38%)	5.7	145	5.9	150	1.5	38				40

Flush Grid Base Flights (Streamline)

Available F	light Height		
in mm		Available Materials	
1	25	Acetal, HR nylon	
• Streamline fli			

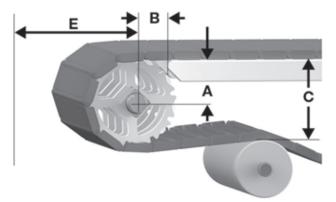
• Each flight extends from the center of the module, molded as one part. No fasteners are required.

- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent is a function of belt width. Minimum indent range: 3 in (76 mm) to 3.75 in (95 mm).



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 55: A, B, C, and E drive dimensions

Spro	cket Descr	iption	1	E	В		C		E	
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a				mm		
in	mm	of Teeth	in	mm	in	mm	in		in	mm
Flush Grid, Flush Grid with Contained Edge										
1.6	41	10	0.64-0.68	16-17	1.13	29	1.62	41	1.00	25
1.9	48	12	0.81-0.84	21	1.24	31	1.93	49	1.15	29
2.3	58	14	0.97-1.00	25	1.34	34	2.25	57	1.31	33
2.7	69	17	1.21-1.24	31	1.49	38	2.72	69	1.55	39
3.1	79	19	1.37-1.39	35	1.59	40	3.04	77	1.71	43
3.8	97	24	1.77-1.79	45	1.76	45	3.83	97	2.10	53
5.7	145	36	2.73-2.74	69-70	2.71	55	5.74	146	3.06	78

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1500 Dead Plate Gap									
	Sprocket Description	Minim	ım Gap							
Pitch I	Diameter									
in	mm	Number of Teeth	in	mm						
1.6	41	10	0.040	1.0						
1.9	48	12	0.033	0.8						
2.3	58	14	0.028	0.7						
2.7	69	17	0.023	0.6						
3.1	79	19	0.021	0.5						
3.8	97	24	0.017	0.4						
5.7	145	36	0.011	0.3						

1.00" NOM (25.4 mm) 1.00" NOM. (25.4 mm)

	Ор	en Hinge	e Flat Top
	in	mm	
Pitch (nominal)	1.00	25.4	monitoria de la de la
Minimum Width	5	127	- month is in the second
Width Increments	0.50	12.7	
Opening Size (approximate)	_		The second states and
Open Area	00	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	je; unheaded	- N' N' N' D'
			and the second
			OIR
Product	Notes		a a a a a a a a a a a a a a a a a a a
 Contact Intralox for precise belt n before designing equipment or or 	neasurements and dering a belt.	d stock status	າງການການການການການການການ
 Smooth, closed upper surface with f 	fully flush edges.		
• Fully sculpted and radius corners.			าสุการการการการการการการการการการการการการก
No pockets or sharp corners to catc	h and hold debris.		
Cam-link hinges provide easy clean	ing with greater hir	nge and rod	บาวกุกกุกกุกกุกกุกกุกกุล
exposure as the belt moves around Intralox feature allows unsurpassed			
 The drive bar on the underside of th 	•		บบาวกากกากกากก่อกกาก
to the outside of the belt for easier,	faster cleanup. Driv	ve bar	
effectiveness is proven both in-hous			17777777777777777777777777777777777
 Each belt material has a default rod available. Introlog can belp identify dentify and below the second seco			
available. Intralox can help identify the combination for your application.	ine pesi peri anu to	u malenai	100000000000000000000000000000000000000
 Detailed material information is prov 	vided in Product Lir	ne.	
No-Cling flights are available.			
• Standard flight height: 4 in (102 mm	ו).	$ -(0 \land \land \land \land \land \land) $	
• Custom flight heights are available.	,	stomer Service	
for more information.			(5.1 mm) 0.40" (10.2 mm)

Belt Data								
	Default Rod Material, Diameter 0.18 in	D. H. OL			ure Range nuous)	Belt Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m ²	
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.05	5.13	
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	1.10	5.37	
Acetal	Polypropylene	1,400	20,400	34 to 200	1 to 93	1.58	7.71	
Acetal	Polyethylene ^a	1,000	14,600	-50 to 150	-46 to 66	1.58	7.71	
Hi-Temp	Hi-Temp	1,000	14,600	70 to 400	21 to 204	1.54	7.52	
X-ray detectable acetal ^b	X-ray detectable acetal	1,000	14,600	-50 to 150	-46 to 66	1.92	9.35	
РК	РК	1,000	14,600	-40 to 176	-40 to 80	1.39	6.79	
^a Polyethylene rods can be used in colo ^b Designed specifically for detection by		dden starts/stop	os occur. Please	e note lower rating	l.			

	Mold to W	idth Ope	en Hinge Flat Top
	in	mm	
Pitch	1.00	25.4	
Molded Width	7.5	190.5	
Open Area	0'	%	Although the second of the second sec
Hinge Style	Op	en	SIMISSIZ DO COM
Rod Retention; Rod Type	Snap-loci	k; headed	and this age of the
Produ	ct Notes		
Contact Intralox for precise be before designing equipment or	It measurements and ordering a belt.	d stock status	
 Smooth, closed upper surface with the surface withe surface withet withet with the surface with the surface with			
Molded with robust tracking tabs loading applications	to support the belt in	heavy side-	mmmmm
 Uses recessed rods. 			
Available in 10 ft (3 m) increment			
 Each belt material has a default i available. Intralox can help identi combination for your application. 	fy the best belt and ro		
 Detailed material information is p 		ne.	
 Do not use with sprockets smalle tooth) sprocket. 			
			0.313" (8 mm) (8 mm) (42.9 mm)
			Figure 56: Front view
		0.20" (5.1 mm) (5.4 mm) (5.4 mm) (25.4 m	
		Belt D	lata

		Belt Data					
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperati (contir	0	Belt I	Mass
Belt Material	(4.6 mm)	lbf	N	°F	°C	lb/ft	kg/m
Acetal	Polyethylene	625	2,780	-50 to 150	-46 to 66	1.02	1.52

		Nub To	ор™
	in	mm	
Pitch	1.00	25.4	and a second second second
Minimum Width	5	127	and a set set start
Width Increments	0.50	12.7	5 5 5 m 2 3 1
Open Area	0	%	S S S S
Product Contact Area	10	1%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	ge; unheaded	and a grant
Produ	ict Notes		022222222222222222222222222222222222222
 Contact Intralox for precise be before designing equipment o 	elt measurements and r ordering a belt.	d stock status	
 Closed upper surface with fully f 	lush edges.		ŮŮŮŮŮŮŮŮŮŮŮŮŮŮŮŮ
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro		
Detailed material information is	provided in Product Li	ne.	
 Not recommended for product a Intralox Customer Service for inf product and belt. 	ccumulation condition ormation about friction	s. Contact 1 values between	
 Standard flights available in poly Flights are molded as part of the 	propylene, polyethyler belt, and can be cut t	ne, and acetal. o any size.	
 Recommended for products larg between the nubs [0.250 in (6.3) 	e enough to span the (5 mm)].	distance	
• Standard nub indent: 1.3 in (33.	0 mm).		1.00" NOM. 1.00" NOM. (25.4 mm)
• Flight height: 4 in (102 mm).			$\begin{array}{cccccccccccccccccccccccccccccccccccc$
			0.475" (12.1 mm)

	Belt Data								
	Default Rod Material, Diameter 0.18 in	Belt St	rength		ure Range nuous)	Belt	Mass		
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.13	5.52		
Polyethylene	Polyethylene	350	5,110	-50 to 150	-46 to 66	1.18	5.76		
Acetal	Polypropylene	1,400	20,400	34 to 200	1 to 93	1.74	8.49		
Acetal	Polyethylene ^a	1,000	14,600	-50 to 150	-46 to 66	1.74	8.49		
X-ray detectable acetal	X-ray detectable acetal	1,400	20,400	-50 to 200	-46 to 93	2.01	9.81		
^a Polyethylene rods can be used in cold ap	plications when impacts or sud	lden starts/stop	s occur. Please	e note lower rating	l.				

SERIES 1600

		Rib	
	in	mm	
Pitch (nominal)	1.00	25.4	
Minimum Width	5	127	
Width Increments	0.50	12.7	
Opening Size (approximate)			
Open Area	00	%	
Hinge Style	Ор	en	and the second second second
Rod Retention; Rod Type	Occluded edç	ge; unheaded	
Produ	ct Notes		
• Contact Intralox for precise be before designing equipment or	It measurements and ^r ordering a belt.	d stock status	mmmmmm
• Closed upper surface with fully fl	ush edges.		
 Fully sculpted and radiused corner to catch and hold debris. 	ers with no pockets or	sharp corners	mpunningen
 Cam-link hinges provide easy cle exposure as the belt moves arou Intralox feature allows unsurpass 	nd the sprockets. This	exclusive	manningandar
 Each belt material has a default r available. Intralox can help identi combination for your application. 	ify the best belt and ro		manninger
 The drive bar on the underside or to the outside of the belt for easi effectiveness is proven both in-h 	er, faster cleanup. Driv	ve bar	and an
• Detailed material information is p	provided in Product Lin	ne.	
 0.16 in (4 mm) Mini Rib on surface accommodates gradual inclines and declines. Not recommended for product accumulation applications. 			
No-Cling flights are available.			0.10
• Standard flight height: 4 in (102 mm).			1.00" NOM. 0.16" 1.00" NOM. 1.00" NOM. (4 mm) (25.4 mm) ↓ 0.20"
 Custom flight heights are available. Contact Intralox Customer Service for more information. 		(2.3.4 mm) (2.3.4 mm) (2.3.4 mm) (5.08 mm) (5.08 mm)	
Minimum nominal alternating ed. (51 mm).	ge indents: 1.5 in (38	mm) and 2 in	

Belt Data							
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperat (contii	ure Range 1uous)	Belt I	lass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	1.135	5.54
Acetal	Polypropylene	1,400	20,400	34 to 200	1 to 93	1.705	8.32

		ор™	
	in	mm	
Pitch	1.00	25.4	
Minimum Width	5	127	
Width Increments	0.50	12.7	
Minimum Opening Size (approximate)	0.06 x 0.12	1.5 x 3.0	
Maximum Opening Size (approximate)	0.06 x 0.20	1.5 x 5.1	15/31/8/8/11
Open Area	16	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edç	je; unheaded	State Barrow
Product	Notes		
 before designing equipment or ord Fully sculpted and radiused corners to catch and hold debris. Cam-link hinges provide easy cleani exposure as the belt moves around t Intralox feature allows unsurpassed The drive bar on the underside of thi to the outside of the belt for easier, f effectiveness is proven both in-hous Each belt material has a default rod available. Intralox can help identify th combination for your application. Detailed material information is prov Standard mesh top indent: 1.0 in (25) No-Cling flights are available. 	with no pockets or ng with greater hir he sprockets. This cleaning access to s belt channels wa aster cleanup. Driv e and in field tests material. Other roc he best belt and ro ided in Product Lir i.4 mm).	nge and rod exclusive this area. ter and debris e bar I materials are d material	↓ 1.00" NOM. (25.4 mm) (25.4 mm) (10.

Belt Data									
	Default Rod Material, Diameter 0.18 in Belt S		Delt Observable		rength	•	ure Range 1uous)	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	0°	lb/ft²	kg/m²		
Acetal	Polypropylene	1,200	17,500	34 to 200	1 to 93	1.40	6.84		
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.94	4.59		
LMAR	HR nylon	1,100	1,6,000	0 to 240	-18 to 116	1.18	5.76		

		Mesh Nu	ир Тор
	in	mm	
Pitch	1.00	25.4	
Minimum Width	5	127	
Width Increments	0.50	12.7	
Minimum Opening Size (approximate)	0.06 x 0.12	1.5 x 3.0	
Maximum Opening Size (approximate)	0.06 x 0.20	1.5 x 5.1	
Open Area	16	%	Level Color Color Color
Hinge Style	Ор	en	State of the two will
Rod Retention; Rod Type	Occluded edg	je; unheaded	
			Margarette
Product	Notes		
 Contact Intralox for precise belt m before designing equipment or ord Fully sculpted and radiused corners w to catch and hold debris. The drive bar on the underside of this to the outside of the belt for easier, fa effectiveness is proven both in-house Each belt material has a default rod r available. Intralox can help identify th combination for your application. Detailed material information is provi Standard Mesh Nub Top indent: 1.0 i No Cling flights are available. 	lering a belt. with no pockets or a belt channels wa aster cleanup. Drive and in field tests naterial. Other roc ne best belt and ro ded in Product Lir n (25.4 mm).	sharp corners ater and debris be bar I materials are d material	
 Custom flight heights are available. C for more information. 		stomer Service	0.275" (7.0 mm) 0.275" (25.4 mm) 0.475" (12.1 mm) 0.475" (12.1 mm)

Belt Data							
	Default Rod Material, Diameter 0.18 in	Belt St	rength	-	ure Range 1uous)	Belt I	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Polypropylene	1,200	17,500	34 to 200	1 to 93	1.45	7.08
Polypropylene	Polypropylene	700	10,200	34 to 220	1 to 104	0.98	4.81

	R	pen Grid	
	in	mm	
Pitch	1.00	25.4	
Minimum Width	5	127	
Maximum Width	60	1524	- And the second s
Width Increments	0.50	12.7	
Opening Size (approximate)	0.20 x 0.16	5.1 x 4.1	
Open Area	28	1%	
Minimum Open Area	n	/a	
linge Style	Ор	en	
Rod Retention; Rod Type		ge; unheaded	and the second and the
Produ	ict Notes		
 Contact Intralox for precise be before designing equipment or 	r ordering a belt.		UUUUUUUUUUUUUUUU
 Fully sculpted and radiused corn to catch and hold debris. 	ers with no pockets o	sharp corners	UUUUUUUUUUUUUUUU
 Open area is designed to limit way water drainage. 	ater film formation and	d maximize	
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro		
 Detailed material information is presented and presented an	provided in Product Li	ne.	
 Detailed material information is provided in Product Line. Like S800 and S1800, the drive bar on the underside of this belt channels water and debris to the outside of the belt for easier, faster cleanup. Drive bar effectiveness is proven both in-house and in field tests. 			
 Standard indent: 1 in (25.4 mm). 			0.09" (2.2 mm) (2.2 mm) (7.4 mm) (7.4 mm) (12.4
			1.00" (25.4 mm)

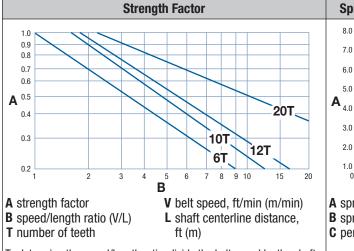
Belt Data										
	Default Rod Material, Diameter 0.18 in	iameter 0.18 in Belt Strength			ure Range 1uous)	Belt Mass				
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal	Polypropylene	800	11,700	34 to 200	1 to 93	1.32	6.44			
Polypropylene	Polypropylene	400	5,840	34 to 220	1 to 104	0.89	4.35			
Polyethylene	Polyethylene	200	2,920	-50 to 150	-46 to 66	0.92	4.49			

Belt Wid	Ith Range ^a	Minimum Number of Sprockets	Wea	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway
5	127	2	2	2
6	152	2	2	2
7	178	2	3	2
8	203	3	3	2
9	229	3	3	2
10	254	3	3	2
12	305	3	3	2
14	356	5	4	3
15	381	5	4	3
16	406	5	4	3
18	457	5	4	3
20	508	5	5	3
24	610	7	5	3
30	762	9	6	4
32	813	9	7	4
36	914	9	7	4
42	1,067	11	8	5
48	1,219	13	9	5
54	1,372	15	10	6
60	1,524	15	11	6
72	1,829	19	13	7
84	2,134	21	15	8
96	2,438	25	17	9
120	3,048	31	21	11
144	3,658	37	25	13

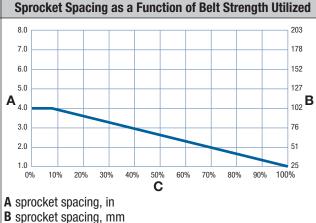
^aBelts are available in 0.50 in (12.7 mm) increments beginning with 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets.

^C Lock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



To determine the speed/length ratio, divide the belt speed by the shaft centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.



C percentage of allowable belt strength utilized

							EZ CI	ean [™] S	procke	t ^a	
Number of Teeth	Nom. Pitch Diameter							Available Bore Sizes			
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^b	Square in	Round mm ^b	Square mm	
6 (13.40%)	2.0	51	1.8	46	1.0	25	1.0		25		Nº MAL
10 (4.89%)	3.2	81	3.2	81	1.0	25	1.0	1.5	25	40	
12 (3.41%)	3.9	99	3.8	97	1.0	25		1.5		40	
20 (1.23%)	6.4	163	6.4	163	1.0	25		1.5		40	

^a When using polyurethane sprockets, the belt strength for belts rated over 500 lb/ft (7,300 N/m) is de-rated to 500 lb/ft (7,300 N/m) All other belts maintain the published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

^bU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

						ŀ	Angled E	Z Clean	™ Spro	ckets
Number of Teeth			A	Available Bore Sizes						
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
12 (3.41%)	3.9	99	3.8	97	2.0	50.8		1.5		40
16 (1.92%)	5.2	132	5.1	130	2.0	50.8		1.5		40
20 (1.23%)	6.4	163	6.4	163	2.0	50.8		1.5		40

						U	HMW Po	lyethyle	ne Spro	ockets	
Number of Teeth			Av	vailable E	Sore Size	es					
(Chordal							Round	Square			
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
16 (1.92%)	5.3	135	5.1	130	1.0	25				40	(40MM)

	Open Hinge Flat Top Base Flight (No-Cling)										
Available F	light Height										
in	mm	Available Materials									
4.0	102	Acetal, polyethylene, PK, polypropylene, X-ray detectable acetal, X-ray detectable PK, X-ray detectable polypropylene									
The No-Cling v	ertical ribs are on l	both sides of the flight.									
 Each flight external required. 	ends from the cente	er of the module, molded as one part. No fasteners are									
Minimum inder	nt: 1.0 in (25.4 mm)									
Flights can be	cut down to custon	n heights. Minimum height: 0.25 in (6.4 mm).	CALLER CALLER P								

Mesh Nub Top Base Flights (No-Cling)

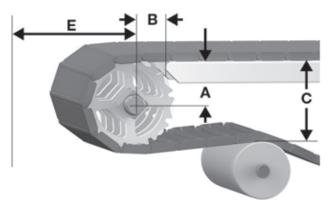
		.			
Available F	light Height				
in	mm	Available Materials			
4.0					
• The No-Cling v	4.0 102 Acetal, polyethylene, polypropylene The No-Cling vertical ribs are on both sides of the flight. Each flight extends from the center of the module, molded as one part. No fastene required. Custom flight heights are available. Contact Intralox Customer Service for more				
 Each flight external required. 	ends from the cente	er of the module, molded as one part. No fasteners are			
Custom flight h information.	neights are availabl	e. Contact Intralox Customer Service for more			
Minimum inde	nt: 1.0 in (25.4 mm	ı).			

	Sideguards										
Available Sizes											
in mm		Available Materials									
2	51	Polypropylene									
3	76	Гојургорујене									
 Fastens to be 	It with hinge rod	s. No other fasteners required.									
Can be used i	in multinle rows	to senarate product									

- Can be used in multiple rows to separate product.
- Sideguards are installed with the back ends angled inward, toward the product. This is called a product-friendly orientation. On request, the back ends can be angled outward, toward the conveyor sides.
- When going around the 6- and 10-tooth sprockets, sideguards fan out, opening a gap at the top that can allow small products to fall out. The sideguards stay completely closed when going around the 12-, 16-, and 20-tooth sprockets.
- Standard gap between sideguards and flight edge: 0.3 in (7.6 mm)
- Minimum indent: 1.0 in (25 mm)

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 58: A, B, C, and E drive dimensions

			S1	600 Conveyor	Frame Dim	ensions				
Spro	cket Descri	ption		1	1	В		C	I	E
Pitch D	iameter	Number	Range (Bot	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Mesh Top, Ope	n Hinge Flat	Тор	•			
2.0	51	6	0.67-0.80	17-20	1.10	28	2.00	51	1.26	32
3.2	81	10	1.34-1.42	34-36	1.56	40	3.24	82	1.88	48
3.9	99	12	1.67-1.73	42-44	1.70	43	3.86	98	2.19	56
5.2	132	16	2.31-2.36	59-60	1.99	51	5.13	130	2.83	72
6.4	163	20	2.96-3.00	75-76	2.25	57	6.39	162	3.46	88
				Mesh Nub	Top, Nub Top)				
2.0	51	6	0.67-0.80	17-20	1.10	28	2.08	53	1.34	34
3.2	81	10	1.34-1.42	34-36	1.56	40	3.31	84	1.96	50
3.9	99	12	1.67-1.73	42-44	1.70	43	3.94	100	2.27	58
5.2	132	16	2.31-2.36	59-60	1.99	51	5.13	130	2.83	72
6.4	163	20	2.96-3.00	75-76	2.25	57	6.47	164	3.53	90
				Mir	ni Rib					
2.0	51	6	0.67-0.80	17-20	1.10	28	2.16	55	1.42	36
3.2	81	10	1.34-1.42	34-36	1.56	40	3.40	86	2.04	52
3.9	99	12	1.67-1.73	42-44	1.70	43	4.02	102	2.35	60
5.2	132	16	2.31-2.36	59-60	1.99	51	5.13	130	2.83	72
6.4	163	20	2.96-3.00	75-76	2.25	57	6.55	166	3.62	92

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1600 Dead Plate Gap										
	Sprocket Description	Minimum Gap									
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
2.0	51	6	0.134	3.4							
3.2	81	10	0.079	2.0							
3.9	99	12	0.066	1.7							
6.4	163	20	0.039	1.0							

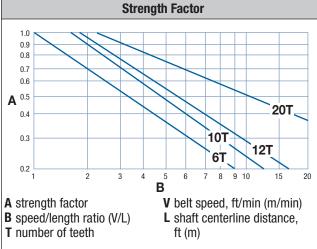
Se	eamFree [™]	[•] Minimu	ım Hinge Flat Top
	in	mm	
Pitch	1.00	25.4	
Minimum Width	4	102	
Width Increments	1.00	25.4	and the first it it is
Opening Size (approximate)	-	-	
Open Area	09	ю	2568 63
Hinge Style	Ор	en	2252
Rod Retention; Rod Type	Snap-lock	STATATA CO	
Product	Notes		
 Contact Intralox for precise belt n before designing equipment or or 			
 Smooth, closed upper surface with f 	ully flush edges.		
• Fully sculpted and radiused corners to catch and hold debris.	with no pockets or	sharp corners	
 Belts over 18 in (457 mm) are built v seams are minimized. 	vith multiple modu	les per row, but	
 Cam-link hinges provide easy cleani exposure as the belt moves around t Intralox feature allows unsurpassed 	he sprockets. This	exclusive	
 The drive bar on the underside of thi pending flume feature to channel wa the belt for easier, faster cleanup. Du both in-house and in field tests. 	ater and debris to t	he outside of	
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
Detailed material information is prov	ided in Product Lin		
 Designed for use with S1600 Anglec compatible with standard S1600 EZ 		0.20" (5.1 mm) 1.00" NOM. (25.4 mm) (25.4 mm)	

Belt Data										
	Default Rod Material, Diameter 0.18 in	Temperature Range Belt Strength (continuous)		Belt	Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal	Acetal	350	5,110	-50 to 200	-46 to 93	1.47	7.18			
Acetal	Polypropylene	325	4,740	34 to 200	1 to 93	1.40	6.84			
Acetal	Polyethylene	225	3,280	-50 to 150	-46 to 66	1.40	6.83			

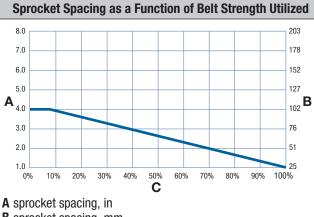
Belt Wi	dth Range ^a	Minimum Number of Sprockets	Wear	strips	
in	mm	Per Shaft ^b	Carryway	Returnway	
4	102	2	2	2	
5	127	2	2	2	
6	152	2	2	2	
7	178	2	3	2	
8	203	3	3	2	
9	229	3	3	2	
10	254	3	3	2	
12	305	3	3	2	
14	356	5	4	3	
15	381	5	4	3	
16	406	5	4	3	
18	457	5	4	3	
20	508	5	5	3	
24	610	7	5	3	
30	762	9	6	4	
32	813	9	7	4	
36	914	9	7	4	
42	1,067	11	8	5	
48	1,219	13	9	5	
54	1,372	15	10	6	
60	1,524	15	11	6	
72	1,829	19	13	7	
84	2,134	21	15	8	
96	2,438	25	17	9	
120	3,048	31	21	11	
144	3,658	37	25	13	
other widths 2 mm) cente	, use an odd numb rline spacing. ^c	per of sprockets at maximum 4 in	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing	

^a Belts are available in 1.0 in (25.4 mm) increments beginning with 4 in (101.6 mm). If the actual width is critical, contact Intralox Customer Service. ^b This number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



To determine the speed/length ratio, divide the belt speed by the shaft centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.



B sprocket spacing, mm

C percentage of allowable belt strength utilized

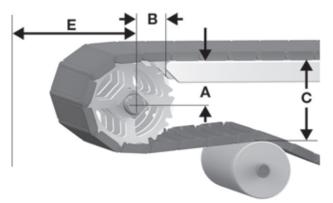
Number				-	Angled EZ Clean [™] Sprockets Nom. Hub Width Available Bore Sizes						
of Teeth (Chordal Action)	in	neter mm	in	neter mm	in	mm		Square in			
12 (3.41%)	3.9	99	3.8	97	2.0	50.8		1.5		40	
16 (1.92%)	5.2	132	5.1	130	2.0	50.8		1.5		40	
20 (1.23%)	6.4	163	6.4	163	2.0	50.8		1.5		40	

	Minimum	Hinge F	Flat Top	Base Flie	ghts (Doub	le No-Cling)
--	---------	----------------	----------	------------------	------------	--------------

Available F	light Height		
in	mm	Available Materials	
3.0	76.2	Acetal	
The No-Cling ve	ertical ribs are on l	both sides of the flight.	
 Each flight externel required. 	ends from the cente	er of the module, molded as one part. No fasteners are	
• Flights can be o	cut down to a mini	mum height of 0.5 in (12.7 mm).	
 Flights of even- inch widths are and evidence o 	available for retro	standard with 1 in (25.4 mm) indents. Flights of odd- fits and require machined indents, which contain marks	ma m

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- $\bm{B}\,$ horizontal distance between shaft centerline and beginning of carryway, $\pm\,0.125$ in (3 mm)
- ${\bm C}\,$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 59: A, B, C, and E drive dimensions

			S1	650 Conveyor	Frame Dime	ensions				
Spro	ocket Descr	iption	4	4	E	3	()	I	E
Pitch D	liameter	Number	Range (Bott	om to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				SeamFree Minin	num Hinge Fl	at Top				
2.0	51	6	0.67-0.80	17-20	1.10	28	2.00	51	1.26	32
3.2	81	10	1.34-1.42	34-36	1.56	40	3.24	82	1.88	48
3.9	99	12	1.67-1.73	42-44	1.70	43	3.86	98	2.19	56
5.2	132	16	2.31-2.36	59-60	1.99	51	5.13	130	2.83	72
6.4	163	20	2.96-3.00	75-76	2.25	57	6.40	163	3.46	88
1-				<i></i>						

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

		S1650 Dead Plate Gap				
	Sprocket Description Minimum Gap					
Pitch Diameter						
in	mm	Number of Teeth	in	mm		
2.0	51	6	0.134	3.4		
3.2	81	10	0.079	2.0		
3.9	99	12	0.066	1.7		
6.4	163	20	0.039	1.0		

		Flush	Grid
	in	mm	
Pitch	1.50	38.1	
Minimum Width	5	127	
Width Increments	1.00	25.4	
Opening Size (approximate)	0.62 × 0.50	15.7 × 12.7	
	0.70 × 0.26	17.8 × 6.6	
Open Area	37	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; u	unheaded	
			and the second
Product	Notes		
• Contact Intralox for precise belt n		l stock status	
before designing equipment or or	dering a belt.		
 Fully flush edges. 			
Slidelox are highly visible, orange ad			
 Multi-rod hinge design significantly Every row contains two rectangular 	reduces cam shaft	requirements.	
Each belt material has a default rod		l materiale are	
available. Intralox can help identify			
combination for your application.			
Detailed material information is prov			
 Ultra-abrasion-resistant polyurethar 		0 0	
• Abrasion resistant system lasts 2.5 modular plastic belts.	to 3 times longer th	nan conventional	
 Provides excellent belt and sprocket material-handling applications. 	t durability, especia	lly in tough	
 Conveyor requirements: Intralox rec either a chevron pattern or a flat con straight, parallel wearstrips. Do not 	ntinuous carryway.	Do not use	(19.0 mm)

		Belt Data					
	Default Rod Material 0.25 × 0.17 in	Belt St	trength		ure Range Iuous) ^a	Belt	Mass
Belt Material	(6.4 × 4.3 mm)	lbf/ft	N/m	°F	0°	lb/ft²	kg/m²
AR nylon	Nylon	1,800	26,300	-50 to 240	-46 to 116	2.21	10.78
Detectable nylon	Nylon	1,500	21,900	-50 to 180	-46 to 82	2.28	11.13
Low Wear Plus	Low Wear Plus	500	7,300	0 to 120	-18 to 49	2.56	12.50
^a Sprocket temperatures must be limited to compliant.	o -40°F to 160°F (-40°C to 70°	C). Belt used ir	n temperature ra	ange of 212°F to 2	240°F (100°C to 1	16°C) are no	ot FDA-

	Flus	sh Grid N	lub Top™
	in	mm	
Pitch	1.50	38.1	
Minimum Width	16	406.4	
Width Increments	1.00	25.4	
Opening Size (approximate)	0.70 × 0.26	18 × 7	
Open Area	370	%	
Product Contact Area	8%	, 0	
Hinge Style	Clos	ed	
Rod Retention; Rod Type	Slidelox; u	nheaded	A DI
Produce Contact Intralox for precise belevelope designing equipment or Fully flush edges. Slidelox are highly visible, orange	ordering a belt.	stock status	
 Multi-rod hinge design significan Every row contains two rectangul Each belt material has a default r available. Intralox can help identi combination for your application. 	tly reduces cam shaft i lar rods. od material. Other rod fy the best belt and roc	materials are	
 Detailed material information is p Ultra-abrasion-resistant, polyuret teeth. Abrasion resistant system lasts 2 modular plastic belts. 	hane split sprockets w	vith large lug	
 Provides excellent belt and sproc material handling applications. 	ket durability, especial	ly in tough-	0.12" (3.2 mm)
 Conveyor requirements: Intralox r either a chevron pattern or a flat straight, parallel wearstrips. Do n 	continuous carryway. I	Do not use	
 Minimum nominal alternating edge 	ge indents: 4 in (102 m	nm) and 6 in	1,50" NOM.

		Belt Data					
Default Rod Material 0.25 × 0.17 in			trength	Temperat (contir	Belt Mass		
Belt Material	(6.4 × 4.3 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Nylon (FDA)	Nylon	1,800	26,300	-50 to 240	-46 to 116	2.21	10.78
Easy Release Traceable PP	Nylon	1,500	21,900	34 to 220	1 to 104	1.84	8.98
Low Wear Plus	Low Wear Plus	500	7,300	0 to 120	-18 to 49	2.58	12.60
			,				

^a Sprocket temperatures must be limited to -40°F to 160°F (-40°C to 70°C). Belt used in temperature range of -212°F to 240°F (100°C to 116°C) are not FDAcompliant.

SERIES 1700

	Transver	rse Rolle	r Top [™] (TRT [™])
	in	mm	13 13 13 13 13 13 13 13 13 13 13 Calla Calla
Pitch	1.475	37.5	a constatatatatatatatat
Minimum Width	12	304.8	
Width Increments (See Product Notes.)	2.00	50.8	
Minimum Opening Size (approximate)	0.62 x 0.50	16 x 13	AND A PROPERTY
Maximum Opening Size (approximate)	0.70 x 0.26	18 x 7	
Open Area	26	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Occluded edg	e; unheaded	a and a set
Product	latas		
 performance. Must be assembled in two-row increation. Available in width increments of 2 in belts are not available. Each belt material has a default rod r available. Intralox can help identify th combination for your application. Detailed material information is provi Ultra-abrasion-resistant, polyurethan teeth. Split sprockets are available. 	(50.8 mm) except naterial. Other rod e best belt and ro ded in Product Lin	l materials are d material e.	
 Provides excellent belt and sprocket material handling applications. Roller diameter: 0.95 in (24.1 mm). Roller length: 0.825 in (21 mm). Roller spacing: 1.0 in (25.4 mm). Minimum return roller diameter: 6.0 in the space of the space		lly in tough-	1.875" (47.6 mm) (47.6 mm) (38.1 mm) (38.1 mm) (37.5 mm) (37.5 mm) (37.5 mm) (37.5 mm) (9.5 mm)

2,200

	,		⊢		1.47.5 mm) —⊫ (37.5 (37.5	mm) 🔫	0.375" 9.5 mm)
		Belt Data					
	od Material, er 0.31 in	Belt St	rength	Temperati (contii	0	Belt	Mass
(7.9	mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²

34 to 200

1 to 93

4.70

22.96

32,100

Belt Material

Nylon

Polypropylene

	Range ^a	Minimum Number of	Wearstrips			
in	in mm Sprockets Per		Carryway	Returnway		
5	127	2				
6	152	2				
7	178	3				
8	203	3				
9	229	3				
10	254	3				
12	305	3				
14	356	3				
15	381	3				
16	406	5				
18	457	5				
20	508	5	chevron pattern or use a chevron pa flat continuous carryway. flat continuo	Place wearstrips in a chevron pattern or use		
24	610	5		flat continuous returnwa		
30	762	7	Do not use straight, parallel wearstrips.	Do not use straight, paral wearstrips.		
32	813	9	- moulouipo.	inourourpo.		
36	914	11				
42	1,067	13				
48	1,219	15				
54	1,372	17				
60	1,524	19				
72	1,829	23				
84	2,134	27				
96	2,438	31				
120	3,048	39				
144	3,658	47				

^aBelts are available in 1.00 in (25.4 mm) increments, beginning at 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets.

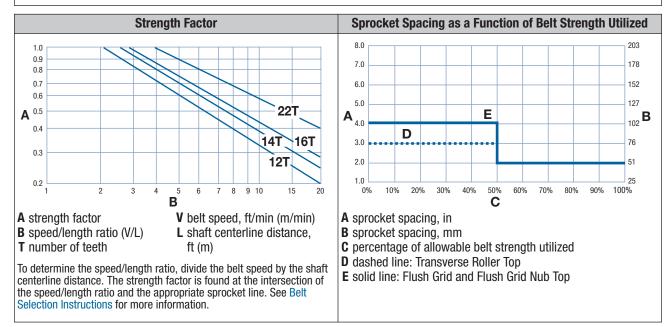
^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.

Sprocket and Support Quantity Reference for Transverse Roller Top									
Belt Wi	Belt Width Range ^a		Wear	strips					
in	mm	Sprockets Per Shaft ^b	Carryway	Returnway					
5	127	2	2	2					
6	152	2	2	2					
7	178	3	2	2					
8	203	3	2	2					
9	229	3	3	2					
10	254	3	3	2					
12	305	3	3	2					
14	356	3	3	3					
15	381	3	3	3					
16	406	5	3	3					
18	457	5	3	3					
20	508	5	4	3					

	Sprocket and Suppor	t Quantity Reference for	Transverse Roller Top	
Belt Wid	th Range ^a	Minimum Number of	Wear	strips
in	mm	Sprockets Per Shaft ^b	Carryway	Returnway
24	610	5	4	3
30	762	7	5	4
32	813	7	5	4
36	914	9	5	4
42	1,067	9	6	5
48	1,219	11	7	5
54	1,372	11	7	6
60	1,524	13	8	6
72	1,829	15	9	7
84	2,134	17	11	8
96	2,438	21	12	9
120	3,048	25	15	11
144	3,658	29	17	13
For other widths, use an odd centerline spacing. ^c	I number of sprockets at maxi	imum 4 in (102 mm)	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing

^aBelts are available in 1.00 in (25.4 mm) increments beginning with 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service. ^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



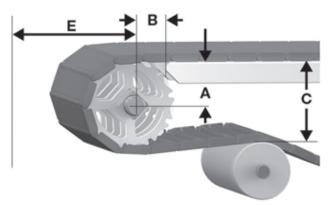
					Ultra	a Abras	sion Res	istant P	olyuretl	nane Sp
Number of Teeth	Nom. Dian	Pitch neter	Nom. Dian		-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
12 (3.41%)	5.8	147	5.85	149	1.5	38		1.5		40
14 (2.51%)	6.7	170	6.80	173	1.5	38		1.5		40
16 (1.92%)	7.7	196	7.74	197	1.5	38		1.5, 2.5		40, 60
22 (1.02%)	10.5	267	10.59	269	1.5	38		2.5		

					Ultra A	brasio	n Resist	ant Poly	urethan	ne Split
Number of Teeth	-	Pitch neter	-	Outer 1eter	-	. Hub dth	A	ailable l	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
14 (2.51%)	6.7	170	6.80	173	1.5	38		1.5, 2.5		40, 60
16 (1.92%)	7.7	196	7.74	197	1.5	38		1.5, 2.5		40, 60
22 (1.02%)	10.5	267	10.59	269	1.5	38		2.5, 3.5		60

	Streamline Flights		
		light Height	Available Fl
	Available Materials	mm	in
4	Nulan (AP), datastable nulan	102	4.0
	Nylon (AR), detectable nylon	152	6.0
	both sides.	nts are smooth on t	Streamline fligh
	er of the module, molded as one part. No fasteners are	nds from the cente	 Each flight extered.
10	le. Contact Intralox Customer Service for more	eights are available	• Custom flight h information.
5333		ıt: 2.0 in (51 mm).	Minimum inden
6 (25000	er of the module, molded as one part. No fasteners are le. Contact Intralox Customer Service for more	nts are smooth on t inds from the cente eights are available	 Streamline fligh Each flight exterequired. Custom flight h information.

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 60: A, B, C, and E drive dimensions

			S1	700 Conveyor F	Frame Dime	ensions				
Spro	cket Descri	ption		A	E	3	(;	E	:
Pitch Di	Pitch Diameter Number Range (Bottom to Top) ^a									
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Flush	n Grid					
5.8	147	12	2.36-2.46	60-62	2.42	61	5.67	144	3.27	83
6.7	170	14	2.85-2.93	72-74	2.63	67	6.61	168	3.74	95
7.7	196	16	3.33-3.40	85-86	2.81	71	7.56	192	4.22	107
10.5	267	22	4.78-4.83	121-123	3.30	84	10.41	264	5.64	143
			-	Flush Gri	d Nub Top					
5.8	147	12	2.36-2.46	60-62	2.42	61	5.79	147	3.39	86
6.7	170	14	2.85-2.93	72-74	2.63	67	6.73	171	3.86	98
7.7	196	16	3.33-3.40	85-86	2.81	71	7.68	195	4.34	110
10.5	267	22	4.78-4.83	121-123	3.30	84	10.53	267	5.76	146
				Transverse	Roller Top					
5.8	147	12	2.42-2.52	61-64	2.36	60	6.92	176	4.46	113
6.7	170	14	2.91-3.00	74-76	2.56	65	7.87	200	4.93	125
7.7	196	16	3.40-3.47	86-88	2.73	69	8.81	224	5.41	137
10.5	267	22	4.84-4.90	123-124	3.20	81	11.67	296	6.83	173
^a For genera	applications	and application	ons where end transf	er of tip-sensitive pr	oduct is not cr	itical, use the	bottom of the	range.		

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S1700 Dead Plate Gap								
	Sprocket Description	Minimum Gap						
Pitch D	iameter							
in	mm	Number of Teeth	in	mm				
5.8	147	12	0.099	2.5				
6.7	170	14	0.085	2.2				
7.7	196	16	0.074	1.9				
10.5	267	22	0.054	1.4				

Flush Grid							
	in	mm					
Pitch	1.52	38.6	"HUUUUU				
Minimum Width	12	304.8					
Maximum Width	120	3048					
Width Increments	1.00	25.4					
Opening Size (approximate)	0.66 x 0.53	16.7 x 13.5					
Open Area	21	%					
Hinge Style	Clos	sed					
Rod Retention; Rod Type	Slidelox; ı	unheaded	and a dealer and the second and the				
Product	Notes						
 before designing equipment or ord Fully flush edges. Highly visible Slidelox rod retention fe Large belt openings allow high-volum Semi-circle rod design significantly r elongation, and delivers predictable p planning in tough applications. Each belt material has a default rod n available. Intralox can help identify th combination for your application. Detailed material information is provide Ultra-abrasion-resistant polyurethance lug teeth that provide reliable engage clear debris from the drive pockets. Provides excellent belt and sprocket material handling applications. Conveyor requirements: Intralox reco a chevron pattern or a flat continuous parallel wearstrips. Do not use on pu For specific conveyor design guidelin Service. 	eature. ne water flow and educes rod wear a performance for m material. Other roc he best belt and ro ided in Product Lir e sprockets. Sproc ement, extend spro durability, especia ommends steel car s carryway. Do nor isher conveyors.	and pitch aintenance I materials are d material ne. kets have large ocket life, and Ily in tough- ryways in either t use straight,	A preferred run direction				

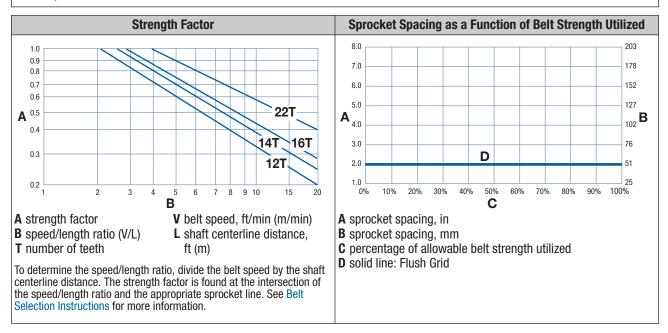
ferred run direction	"				TD)	
ferred run direction	-			-		
	ferred run	directior	n			

		Belt Data					
	Default Rod Material 0.5 in (12.5 mm)	Belt St	rength		ure Range 1uous)	Belt	Mass
Belt Material	Half Round	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Low Wear Plus	Stainless steel	1,200	17,500	0 to 120	-18 to 49	7.10	34.66
LMAR	Stainless steel	1,800	26,300	0 to 212	-18 to 100	6.73	32.86

Belt Width Range ^a Minimum Number of in mm Sprockets Per Shaft ^b		Wearstrips			
		Sprockets Per Shaft ^b	Carryway	Returnway	
12-14	305-356	5			
15-18	381-457	7			
20	508	9			
24	610	11			
30	762	13			
32	813	15	-		
36	914	17			
42	1,067	19	For specific carryway	For specific returnwa	
48	1,219	23	guidelines, contact Intralox Customer Service, or see the S1750 Design Guidelines.	guidelines, contact Intra Customer Service, or s the S1750 Design Guidelines.	
54	1,372	25			
60	1,524	29			
72	1,829	35			
84	2,134	41			
96 2,438	47				
108	108 2,743	53			
120	3,038	59			

^a Belts are available in 1.00 in (25.4 mm) increments beginning with 12 in (305 mm). If the actual width is critical, contact Intralox Customer Service. ^b This number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



	Ultra Abrasion Resistant Polyurethane Sprockets											
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter				Available Bore Sizes					
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm		
16 (1.92%)	7.8	198	7.9	201	1.5	38		2.5		60		
22 (1.02%)	10.6	269	10.9	277	1.5	38		2.5, 3.5		60		

						Ultra A	brasion	Resista	nt Split	t Sprock	kets
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter		Nom. Hub Width		Available Bore Sizes			es	
(Chordal							Round	Square	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
14 (2.51%)	6.8	173	6.9	175	1.5	38		1.5, 2.5		40, 60	
16 (1.92%)	7.8	198	7.9	201	1.5	38		1.5, 2.5		40, 60	
22 (1.02%)	10.6	269	10.9	277	1.5	38		2.5, 3.5		60	

		3-Piece Streamline Flights								
Flight	Height									
in	mm	Materials								
3.0	76	Low Wear Plus, LMAR								
4.0	102									
Flight consists	of three pieces: the	e base module, the attachment, and the rod.								
Streamline flig	hts are smooth on	both sides.								
		st available indent is 1.625 in (41 mm). Contact Intralox nation.								
module withou	 Customer Service for more information. Flights can be cut as short as 1.5 in (38 mm). If a shorter flight is needed, the flight base module without a flight attachment functions as a 0.75 in (19 mm) raised link. Contact Intralox Customer Service for more information. 									

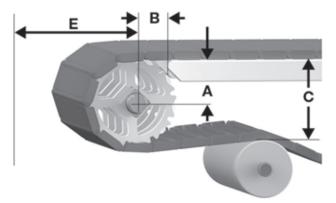
Urethane Wearstrip

Uretnane wearstrip									
Dime	nsions								
in	mm	Available Colors							
0.50 x 2 x 216	13 x 51 x 5486	Blue	The set of the						
liquid-oil applicationContact Intralox Culture	ins.	food applications. Do not use for tion and belt strength analysis. to 49°C).							

	Split Metal Sprockets										
Number of Teeth (Chordal Action)	Nom. Pitch Diameter		Nom. Outer Diameter		Nom. Hub Width		Available Bore Sizes			es	
	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
22 (1.02%)	10.6	269	10.7	272	1.625	41		2.5, 3.5		90	000

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 61: A, B, C, and E drive dimensions

	S1750 Conveyor Frame Dimensions										
Spro	cket Descri	ption		1	E	3	(;	E	E	
Pitch D	tch Diameter Number Range (Bottom to Top) ^a										
in	mm	of Teeth	in	mm	in mm		in	mm	in	mm	
	Flush Grid										
6.8	173	14	2.72-2.81	69-71	2.83	72	6.81	173	4.06	103	
7.8	198	16	3.21-3.29	82-84	3.04	77	7.77	197	4.54	115	
10.6	269	22	4.67-4.73	119-120	3.68	93	10.65	271	5.98	152	
a For gonoro	Longligations	and applicatio	no whore and transf	or of tin consitive pr	aduat ia nat ar	itiaal waa tha	hottom of the	ranga			

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1750 Dead Plate Gap								
	Sprocket Description Minimum Gap								
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
6.8	173	14	0.085	2.2					
7.8	198	16	0.075	1.9					
10.6	269	22	0.054	1.4					

		Flat T	lot	o				
	in	mm				74		-
Pitch	2.50	63.5	1	~ 0	100	1 5	2	23
Minimum Width	5	127	1		7	20 /	-33	2
Width Increments	1.00	25.4	1			or un	15	1 .
Opening Size	-	-	1		000	3 5	~	
Open Area	0%		1		- 12 ·	Stor Re-		
Hinge Style	Open		1		02 5	12 97	195	1 9
Rod Retention; Rod Type	Occluded edge; u	inheaded	1		1.5	A A		4
						1.5%		1
						1 m	200	
							9	
Produc	t Notes							
• Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.								
• Smooth, closed upper surface with	fully flush edges.							
• Impact resistant belt designed for a								
 Like S800 and S1600, the drive ba channels water and debris to the o cleanup. Drive bar effectiveness is tests. 	utside of the belt for eas	sier, faster						
 Cam-link hinges provide easy clean exposure as the belt moves around 	ning with greater hinge a the sprockets.	and rod						
 Each belt material has a default rou available. Intralox can help identify combination for your application. 								
• Detailed material information is pro	vided in Product Line.							
• Easy retrofit from S800 without ext most meat industry applications si are within 0.25 in (6 mm) of S800.			-	0.35" (8.9 mm) 2 1	.50" NOM. (63.5 mm	2.50" NOM. ((63.5 mm)	0.75" (19.1 mm)
		Belt Da	ata					
	Default Rod Materia				Temperat	ure Range		
	Diameter 0.31 in		elt St	rength	-	nuous)	Belt	Mass
Belt Material	(7.9 mm)	lbf/f	t	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Polypropylene	1,20	0	17,500	34 to 220	1 to 104	2.06	10.06
Acetal	Polyethylene	1,200	0	17,500	-50 to 150	-46 to 66	3.36	16.40
Acetal	Polypropylene	1,500	0	21,900	34 to 200	1 to 93	3.36	16.40
X-ray detectable acetal ^a	Polyethylene	1,000	0	14,600	-50 to 150	-46 to 66	3.77	18.41
-			_		101.100			

1,200

1,200

17,500

17,500

-40 to 176

-40 to 176

^aDesigned specifically for detection by X-ray machines.

PK

ΡK

PK

X-ray detectable PK

3.02

3.52

14.74

17.19

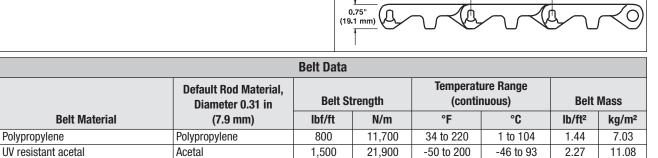
-40 to 80

-40 to 80

Polyethylene

Nylon

		Mesh 1	Гор™
	in	mm	The second secon
Pitch	2.50	63.5	
Minimum Width	5	127	
Width Increments	1.00	25.4	
Opening Size (approximate)	0.07 × 0.75	1.7 × 19.1	
Open Area	32	2%	State The man
Hinge Style	Op	en	
Rod Retention; Rod Type	Occluded edg	ge; unheaded	
			The state of the
			Contraction of the second s
Prod	uct Notes		
		d otook ototuo	
 Contact Intralox for precise b before designing equipment of 	or ordering a belt.	u Slock Slalus	
 Fully flush edges with recessed migration. 	-	nage and rod	
 Each belt material has a default available. Intralox can help iden combination for your application 	tify the best belt and ro		
Detailed material information is	provided in Product Li	ne.	
Flights and other accessories a	re available.		
			2.50" NOM. (63.5 mm)



5,840

14,600

-50 to 150

-50 to 240

-46 to 66

-46 to 116

1.50

1.81

7.32

8.84

400

1,000

Polyethylene

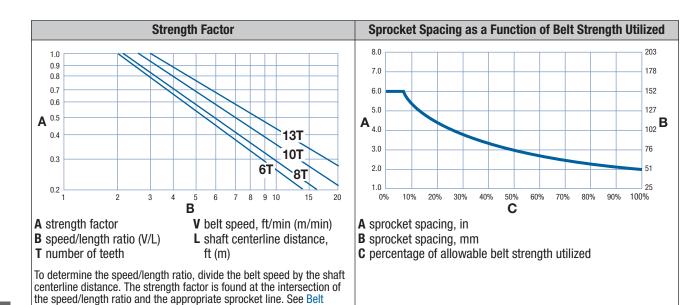
Nylon

Belt Wi	dth Range ^a	Minimum Number of Sprockets	Wea	rstrips		
in	mm	Per Shaft ^b	Carryway	Returnway		
5	127	1	2	2		
6	152	2	2	2		
7	178	2	2	2		
8	203	2	2	2		
9	229	2	2	2		
10	254	2	3	2		
12	305	3	3	2		
14	356	3	3	3		
15	381	3	3	3		
16	406	3	3	3		
18	457	3	3	3		
20	508	3	4	3		
24	610	5	4	3		
30	762	5	5	4		
32	813	5	5	4		
36	914	7	5	4		
42	1,067	7	6	5		
48	1,219	9	7	5		
54	1,372	9	7	6		
60	1,524	11	8	6		
72	1,829	13	9	7		
84	2,134	15	11	8		
96	2,438	17	12	9		
other widths centerline	s, use odd number o spacing. ^c	f sprockets at maximum 6 in (152	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 m centerline spacing		

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with 5.0 in (127 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



EZ Clean[™] Sprockets Nom. Pitch Nom. Outer Nom. Hub Number Diameter Diameter Width **Available Bore Sizes** of Teeth (Chordal Round Square Round Square Action) in mm in mm in mm in in mm mm 6 5.0 127 4.6 117 1.5 38 1.5 40 (13.40%) 8 (7.61%) 6.2 1.5 38 1.5 40 6.5 165 157 10 206 198 8.1 7.8 1.5 38 1.5 40 (4.89%)13 10.5 267 10.3 262 1.5 38 1.5, 2.5 40, 60 (2.91%)

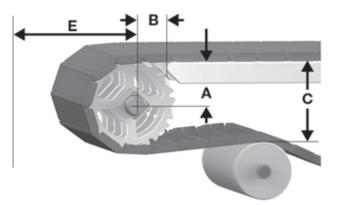
	Angled EZ Clean [™] Sprockets									ckets	
Number of Teeth		Pitch neter	Nom. Dian	Outer neter	-	Nom. Hub Width		Available Bore Sizes		es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
8 (7.61%)	6.5	165	6.2	157	2.0	50.8		1.5		40	

Selection Instructions for more information.

		Impact Resistan	t Flights					
Available F	light Height							
in	mm	Available Materials						
4.0	102	Acetal, PK, polyethylene, polypropylene, X- ray detectable acetal						
No fasteners								
 Custom flight more informa 	t heights are avai ation.	lable. Contact Intralox Customer Service for						
			Sec. 30					

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 62: A, B, C, and E drive dimensions

	S1800 Conveyor Frame Dimensions									
Sprocket Description		ption		1	В		C		E	
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	Flat Top, Mesh Top									
5.0	127	6	1.77-2.10	45-53	1.87	47	4.95	126	2.91	74
6.5	165	8	2.62-2.87	66-73	2.23	57	6.48	165	3.68	93
8.1	206	10	3.45-3.65	88-93	2.59	66	8.04	204	4.46	113
10.5	267	13	4.67-4.82	119-123	3.02	77	10.40	264	5.64	143
0										

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S1800 Dead Plate Gap								
	Minimu	Minimum Gap							
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
5.0	127	6	0.150	3.8					
6.5	165	8	0.108	2.8					
8.1	206	10	0.091	2.3					
10.5	267	13	0.074	1.9					

		Raise	d Rib
Ditab	in	mm 52.6	
Pitch	2.07		
Minimum Width	15	381	
Width Increments	1.00	25.4	
Opening Size	-	-	
Open Area	27		
Hinge Style	Clos		
Rod Retention; Rod Type	Shuttleplug	; unheaded	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or of Increased module thickness and ru- strength and increased belt life. Tall belt ribs and strong fingers en Engineered resin module material chemicals and temperature chang Each belt material has a default ro available. Intralox can help identify combination for your application. Detailed material information is pr Minimal back tension required for Split sprockets available for easy i 	ordering a belt. od diameter provides able robust transfers provides increased r es. id material. Other roc i the best belt and ro ovided in Product Lir sprocket engagemen	superior belt esistance to I materials are d material ie.	
			2.07" NOM. (52.6 mm) (52.6 mm) (52.6 mm) (9.4 mm) (9.4 mm) (2.4 mm) (2.4 mm)

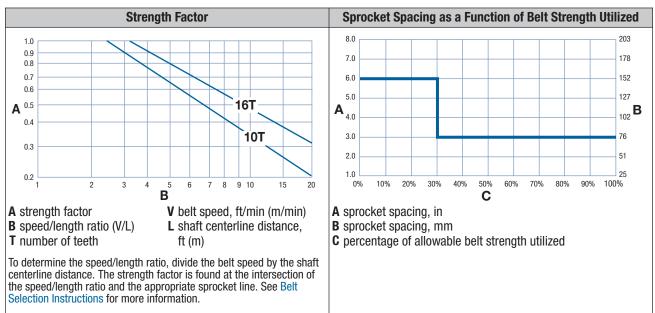
Belt Data								
	Default Rod Material, Diameter 0.38 in	Belt St	rength	Temperati (contin	ure Range 1uous)	Belt Mass		
Belt Material	(9.7 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²	
Enduralox polypropylene	Polypropylene	4,000	58,400	34 to 220	1 to 104	3.90	19.04	

		Sprocket and Support		
Belt Wid	th Range ^a	Minimum Number of Sprockets	Wea	rstrips
in	mm	Per Shaft ^b	Carryway	Returnway
15	381	3	3	3
18	457	3	3	3
24	610	5	4	3
30	762	5	5	4
36	914	7	5	4
42	1,067	7	6	5
48	1,219	9	7	5
54	1,372	9	7	6
60	1,524	11	8	6
72	1,829	13	9	7
84	2,134	15	11	8
96	2,438	17	12	9
120	3,048	21	15	11
144	3,658	25	17	13
	, use an odd numb line spacing. ^c	er of sprockets at Maximum 6 in	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



							Split	Metal S	procke	ts
Number of Teeth		Pitch neter		Outer 1eter	-	. Hub dth	A	vailable I	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.7	170	7.0	177	1.7	43		2.5		60
15 (2.19%)	10.0	254	10.3	262	1.7	43		3.5		
16 (1.92%)	10.6	269	11.0	279	1.7	43	3.5	3.5		90

Two-Material Finger Transfer Plates

Available	e Widths	Number of		
in	mm	Fingers	Available Materials	
6.0	152	18	Glass-filled thermoplastic fingers, acetal backplate	
 Provides high-s 	strength fingers co	mbined with a low-	-friction backplate	

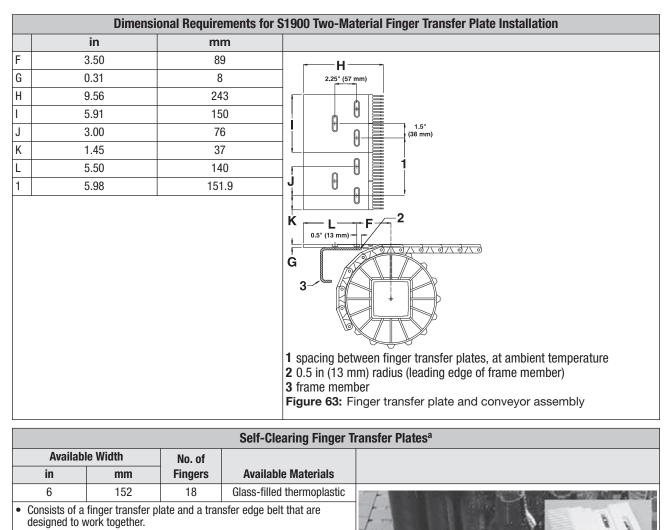
• Provides high-strength fingers combined with a low-friction backplate.

• Low-friction backplate is permanently attached to the two high-strength finger inserts.

• Eliminates product transfer and tipping problems. The 18 fingers extend between the belt ribs, allowing smooth, continuous product flow as the belt engages the sprockets.

- Easily installed on the conveyor frame with supplied shoulder bolts. Caps snap easily into place over the bolts, keeping foreign materials out of the slots.
- The extended backplate has three attachment slots. Mounting hardware is sold separately and includes stainless steel oval washers and bolts. Plastic bolt covers are also included.

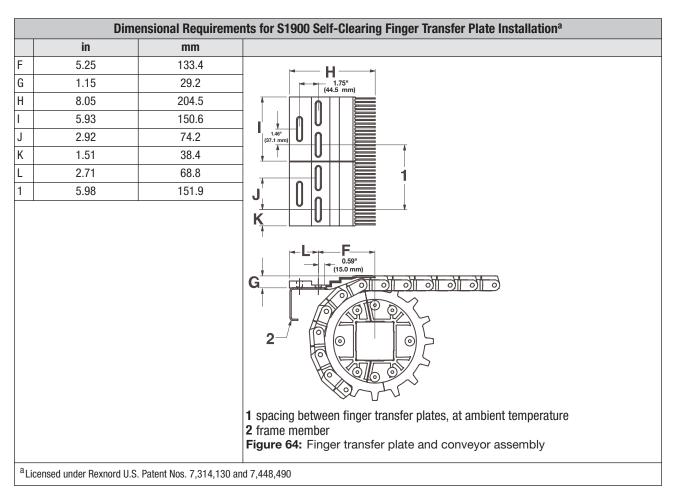




- Flat, smooth top surface provides excellent lateral movement of containers.
- Fully flush edges, headed rod retention system, and nylon rods for superior wear resistance.
- Eliminates the need for a sweeper bar, a pusher arm, or wide transfer plates. Transfers are smooth and 100% self-clearing, making right angle transfers possible for all container types.
- Ideal for warmer/cooler applications with frequent product changeovers.
- Bi-directional system allows same transfer belt use for both left-hand and right-hand transfers.
- Compatible with any series and style of Intralox belt on the discharge and infeed conveyors.
- Capable of transferring product to and from Intralox Series 400, Series 1200, and Series 1900 Raised Rib belts.
- Robust design for durability in tough, glass applications.
- Easily installed and secured to mounting plates of any thickness with stainless steel bolts and oval washers that allow movement with belt expansion and contraction.
- Stainless steel hardware is sold separately.

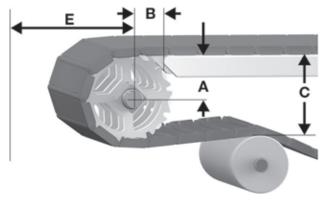
 $^{a}\mbox{Licensed}$ under Rexnord U.S. Patent Nos. 7,314,130 and 7,448,490

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CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 65: A, B, C, and E drive dimensions

			S1	900 Conveyor F	rame Dim	ensions				
Spro	cket Descri	ption	1	4	E	3	(;	E	:
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Raise	ed Rib				•	
6.7	170	10	2.69-2.85	68-72	2.82	72	7.08	180	4.29	109
10.0	254	15	4.37-4.48	111-114	3.52	89	10.33	262	5.91	150
10.6	269	16	4.71-4.81	120-122	3.65	93	11	279	6.25	159
^a For genera	l applications	and applicatio	ons where end transf	er of tip-sensitive pr	oduct is not cr	itical, use the	bottom of the	range.		

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

		S1900 Dead Plate Gap		
	Sprocket Description		Minimu	ım Gap
Pitch D	iameter			
in	mm	Number of Teeth	in	mm
6.7	170	10	0.164	4.2
10.0	254	15	0.109	2.8
10.6	269	16	0.102	2.6

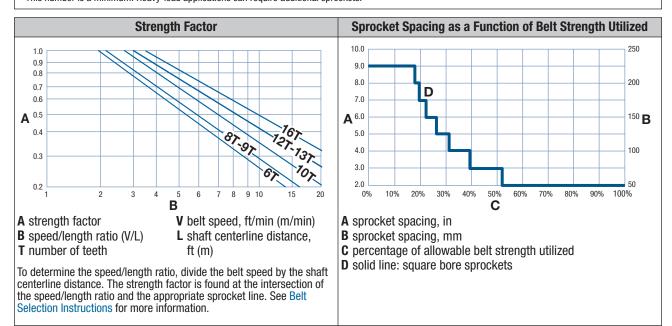
	Transve	rse Rolle	r Top [™] (TRT [™])
	in	mm	
Pitch	2.00	50.8	
Minimum Width	8	203	
Width Increments	2.00	50.8	
Opening Size (approximate)	0.43 x 0.53	10.9 x 13.5	
Open Area	17.	8%	
Hinge Style	Op	en	
Rod Retention; Rod Type	Barn door;	unheaded	Carl Carl Carl Carl Carl Carl Carl Carl
Product	Notes		n Rinn an an an ann an an an an bhairt
 Contact Intralox for precise belt m before designing equipment or or Uses acetal rollers with plastic axles Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov Designed for 90-degree transfers. Sprockets have large lug teeth. S4400 alternating tooth, glass-filled Robust design offers excellent belt a in tough, material-handling applicati Detailed conveyor design guidelines Customer Service for more informat 	dering a belt. s. material. Other roo the best belt and ro vided in Product Lin split sprockets are and sprocket durab ions. are available. Con ion.	l materials are d material ne. e recommended. ility, especially tact Intralox	
 Adjust belt length in 4 in (10.16 cm) Roller diameter: 0.95 in (24.1 mm). Roller length: 0.825 in (20.9 mm). Standard roller indent: 0.26 in (6.6 r Roller spacing: 2 in (50.8 mm), alter 	nm).	nts.	2.00' (SLB mm) 0.314' (7.86 mm) (1.58 mm) (1.58 mm)

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		Belt Data					
	Default Rod Material, Diameter 0.24 in	Straight Be	It Strength	Temperati (contir	0	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Nylon	2,200	32,100	34 to 200	1 to 93	2.25	10.985

Belt Wi	dth Range ^a	Sprocket and Support Minimum Number of Sprockets		arstrips
in	mm	Per Shaft ^b	Carryway	Returnway
10-14	254-356	2	3	2
16-18	406-457	3	3	3
20-24	508-610	3	4	3
26	660	4	4	3
28-32	711-813	4	5	3
34-36	864-914	5	5	4
38-42	965-1,067	5	6	4
44	1,118	6	6	5
46-50	1,168-1,270	6	7	5
52-54	1,321-1,372	7	7	5
56-60	1,422-1,524	7	8	6
62	1,575	8	8	6
64-68	1,626-1,727	8	9	6
70-72	1,778-1,829	9	9	6
74-78	1,879-1,981	9	10	7
80	2,032	10	10	7
aximum 9 in (sh edge	229 mm) centerline	spacing, minimum indent from	Maximum 9 in (229 mm) centerline spacing	Maximum spacing 12 in (304. mm)

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 2.00 in (51 mm) increments beginning with minimum width of 10 in (254 mm). If the actual width is critical, contact Intralox Customer Service. ^b This number is a minimum. Heavy-load applications can require additional sprockets.



					Glass	-Filled	Nylon A	Iternatii	ng Tootl	h Split S
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	/ailable l	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.5	165	6.5	165	1.95	50		1.5, 2.5		40, 60
12 (3.41%)	7.8	198	7.8	198	1.95	50		1.5, 2.5		40, 60
16 (1.92%)	10.3	262	10.4	264	1.95	50		1.5, 2.5		40, 60

						Nylon	Alternat	ing Too	th Split	Sprock	ets
Number of Teeth		Pitch neter		Outer 1eter	Nom. Wie	. Hub dth	Av	vailable E	Bore Size	es	
(Chordal								Square	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
8 (7.61%)	5.3	135	5.5	140	1.9	48		1.5		40	
16 (1.92%)	10.3	262	10.5	267	1.9	48		3.5			

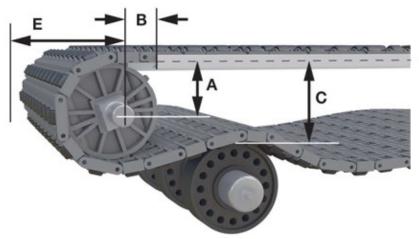
						Nyl	on Alteri	nating T	ooth Sp	rockets	•
Number of Teeth		Pitch neter		Outer neter	-	. Hub dth	Av	ailable l	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
6 (13.40%)	4.0	102	3.8	97	1.9	48		1.5		40	

					Gla	ss-Fill	ed Nylor	n Alterna	ating To	oth Spr
Number of Teeth	-	Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.5	165	6.5	165	2.0	51		1.5, 2.5		40, 60
12 (3.41%)	7.8	198	7.8	198	2	51		1.5, 2.5		40, 60
16 (1.92%)	10.3	262	10.4	264	2	51		2.5		60

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.

The belt height dimension includes the roller. The B dimension assumes a carryway with a 0.5 in (12.7 mm) thickness.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

 ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)

 ${\boldsymbol{\mathsf{C}}}$ maximum vertical distance between carryway top and returnway support top

 ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 66: A, B, C, and E dimensions

			S4	400 Conveyor I	Frame Dim	ensions				
Spro	cket Descri	ption		A	E	3	()	I	
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	•			Transverse Rolle	er Top™ (TF	RT™)		•		
4.0	102	6	1.43-1.70	36-43	1.85	47	4.40	112	2.76	70
5.3	135	8	2.12-2.32	54-59	2.24	57	5.64	143	3.38	86
6.5	165	10	2.79-2.95	71-75	2.39	61	6.90	175	4.01	102
7.8	198	12	3.45-3.58	88-91	2.64	67	8.16	207	4.64	118

			S4	400 Conveyor F	rame Dim	ensions				
Spro	cket Descri	ption		1	E	3	C	;	E	
Pitch Di	iameter	Number	Range (Bott	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Transverse Rolle	er Top™ (TR	T™)				
10.3	262	16	4.75-4.85	121-123	3.10	79	10.70	272	5.91	150
^a For general	l applications	and applicatio	ons where end transf	er of tip-sensitive pro	oduct is not cr	itical, use the	bottom of the	range.		

		Flush	Grid
PitchMinimum WidthWidth IncrementsOpening Size (approximate)Open AreaHinge StyleRod Retention; Rod Type	in 2.00 5.00 1.00 0.24 x 0.23 35 Op Barn door;	en	
 Contact Intralox for precise belt m before designing equipment or ord Smooth upper surface and straightfor movement. Opening size prevents 0.25 in (6.35 r through the belt surface. Each belt material has a default rod r available. Intralox can help identify th combination for your application. Detailed material information is provi Sprockets have large lug teeth. 	easurements and lering a belt. rward design prov nm) or larger bolt naterial. Other rod le best belt and ro	ide free product from falling materials are d material	2.0" 2.0" (50.8 mm) (7.9 mm)

		Belt Data					
	Default Rod Material, Diameter 0.24 in	Belt St	rength	Temperati (contir	•	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Polypropylene	Nylon	2,400	35,000	34 to 220	1 to 104	1.54	7.52
Polypropylene	Polypropylene	2,200	32,100	34 to 220	1 to 104	1.54	7.52

		Flat 7	Гор
	in	mm	The set of
Pitch	2.00	50.8	We we we
Minimum Width	5.00	127	A C LA C
Width Increments	1.00	25.4	- La Constantina and State
Opening Size	—	—	
Open Area	0%	6	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; u	inheaded	A A A A A A A A A A A A A A A A A A A
	ct Notes		
 Contact Intralox for precise belt before designing equipment or 	t measurements and ordering a belt.	l stock status	งงางงางหม่างการเรางงางการการการสารมีรัฐ
• Smooth, closed upper surface.			
 Fully flush edges. 			
 Available with yellow edges. Stag distinguish the moving belt from t 	gered yellow edges m he stationary floor.	nake it easy to	
Slidelox are glass-reinforced poly	propylene.		
 Each belt material has a default ro available. Intralox can help identif combination for your application. 			
Detailed material information is pr	rovided in Product Lin	е.	ากกลากาาาาาาาาาาาาาาาาาาาาาาาาาาาาาาาา
			2.0" NOM. (50.8 mm) (50.8 mm)

	В	elt Data					
	Default Rod Material,	Belt St	rength	-	ure Range 1uous)	Belt	Mass
Belt Material	Diameter 0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.07	14.96
HSEC acetal	Nylon	4,100	59,800	-50 to 200	-46 to 93	3.08	15.04
AC/EC	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.08	15.04
Polypropylene	Nylon	2,900	42,300	34 to 220	1 to 104	1.97	9.62
Easy Release Traceable polypropylene	Nylon	2,500	36,500	34 to 220	1 to 104	2.26	11.03

		Non	Skid
	in	mm	
Pitch	2.00	50.8	
Minimum Width	5.00	127	
Width Increments	1.00	25.4	
Opening Size	_	_	
Open Area	00	6	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; ı	inheaded	
Produc	ct Notes		
 Contact Intralox for precise bel before designing equipment or Fully flush edges. Edges have Flat Top surface with Available with yellow edges. Stag distinguish the moving belt from f Diamond tread pattern provides a safety. Slidelox are glass-reinforced poly Each belt material has a default r available. Intralox can help identific combination for your application. Detailed material information is p Flat Top indent: 2.0 in (50 mm) from the same safet in the same safet is the same safet is the same same safet is the same same safet is the same same same same same same same sam	ordering a belt. no tread pattern. gered yellow edges n the stationary floor. non-skid walking su propylene. od material. Other roo y the best belt and ro rovided in Product Lir	nake it easy to rface to increas I materials are d material	
			(50.8 mm) (50.8 mm) (50.8 mm) (50.8 mm) (16.8 mm) (16.8 mm)
		Belt	Data
	Default Rod Mat	erial.	Temperature Range

		Dell Dala					
	Default Rod Material, Diameter 0.24 in	Belt St	rength		ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.09	15.09
HSEC acetal	Nylon	4,100	59,800	-50 to 200	-46 to 93	3.10	15.14
AC/EC	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.10	15.14
Polypropylene	Nylon	2,900	42,300	34 to 220	1 to 104	1.98	9.67

	No	on Skid F	Raised Rib
	in	mm	
Pitch	2.00	50.8	
Minimum Width	5.00	127	
Width Increments	1.00	25.4	
Opening Size	_	_	
Open Area	0	1%	
Hinge Style	Clo	osed	
Rod Retention; Rod Type	Slidelox;	unheaded	
Product	Notes		
 before designing equipment or or Fully flush edges. Edges have Flat Top surface with no Available with yellow edges. Stagge distinguish the moving belt from the Non-skid tread pattern increases sa Slidelox are glass-reinforced polypreside to available. Intralox can help identify the combination for your application. Detailed material information is prov Finger transfer plates are available. debris from the belt surface. Flat Top indent: 2.0 in (50 mm) from 	o tread pattern. ered yellow edges i e stationary floor. afety. opylene. I material. Other ro the best belt and ro vided in Product Li Finger transfer pla	d materials are od material ne.	
 Fractop Indent: 2.0 III (50 IIIIII) If01 	r me ben euge.		(50.8 mm) (50.8 mm)

		Dont Dutu						
	Default Rod Material, Diameter		Belt Strength		Temperature Range (continuous)		Belt Mass	
Belt Material	0.24 in (6.1 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²	
Acetal	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.39	16.55	
HSEC acetal	Nylon	4,100	59,800	-50 to 200	-46 to 93	3.39	16.55	
AC/EC	Nylon	4,400	64,200	-50 to 200	-46 to 93	3.39	16.55	

	Embe	edded D	iamond To	p	
	in	mm		•	
Pitch	2.00	50.8			
Minimum Width	5.00	127.0			
Width Increments	1.00	25.4	21 / ·		
Open Area	0	%		K I have	
Hinge Style	Clo	sed		about 1	
Rod Retention; Rod Type	Slidelox [®] ;	unheaded			
Prod	uct Notes				
 The Embedded Diamond Top pa easily from the belt. Slidelox are glass-reinforced po Each belt material has a default available. Intralox can help iden combination for your application Detailed material information is 	blypropylene. t rod material. Other roo tify the best belt and ro n.	d materials are d material ne.			
		Belt D	lata		
			Dalt Chronoth	Temperature Range	Delt
	Default Rod M	laterial,	Belt Strength	(continuous)	Belt Ma

lbf/ft

2,900

2,500

N/m

42,300

36,500

°F

34 to 220

34 to 220

°C

1 to 104

1 to 104

lb/ft²

1.97

2.26

kg/m²

9.62

11.03

Diameter 0.24 in (6.1 mm)

Nylon

Nylon

Belt Material

Easy Release traceable polypropylene

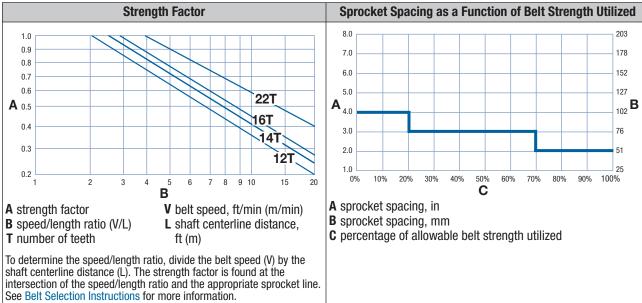
Polypropylene

Carryway 2 2 2 2 2 3 3 3 3 3 3 3 3 3 4 4	rstrips Returnway 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3
2 2 2 2 3 3 3 3 3 3 3 3 3 4	2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3
2 2 2 3 3 3 3 3 3 3 3 4	2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3
2 2 3 3 3 3 3 3 3 3 4	2 2 2 2 3 3 3 3 3 3 3 3 3 3
2 3 3 3 3 3 3 3 4	2 2 2 3 3 3 3 3 3 3 3 3
3 3 3 3 3 3 4	2 2 3 3 3 3 3 3 3 3
3 3 3 3 3 3 4	2 3 3 3 3 3 3 3
3 3 3 3 4	3 3 3 3 3 3
3 3 3 4	3 3 3 3 3
3 3 4	3 3 3
3 4	3
4	3
1	
4	3
5	4
5	4
5	4
6	5
7	5
7	6
8	6
9	7
11	8
12	9
15	11
17	13
	7 8 9 11 12 15

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



Action) in mm in mm in in 10 (4.89%) 6.5 165 6.7 170 1.5 38 1.5, 2.5 12 (3.41%) 7.8 198 8 203 1.5 38 1.5, 2.5	Round mm Square mm 40, 60 40, 60	nm 0, 60
Action) in mm in mm in mm in in </th <th>mm mm 40, 60 40, 60</th> <th>nm 0, 60</th>	mm mm 40, 60 40, 60	nm 0, 60
(4.89%) 6.5 165 6.7 170 1.5 38 2.5 12 (3.41%) 7.8 198 8 203 1.5 38 2.5 16 10.3 262 10.5 267 1.5 38 2.5	40, 60	
(3.41%) 7.6 196 6 203 1.5 36 2.5 16 10.3 262 10.5 267 1.5 38 2.5, 3.5 2.5	,	0, 60
	00.00	
	60, 90 60	60

^b Bores are over-sized.

						Gla	ss-Filled	d Nylon :	Split Sp	rockets
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.5	165	6.7	170	1.95	50		1.5, 2.5		40, 60
12 (3.41%)	7.8	198	8	203	1.95	50		1.5, 2.5, 3.5		40, 60, 90
16 (1.92%)	10.3	262	10.5	267	1.95	50		2.5, 3.5		60, 90

S	Number of Teeth	Nom. Dian	Pitch neter	N
3	(Chordal Action)	in	mm	i
ES 4500	16 (1.92%)	10.3	262	1(

	Nylon Split Sprockets											
Number of Teeth	Nom. Dian		Nom. Diam		Nom. Wie		Av	ailable E	Bore Size	es		
(Chordal	in	mm	in	mm	in	mm		Square		-		
Action)	in	mm	in	mm		mm	in	in	mm	mm		
16 (1.92%)	10.3	262	10.5	267	1.95	50		1.5		40		

						(Glass-Fil	led Nylo	on Spro	ckets
Number of Teeth		Pitch neter	-	Outer neter	Nom Wie		A	ailable l	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
10 (4.89%)	6.5	165	6.5	165	1.45	37		1.5, 2.5		40, 60
12 (3.41%)	7.8	198	7.8	198	1.45	37		1.5, 2.5		40, 60

				Endu	ralox P	olypro	pylene C	composi	ite Dual	Tooth S
Number of Teeth		. Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
16 (1.92%)	10.3	262	10.5	267	1.5	38		3.5 ^b		90p

^aHardware made from 316 stainless steel

^bBores are over-sized.

Flat Top Wheel Chocks

Availabl	e Height	Availab	le Width				
in	mm	in	mm	Available Materials			
1.6	41	5	127	UHMW			
1.97	50	5	127	UHMW			

• Fasteners and modified S4500 Flat Top modules are required.

• Fastener torque specification: 40-45 in-lbf (4.5-5 N-m).

• Minimum indent from the edge of the belt without wheel chocks: 2.0 in (50 mm).

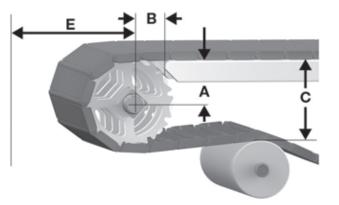


		Insert Nuts								
ľ	Available Base Belt Style; Material Available Insert Nut Sizes									
	Flat Top; Acetal 6 mm –1 mm									
	Flat Top; Polypropylene	6 mm –1 mm								
	 Insert nuts allow easy attachment of fixtures t 	o the belt.								
	Square insert nuts are provided. The square flange ensures that the insert nut stays in place when the bolt is tightened or loosened.									
	Ensure that attachments connected to more than one row do not prohibit belt rotation around the sprockets.									
	Do not locate sprockets in-line with the insert nuts. Contact Intralox Customer Service for sprocket and insert nut placement.									
	Fasteners and modified Series 4500 Flat Top modules are required.									
	Fastener torque specification: 40-45 in-lbf (4.5-5.0 N-m).									
	Minimum indent from the belt edge: 3.5 in (89 mm)									
	Minimum distance between nuts along the length of the belt: 1.0 in (25 mm)									
	 Contact Intralox Customer Service for assistar placement. 	ice with insert nut								

	Plates			
Availab	le Widths	Number of		
in	mm	Fingers	Available Materials	
6	152	18	Glass-filled thermoplastic fingers, acetal backplate	
For use with	Series 4500 Non	Skid Raised Rib	belt styles.	
 Fingers exter the end of th 		bs to prevent ha	rdware from dropping off	
	der bolts and bol b-material finger t		ided for installing the	Million
Easily install	ed on the convey	or frame.		Internet
features long configuration	y fingers with a sl n features long fir ns two attachmen	fort backplate. S Igers with an ext	tandard configuration tandard Extended Back ended backplate. The short tended backplate has	

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- **A** vertical distance between shaft centerline and carryway top, ± 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 67: A, B, C, and E drive dimensions

	S4500 Conveyor Frame Dimensions											
Spro	cket Descri	ption		1	E	3	(;	I	E		
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a								
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm		
	Flat Top, Flush Grid											
6.5	165	10	2.77-2.92	70-74	2.40	61	6.47	164	3.61	92		
7.8	198	12	3.46-3.59	88-91	2.63	67	7.80	198	4.28	109		
10.3	262	16	4.71-4.81	120-122	3.15	80	10.25	260	5.50	140		
	Non Skid											
6.5	165	10	2.77-2.92	70-74	2.40	61	6.56	167	3.70	94		
7.8	198	12	3.46-3.59	88-91	2.63	67	7.89	200	4.36	111		
10.3	262	16	4.71-4.81	120-122	3.15	80	10.34	263	5.59	142		

	S4500 Conveyor Frame Dimensions											
Spro	Sprocket Description A B C E											
Pitch D	iameter	Number	Range (Bot	tom to Top) ^a								
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm		
	Non Skid Raised Rib											
6.5	165	10	2.77-2.92	70-74	2.40	61	6.67	169	3.81	97		
7.8	198	12	3.46-3.59	88-91	2.63	67	8.00	203	4.48	114		
10.3	262	16	4.71-4.81	120-122	3.15	80	10.45	265	5.70	145		
a For gonoro	Lapplicationa	and applicatio	no whore and transf	or of tin consitive pr	aduat in not ar	itiaal uga tha	bottom of the	rango				

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

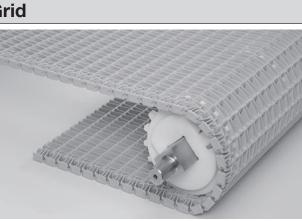
Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

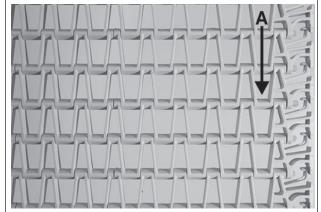
	S4500 Dead Plate Gap											
	Sprocket Description	Minimum Gap										
Pitch D	iameter											
in	mm	Number of Teeth	in	mm								
6.4	163	10	0.160	4.1								
7.8	198	12	0.130	3.3								
10.1	257	16	0.100	2.5								

		Flush (
	in	mm				
Pitch	1.00	25.4				
Minimum Width	6	152.4				
Width Increments	1.00	25.4				
Opening Size (approximate)	0.7 x 0.5	17.8 x 12.7				
Open Area	58	3%				
Hinge Style	Clo	Closed				
Rod Retention; Rod Type	Occluded ed	Occluded edge; unheaded				

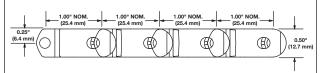
Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Open surface enhances spray-through cleaning performance and airflow cooling performance, depending on the application.
- PVDF is a polymer material proven for long-term use in washer environments.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Available with split steel sprockets for longer sprocket life and easier replacement.
- Easy to retrofit from existing steel belting with virtually no conveyor changes.





A preferred run direction



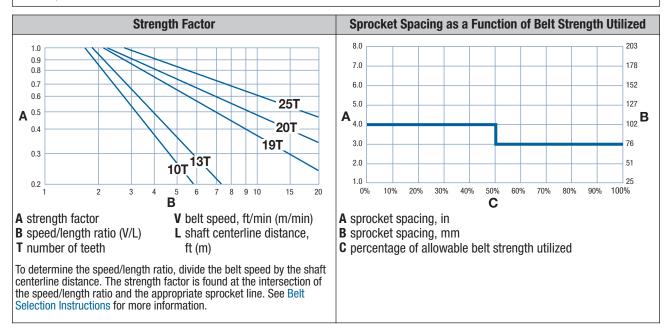
Belt Data										
	Default Rod Material, Diameter 0.18 in	Delt Observable				Belt Mass				
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
PVDF	PVDF	1,000	14,600	34 to 200	1 to 93	1.57	7.64			
Polypropylene	Polypropylene	750	10,900	34 to 220	1 to 104	0.82	4.00			
Acetal	Polypropylene	900	13,100	34 to 200	1 to 93	1.14	5.57			

Belt Wid	Ith Range ^a	Minimum Number of Sprockets	Wearstrips						
in	mm	Per Shaft ^b	Carryway	Returnway					
12	305	3	2						
24	610	6	4						
36	914	9	6						
48	1,219	12	8	Minimum 3 in (76.2 mm) diameter					
60	1,524	15	10	rollers.					
72	1,829	18	12						
84	2,134	21	14						
96	2,438	24	16						

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 6 in (152.4 mm). If the actual width is critical, contact Intralox Customer Service.

^bThis number is a minimum. Heavy-load applications can require additional sprockets.

^CLock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



Teeth Chordal Diameter Diameter Width Available Bore Sizes Chordal Action) in mm in mm in Round in Square mm 20 1.23%) 6.5 165 6.5 165 1.7 43 2-3/16, 2-7/16, 3-7/16 2.5 2.5		Split Metal Sprockets ^a									
Action)inmminmminmminmmmm $\begin{array}{c} 20\\ 1.23\% \end{array}$ 6.51656.51651.651.743 $\begin{array}{c} 2-3/16,\\ 2-7/16,\\ 2-11/16,\\ 3-7/16 \end{array}$ 2.5 $\begin{array}{c} 2.5\\ 2.5\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-11/16,\\ 2-5 \end{array}$ 90	Number of Teeth			-							
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	(Chordal								-		-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Action)	In	mm	In	mm	In	mm		In	mm	mm
2-11/16,	20 (1.23%)	6.5		6.5	165	1.7	43	2-7/16, 2-11/16, 3-7/16	2.5		
	25 (0.8%)	8.1	206	8.1	206	1.7	43	2-11/16,		90	

UHMW Polyethylene Split Sprockets Nom. Pitch Nom. Outer Nom. Hub Number Diameter Width **Available Bore Sizes** Diameter of Teeth (Chordal Round Square Round Square Action) in mm in mm in mm in in mm mm 2-7/16, 2-11/16, 3-7/16 40 (0.31%) 12.9 328 330 13.0 1.48 38 60

	Nylon FDA Split Sprockets										
Number of Teeth		Pitch neter	Nom. Dian		-	. Hub dth	A	/ailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
-											
13 (2.90%)	4.2	107	4.2	107	1.48	38	1-1/4	1-1/2		40	
19 (1.38%)	6.1	155	6.1	155	1.48	38	1-1/4	1-1/2		40	

	Acetal Sprockets									
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable l	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
20 (1.23%)	6.5	165	6.5	165	0.75	19		1.5		

					_				•	
	Enduralox Polypropylene Composite Sp									site Spr
Number	Nom.	Pitch	Nom.	Outer	Nom	. Hub				
of Teeth	Dian	neter	Dian	neter	Wi	dth	A	vailable E	Bore Size	es
(Chordal							Round	Square	Round	Square
Action)	in	mm	in	mm	in	mm	in	in	mm	mm
20 (1.23%)	6.5	165	6.5	165	1.48	38	2-7/16, 3-7/16		90	
25 (0.8%)	8.1	206	8.1	206	1.48	38	2-7/16, 3-7/16		90	
40 (0.31%)	12.9	328	13.0	330	1.48	38	2-11/16		60	

	Flat	Top Bas	e Fliahts ((No-Cling)
--	------	---------	-------------	------------

Available r	iiyiit neiyiit							
in	mm	Available Materials						
3	76	Polypropylene, nylon						
No-Cling vertical ribs are on both sides of the flight.								

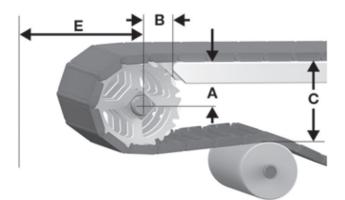
- Each flight extends from the center of the module, molded as one part. No fasteners are required.
- Custom flight heights are available. Contact Intralox Customer Service for more information.
- Minimum indent without sideguards: 2.0 in (50.8 mm).

Available Elight Usight



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, ± 0.03 in (1 mm)

B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)

C vertical distance between carryway top and returnway support top

E minimum horizontal distance between shaft centerline and other components

Figure 68: A, B, C, and E drive dimensions

	S9000 Conveyor Frame Dimensions									
Sprocket Description		Α			В		C			
Pitch D	iameter	Number	Range (Bott	com to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	Flush Grid									
3.3	84	10	1.30-1.38	33-35	1.65	42	3.26	83	1.95	50
4.2	107	13	1.80-1.86	46-47	1.85	47	4.22	107	2.42	61
6.1	155	19	2.78-2.82	71-72	2.23	57	6.14	156	3.38	86
6.5	165	20	2.94-2.98	75-76	2.35	60	6.46	164	3.54	90
8.1	206	25	3.75-3.78	95-96	2.63	67	8.06	205	4.34	110

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

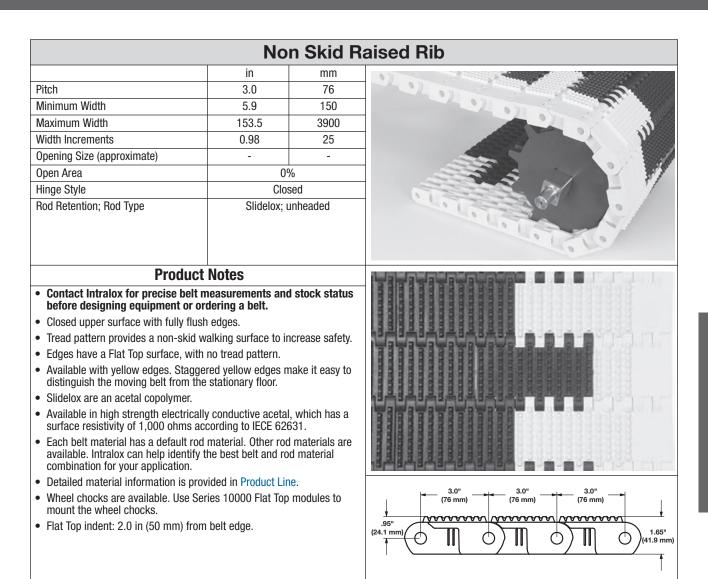
	S9000 Dead Plate Gap							
	Sprocket Description		Minimum Gap					
Pitch D	iameter							
in	mm	Number of Teeth	in	mm				
3.3	84	10	0.081	2.1				
4.2	107	13	0.061	1.5				
6.1	155	19	0.042	1.1				
6.5	164	20	0.040	1.0				
8.1	205	25	0.032	0.8				

		Flat 7	Гор
	in	mm	
Pitch	3.0	76	
Minimum Width	5.9	150	and
Maximum Width	153.5	3900	OT OT OT OT
Width Increments	0.98	25	
Opening Size	-	-	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Slidelox;	unheaded	and the later of
	ct Notes		
 Contact Intralox for precise be before designing equipment or 	It measurements an [·] ordering a belt.	d stock status	
 Smooth, closed upper surface wi 	•		
 Available with yellow edges. Stag distinguish the moving belt from 	ggered yellow edges r the stationary floor.	nake it easy to	
 Available in high strength electric surface resistivity of 1,000 Ohms 			
Slidelox are an acetal copolymer.			
 Each belt material has a default r available. Intralox can help identi combination for your application. 	fy the best belt and ro		
• Detailed material information is p	provided in Product Li	ne.	
Wheel chock attachments are av	ailable.		
			3.0" (76 mm) (76 mm

Belt Data							
Default Rod Material, Temperature Range Diameter 0.50 in Belt Strength (continuous) Belt					Belt	Mass	
Belt Material	(12.7 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	10,000	146,000	-50 to 200	-46 to 93	6.36	31.05
HSEC acetal	Nylon	8,000	117,000	-50 to 200	-46 to 93	6.36	31.05

	Mol	d to Wid	th Flat Top
	in	mm	- 0 12 - 2010.
Pitch	3.0	76	2 2200
Molded Widths	3.9	100	Letter A - pail
	7.9	200	in the second se
Opening Size	-	-	
Open Area	0	1%	
Hinge Style	Clo	osed	
Rod Retention; Rod Type	Slidelox;	unheaded	COLOR S
Produc	ct Notes		And the second se
 before designing equipment or Smooth, closed upper surface wit Available in high strength electric surface resistivity of 1,000 Ohms Slidelox are an acetal copolymer. Each belt material has a default r available. Intralox can help identiti combination for your application. Detailed material information is p 	th fully flush edges. ally conductive aceta according to IEC 626 od material. Other ro fy the best belt and ro	631. d materials are od material	
			(17.8 mm) (17.8

	Belt Data									
Belt Width		Default Rod Material, Belt Width Diameter 0.50 in		Belt Strength		Temperature Range (continuous)		Belt Mass		
Belt Material	in	mm	(12.7 mm)	lbf	N	°F	°C	lb/ft	kg/m	
Acetal	3.9	100	Nylon	2,500	11,100	-50 to 200	-46 to 93	2.08	3.10	
Acetal	7.9	200	Nylon	5,800	25,800	-50 to 200	-46 to 93	4.15	6.18	
HSEC acetal	3.9	100	Nylon	2,000	8,900	-50 to 200	-46 to 93	2.08	3.10	
HSEC acetal	7.9	200	Nylon	4,700	20,900	-50 to 200	-46 to 93	4.15	6.18	



Belt Data							
Default Rod Material, Temperature Range Diameter 0.50 in Belt Strength (continuous) Belt Mas							Mass
Belt Material	(12.7 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
HSEC acetal	Nylon	8,000	117,000	-50 to 200	-46 to 93	6.85	33.44

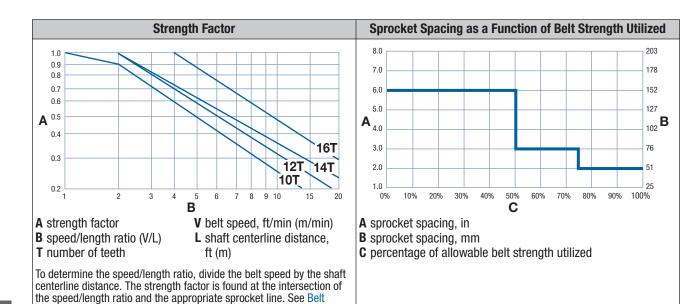
	No	n Skid F	Perforated
	in	mm	
Pitch	3.00	76.2	
Minimum Width	5.9	150	- Diana - Dian
Maximum Width	153.5	3900	
Width Increments	0.98	25	
Opening Size (approximate)	0.10 x 0.31	2.8 x 7.9	
Open Area	30	%	
Hinge Style	Clos	sed	
Rod Retention; Rod Type	Slidelox; ı	unheaded	· · · · · · · · · · · · · · · · · · ·
			01.0
Produ	ict Notes		
 Contact Intralox for precise be before designing equipment or 		d stock status	
 Fully flush edges have a Flat Top 	surface with no tread	pattern.	10 10 10 10 10 10 10 10 10 10 10 10 10
 Open slots improve drainage. Dia skid walking surface to increase 	amond tread pattern p safety.	rovides a non-	
 Available with yellow edges. Standistinguish the moving belt from 	ggered yellow edges n the stationary floor.	nake it easy to	
 Slidelox are an acetal copolymer 			
 Available in high strength electric surface resistivity of 1,000 0hms 			1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /
 Each belt material has a default available. Intralox can help ident combination for your application 	ify the best belt and ro		
 Detailed material information is 	provided in Product Lir	ne.	
 Wheel chocks are available. Use mount the wheel chocks. 	Series 10000 Flat Top	modules to	(76 mm) 3.0" 3.0" 3.0" 3.0" 3.0" 3.0" 3.0" 3.0"
• Flat Top indent: 1.97 in (50.0 mn	n) from edge of belt.		

Belt Data							
Default Rod Material,Temperature RangeDiameter 0.50 inBelt Strength(continuous)						Mass	
Belt Material	(12.7 mm)	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	10,000	146,000	-50 to 200	-46 to 93	6.48	31.64
HSEC acetal	Nylon	8,000	117,000	-50 to 200	-46 to 93	6.48	31.64

Belt Wid	th Range ^a	Minimum Number of Sprockets	Wear	strips
in	mm	Per Shaft ^b	Carryway	Returnway
3	100	1	2	2
5.9	150	1	2	2
7.9	200	2	2	2
9.8	250	2	3	2
11.9	300	3	3	2
13.8	350	3	3	3
15.7	400	3	3	3
17.7	450	3	3	3
19.7	500	3	4	3
23.6	600	5	4	3
29.5	750	5	5	4
31.5	800	5	5	4
35.4	900	7	5	4
41.3	1,050	7	6	5
47.2	1,200	7	7	5
53.1	1,350	9	7	6
59.1	1,500	9	8	6
70.9	1,800	13	9	7
82.7	2,100	21	11	8
94.5	2,400	23	12	9
118.1	3,000	29	15	11
143.7	3,650	35	17	13
145.7	3,700	37	18	14
147.6	3,750	37	18	14
149.6	3,800	37	18	14
151.6	3,850	37	18	14
153.5	3,900	41	19	14
other widths, mm) center	use an odd num line spacing. ^c	ber of sprockets at maximum 6 in	Maximum 6 in (152 mm) centerline spacing	Maximum 12 in (305 mm centerline spacing

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.97 in (50 mm) increments beginning with a minimum width of 3.94 in (100 mm). If the actual width is critical, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets. Sprockets require a maximum 5.91 in (150 mm) centerline spacing. ^c Lock the center sprocket. If only two sprockets are used, lock the sprocket on the drive journal side. For locked sprocket locations, see Retainer Rings and Center Sprocket Offset.



Nylon Sprockets Nom. Pitch Nom. Outer Nom. Hub Number Diameter Diameter Width **Available Bore Sizes** of Teeth (Chordal Round Square Round Square Action) in mm in mm in mm in in mm mm 10 9.9 251 9.7 246 1.5 38 3.5 90 (4.70%)12 11.8 300 11.7 297 1.5 38 3.5 90 (3.29%) 14 13.7 348 13.6 345 1.5 38 3.5 90 (2.43%)100. 16 15.7 399 15.6 396 1.5 38 3.5 120, 90 (1.84%) 140

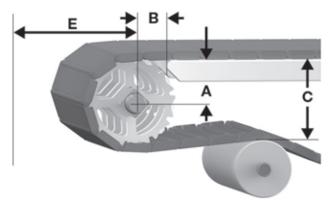
vailabl	e Height	Available Width			
in	mm	in	mm	Available Materials	
0.8	20	1.5	37	Nylon	And the second s
1.6	40	4.9	125	Nylon	
2	50	4.9	125	Nylon	
Fastener	's and modi	fied S1000	0 Flat Top m	odules are required.	and a start of the start of the
Minimur	n indent wit	hout wheel	chocks is 2	0 in (50 mm).	The second state of the second
					A STATISTICS AND A STATISTICS AND AND A STATISTICS AND A
					Man - Milling
					- CHODAN
					plan.
					TTTT AND

Selection Instructions for more information.

	Insert Nuts								
Base Belt Style	Material	Insert Nut Sizes							
Flat Top	Acetal	6 mm–1 mm, 8 mm–1.25 mm							
Insert Nuts easily allow the attack	hment of fixtures to the belt.	- -	6 5 6						
• Insert nuts are square. The squar tightened or loosened.	re flange ensures that the insert nut s	stays in place when the bolt is							
• Ensure that attachments connect sprockets.	ted to more than one row do not proh	ibit belt rotation around the							
All nut placement dimensions are Intralox Customer Service for nut	e referenced from the edge of the bel location options available for your in	t when placing an order. Contact dividual belt specifications.							
	with insert nuts if a 0.187 (4.75 mm) appropriate bolt length to fit the app		5 5 000						
The fastener torque specification	: 40-45 in lbf (4.5-5.0 N-m).		600						
Minimal indent from the edge of	the belt: 1.22 in (31 mm)								
Minimal distance between nuts a	cross the width of the belt 0.492 in (12.5 mm)							
Spacing along the length of the b	elt: 3 in (76 mm) increments.								

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

 ${\bm B}\,$ horizontal distance between shaft centerline and beginning of carryway, $\pm\,0.125$ in (3 mm)

 ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top

 ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 69: A, B, C, and E drive dimensions

	S10000 Conveyor Frame Dimensions											
Sprocket Description			4	В		(;	E				
Pitch D	iameter	Number	Range (Bottom to Top) ^a									
in	mm	of Teeth	in mm		in	mm	in	mm	in	mm		
				Flat	Тор	•			•			
9.9	251	10	4.02-4.25	102-108	3.33	85	9.90	251	5.71	145		
11.8	300	12	5.01-5.20	127-132	3.73	95	11.80	300	6.66	169		
13.7	348	14	5.98-6.15	152-156	4.03	102	13.70	348	7.61	193		
15.7	399	16	7.01-7.15	178-182	4.33	110	15.70	399	8.61	219		

	S10000 Conveyor Frame Dimensions												
Sprocket Description		1	E	3	()	E						
Pitch Di	iameter	Number	Range (Bott	tom to Top) ^a									
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm			
Non Skid Raised Rib													
9.9	251	10	4.02-4.25	102-108	3.33	85	10.15	258	5.96	151			
11.8	300	12	5.01-5.20	127-132	3.73	95	12.05	306	6.91	176			
13.7	348	14	5.98-6.15	152-156	4.03	102	13.95	354	7.86	200			
15.7	399	16	7.01-7.15	178-182	4.33	110	15.95	405	8.86	225			
				Non Skid	Perforated								
9.9	251	10	4.02-4.25	102-108	3.33	85	9.99	254	5.80	147			
11.8	300	12	5.01-5.20	127-132	3.73	95	11.89	302	6.75	171			
13.7	348	14	5.98-6.15	152-156	4.03	102	13.79	350	7.70	196			
15.7	399	16	7.01-7.15	178-182	4.33	110	15.79	401	8.70	221			

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S10000 Dead Plate Gap										
	Sprocket Description	Minimum Gap									
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
9.9	251	10	0.233	5.9							
11.8	300	12	0.194	4.9							
13.7	348	14	0.166	4.2							
15.7	399	16	0.145	3.7							

ENGINEERING ANALYSIS FOR SPIRAL AND RADIUS BELTS

Intralox can provide an engineering analysis for spiral and radius applications, to determine the estimated belt pull, and ensure that the belt is strong enough for the application. Contact Intralox Customer Service for more information.

The following information is required for an engineering analysis:

- Any environmental conditions which can affect the friction coefficient. For dirty or abrasive conditions, use higher-than-normal friction coefficients.
- Belt width
- Length of each straight section
- Angle, direction, and inside radius of each turning section
- Carryway and hold down wearstrip materials.
- Product load lbf/ft² (N/m²)
- Product accumulation conditions
- Belt speed
- Elevation changes in each section
- Operating temperatures
- Sprocket and shaft specifications

Intralox can help select radius belt and low-tension capstan drive spiral belts for your application. Contact Intralox Customer Service for more information.

2025 Engineering Manual-Modular Plastic Belts

	ZERO TAN	IGENT™	Radius Flat Top
	in	mm	
Row-to-Row Angle	1.33 de	grees	
Maximum Width	55.12	1400	
Minimum Width	7.87	200	A CARLER AND A CARLE
Width Increments	7.87	200	
Open Area	09	6	
Hinge Style	Clos	ed	
Rod Retention; Rod Type	Snap-lock		
Produc	ct Notes		
 Contact Intralox for precise belibefore designing equipment or Belt shape completely eliminates and after turns. Pitch distance changes, dependin from the center of the turn. Uses nylon rods. Each belt material has a default role. 	ordering a belt. the need for straight s g upon the location of	sections before f the module	
available. Intralox can help identif combination for your application.	y the best belt and ro	d material	
Detailed material information is p			
 Intralox provides complete design engineering design investment. 	-		
 Designed for radius applications v 23.62 in (600 mm). 	vith a minimum inside	e-turn radius of	0.20 in (5.0 mm) (5.0 mm) (10.1 m

Belt Data										
	Default Rod Material, Diameter 0.18 in	Belt St	rength	Temperatı (contir	0	Belt Mass				
Belt Material	(4.6 mm)	lbf/ft	N/m	°F	°C	lb/ft²	kg/m²			
Acetal	Nylon	907	13,200	-50 to 200	-46 to 93	1.89	9.25			

	Sprocket and Support Quantity Reference											
Belt Widt	h Range ^{ab}	Minimum Number of	Wearstrips									
in	mm	Sprockets per Shaft ^c	Carryway	Returnway								
7.87	200	2	2	2								
15.75	400	4	3	2								
23.62	600	6	4	2								
31.50	800	8	5	3								
39.37	1,000	10	6	3								

^a If the actual width is critical, contact Intralox Customer Service.

^b For other widths, use an even number of sprockets at maximum sprocket spacing: 3.94 in (100 mm). Maximum carryway spacing: 7.87 in (200 mm). Maximum returnway spacing: 15.75 in (400 mm)

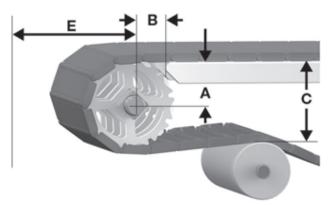
^CLock all sprockets.

	Nylon (FDA) Molded Sprocket													
Number of Teeth	-	Pitch neter	-	Outer 1eter	-	. Hub dth	Av	ailable B	ore Size	es				
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm				
12 (3.41%)	2.3	58	2.4	61	1.0	25	-	-	40	_				
12 (3.41%)	2.6	66	2.7	70	1.0	25	_	-	40	-				
12 (3.41%)	3.0	76	3.1	78	1.0	25	-	-	40	-				
12 (3.41%)	3.3	84	3.4	87	1.0	25	-	-	40	-				
12 (3.41%)	3.7	94	3.8	96	1.0	25	-	-	40	-				
12 (3.41%)	4.0	102	4.1	104	1.0	25	-	-	40	-				
12 (3.41%)	4.4	112	4.5	113	1.0	25	-	-	40	-				
12 (3.41%)	4.7	119	4.8	122	1.0	25	-	-	40	-				
12 (3.41%)	5.1	130	5.1	131	1.0	25	-	-	40	-				
12 (3.41%)	5.4	137	5.5	139	1.0	25	_	-	40	-				
12 (3.41%)	5.8	147	5.8	148	1.0	25	_	-	40	-				
12 (3.41%)	6.2	157	6.2	157	1.0	25	_	-	40	-				
12 (3.41%)	6.5	165	6.5	165	1.0	25	_	-	40	-				
12 (3.41%)	6.9	175	6.9	174	1.0	25	-	-	40	-				

						Nylo	n (FDA)	Machin	ed Spro	ocket	
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	Av	ailable B	ore Siz	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
12 (3.41%)	2.3	58	2.4	61	1.0	25	1-7/16	-	-	-	
12 (3.41%)	2.6	66	2.7	70	1.0	25	1-7/16	-	_	-	
12 (3.41%)	3.0	76	3.1	78	1.0	25	1-7/16	-	_	-	
12 (3.41%)	3.3	84	3.4	87	1.0	25	1-7/16	-	-	-	
12 (3.41%)	3.7	94	3.8	96	1.0	25	1-7/16	-	_	-	
12 (3.41%)	4.0	102	4.1	104	1.0	25	1-7/16	-	_	-	
12 (3.41%)	4.4	112	4.5	113	1.0	25	1-7/16	-	_	-	
12 (3.41%)	4.7	119	4.8	122	1.0	25	1-7/16	-	_	-	and the second
12 (3.41%)	5.1	130	5.1	131	1.0	25	1-7/16	-	_	-	4.01
12 (3.41%)	5.4	137	5.5	139	1.0	25	1-7/16	-	_	-	and a second sec
12 (3.41%)	5.8	147	5.8	148	1.0	25	1-7/16	-	-	-	1
12 (3.41%)	6.2	157	6.2	157	1.0	25	1-7/16	-	-	-	1
12 (3.41%)	6.5	165	6.5	165	1.0	25	1-7/16	-	-	-	1
12 (3.41%)	6.9	175	6.9	174	1.0	25	1-7/16	-	_	-	1
. ,						_					y sizes are based on DIN standard 6885.

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

 ${\bm B}\,$ horizontal distance between shaft centerline and beginning of carryway, $\pm\,0.125$ in (3 mm)

C vertical distance between carryway top and returnway support top

 ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 70: A, B, C, and E drive dimensions

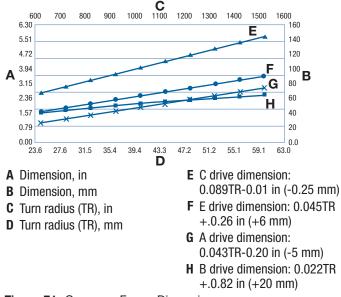
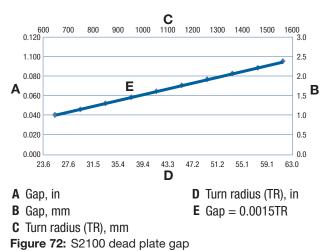


Figure 71: Conveyor Frame Dimensions

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.



	R	adius Flu	ush Grid
	in	mm	1. 1. 1. 1. 1. 1.
Pitch	1.50	38.1	6.201
Minimum Width	5	127	1.1.1.1.1
Width Increments	1.00	25.4	12/22/22
Opening Size (approximate)	0.50 × 0.75	12.7 × 19.7	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Open Area	50	1%	
Product Contact Area	37	'%]
Hinge Style	Ор	en	1
Rod Retention; Rod Type	Occluded edg	ge; unheaded	1
Produ	ict Notes]

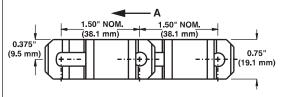
- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Flush edge or tab edge available.
- Belt openings pass straight through the belt to simplify cleaning.
- Lightweight, strong belt with a smooth surface grid.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Non-sliding drive system reduces belt and sprocket wear, and provides low back tension.
- Designed for radius applications with a minimum turn radius of 2.2 times belt width (measured from inside edge).
- If a standard edge or tabbed edge wearstrip is used to hold the belt in place, do not retain sprockets on the shaft. In this case, the wearstrip maintains the lateral belt position.
- Tab edge belt width measurement does not include tabs. Tabs extend approximately 0.5 in (13 mm) \times 0.25 in (6 mm) on each side of belt, inside wearstrip.
- Maximum belt width in turns: 36 in (914 mm)



Figure 73: Series 2200 tab edge dimensions

0.25" NOM.

(6 mm)



A preferred run direction for flat, turning applications

Belt Data												
	Default Rod Material, Diameter 0.24 in		ht Belt ngth		Temperat (contii	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m ²				
Polypropylene	Acetal	1,600	23,400		34 to 200	1 to 93	1.86	9.10				
Polyethylene ^a	Acetal	1,000	14,600	For curved belt strength	-50 to 150	-46 to 66	1.96	9.56				
Acetal	Nylon	2,500	36,500	calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	2.82	13.80				
Polypropylene	Polypropylene ^b	1,400	20,400		34 to 220	1 to 104	1.78	8.69				
^a Polyethylene cannot e				nicol registance is required. Place		t obvo o obb						

^bPolypropylene rods can be installed in polypropylene belts when extra chemical resistance is required. Please note lower belt strength.

	Belt Data											
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength ^a			Temperatı (contir	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²				
Acetal	Nylon	2,500	36,500		-50 to 200	-46 to 93	3.66	17.87				
Polypropylene	Acetal	1,600	23,400	calculations, contact Intralox Customer Service.	34 to 200	1 to 93	2.41	11.77				

^a When using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain their published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

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			Ra	dius Fric	tion Top					
			in	mm						
Pitch			1.50	38.1				1232	20	60
Minimum Width			5	127		in		5346	0.1	20
Width Increments			1.00	25.4	62	52	1		2020	1.31
Opening Size (approx	(imate)	0.5	50 × 0.75	12.7 × 19.7	55	5		201	069	26
Open Area			509		-53	PC	5 0		1.10	9
Hinge Style			Ope	en	1.00	1 Per	2.	61	19	
Rod Retention; Rod Ty	уре	(Occluded edg	e; unheaded		1000	100%		17	
, .		oduct Note			-	X	500	-10/		
Installation, Maintenan Contact Intralox for pre equipment or ordering a Flush edge or tab edge a Belt openings pass straig Available in grey polypron natural polyethylene, with Each belt material has a help identify the best belf Detailed material informa Non-sliding drive system Designed for radius appli (measured from the insid Temperature, environmer degree of incline. Considuelts. If a standard edge or tabl sprockets on the shaft. Ir Tab edge belt width mear (13 mm) × 0.25 in (6 mm	ecise belt me a belt. available. ght through th pylene with g th white rubbe default rod mai ation is provid ications with de edge). Intal condition ler these facto bed edge wea n this case, th usurement doo n) on each sid	he belt to simplify grey rubber, white er. haterial. Other rod terial combination ded in Product Lin luced belt and spi a minimum turn r hs, and product ch ors when designir arstrip is used to he wearstrip main es not include tab	d stock status by cleaning. polypropylene w d materials are av n for your applica ne. rocket wear, and radius of 2.2 time haracteristics affe ng conveyor syste hold the belt in p ttains the lateral l us. (Tabs extend a	efore designing ith white rubber, and ailable. Intralox can tion. low back-tension. as the belt width act the maximum ems using these lace, do not retain belt position.	0.25" NOM. (6 mm) (6 m) (6 m)	nm) -				
 Molded indent: 1.75 in (4 Maximum belt width in tu 	,	114 mm).			Figure 74: Tab e	dge di .50" NOM (38.1 mm	▲	nS A (38.1 mm)	0.25" (6.4 mm 1.) (25.4	
				A preferred run di Figure 75: Flush				ations		
		Default Rod		Belt Da	Temp. Range				Δ.a.	ency
		Material,	Belt Strengt	h	(continuous)	Be	It Mass		Accep	-
		Diameter	g .	-				-		

		Material,	Belt Strength (continuous) Belt Mass		Mass			tability				
Dees Dalt	Deee/Eristian	Diameter			Oursed Dalk					Fristian Tan	EDA	
Base Belt Material	Base/Friction Top	0.24 in (6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/grey	Acetal	1,600	23,400	For curved belt	34 to 150	1 to 66	2.20	10.74	64 Shore A		
Polypropylene	White/white	Acetal	1,600	23,400		34 to 150	1 to 66	2.20	10.74	55 Shore A	b	С
Polyethylene	Natural/white	Acetal	1,000	14,600	calculations, contact Intralox	-50 to 120	-46 to 49	2.30	11.23	55 Shore A	b	С
Polypropylene	Grey/grey	Polypropylene	1,400	20,400	Customer	34 to 150	1 to 66	2.12	10.35	64 Shore A		
Polypropylene	White/white	Polypropylene	1,400	20,400	Service.	34 to 150	1 to 66	2.12	10.35	55 Shore A	b	C

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

 $^{b}\,\mathrm{FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

	Dell							
		is with E						
	in	mm						
Pitch	1.50	38.1						
Minimum Width (Bearings one side)	7	178						
Minimum Width (Bearings both sides)	9	229						
Width Increments	1.00	25.4						
Opening Size (approximate)	0.50 x 0.75	12.7 x 19.7						
Open Area	50)%						
Product Contact Area	37	7%						
Hinge Style	Op	ben						
Rod Retention; Rod Type	Occluded edg	ge; unheaded						
Product	Notes							
This belt has pinch points. See the Safety se Installation, Maintenance & Troubleshootin								
Contact Intralox for precise belt measurement								
equipment or ordering a belt.								
 Both flush edge and tab edge are available for be edge and tab edge must be placed on the outside 		only one side. Flush						
Rod retention allows for easier insertion and rer	noval of rods.							
Edge bearings are only available for turning belt								
 Bearings are available on one side for belts that for belts that turn in both directions. 	turn in only one direct	ion or on both sides						
Bearings must be configured in every other row	of the belt.							
Bearings are chrome steel, recommended for de	ry applications only.							
 Bearings are retained with a stainless pin. Each belt material has a default rod material. Of 	ther rod materials are a	available Intralox can						
help identify the best belt and rod material com	bination for your applic							
Detailed material information is provided in Proc								
 Bearings must be placed on the inside edge of t Designed for radius applications with a minimum 		nes the helt width						
(measured from the inside edge of the wearstrip	channel).							
 Use the Intralox Engineering Program to determine if edge bearings are suitable for the intended application. 								
Maximum belt speed: 350 fpm (107 mpm).								
 The plastic portion of the bearing edge is indented 0.125 in (3.2 mm). Belt width is measured to the end of the bearing. 								
 Belts with bearings on one side work with stand in (12.7 mm) deep channel. 	lard edge, hold down w	vearstrips with a 0.50						
Belts with bearings on both sides require the wearstrip on the outside of the turns to ha least a 0.75 in (19.1 mm) deep channel.								
 Maximum belt width: 36 in (914 mm). 								

	Belt Data											
	Default Rod Material, Diameter 0.24 in	-	ht Belt ngth		Temperati (contir	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft²	kg/m²				
Acetal	Nylon	2,000	29,200	For curved belt strength calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	2.82	13.80				

SERIES 2200

Flush Grid High Deck with Edge Bearing

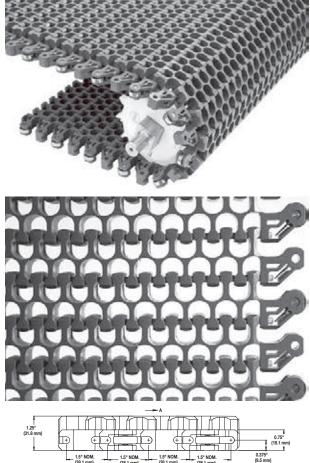
		-			
	in	mm			
Pitch	1.50	38.1			
Minimum Width (bearings one side)	7.0	177.8			
Minimum Width (bearings both sides)	9.0	228.6			
Width Increments	1.0	25.4			
Opening Size (approximate)	0.50 x 0.75	12.7 x 19.7			
Open Area	50%				
Product Contact Area	37%				
Hinge Style	Open				
Rod Retention; Rod Type	Occluded edge; unheaded				
— • • •					

Product Notes

This belt has pinch points. See the Safety section in the Intralox Conveyor Belting
Installation, Maintenance & Troubleshooting Manual for more information.

• Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.

- Occluded edge rod retention provides easier rod insertion and removal.
- Bearings are chrome steel, and are retained in the belt using a stainless pin.
- Bearings are placed in every other row of the belt, on the inside edge of the turn.
- Edge bearings are only available for turning belts. Bearings are available on one side for belts that turn in only one direction or on both sides for belts that turn in both directions.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Edge bearings are only recommended for dry applications.
- Use the Intralox Engineering Program to determine if edge bearings are suitable for the intended application.
- Designed for radius applications with a minimum turn radius of 2.2 times the belt width, measured from the inside edge of the wearstrip channel.
- 0.5 in (12.7 mm) higher than the standard S2200 belt.
- Standard indent: 1.75 in (44.5 mm).
- The plastic portion of the bearing edge is indented 0.125 in (3.2 mm). Belt width is measured to the end of the bearing.
- Belts with bearings on one side work with standard edge, hold down wearstrips with a 0.50 in (12.7 mm) deep channel.
- Belts with bearings on both sides require the wearstrip on the outside of the turns to have at least a 0.75 in (19.1 mm) deep channel.
- Maximum belt width: 36 in (914 mm).
- Maximum belt speed: 350 fpm (107 meters per minute).



A preferred run direction for flat, turning applications

	Belt Data											
	Default Rod Material, Diameter 0.24 in	Straig Stre	ht Belt ngth		Temperat (conti	Belt Mass						
Belt Material	(6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²				
Acetal	Nylon	2,000	29,200	For curved belt strength calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	3.66	17.87				

Rad	ius Flush	Grid (2.6	6) with Insert Rollers
	in	mm	
Pitch	1.50	38.1	
Minimum Width	7	178	
Width Increments	1.00	25.4	
Opening Size (approximate)	0.50 × 0.75	12.7 × 19.7	
ppen Area	50)%	
Hinge Style	Or	ben	
Rod Retention; Rod Type	Occluded ed	ge; unheaded	
Product		<u> </u>	
This belt has pinch points. See the Safety so Installation, Maintenance & Troubleshootin	ection in the Intralox (Conveyor Belting formation.	
Contact Intralox for precise belt measureme equipment or ordering a belt.	•		www.
Flush edge or tabbed edge available.			
Uses acetal rollers.			JULIA
 Each belt material has a default rod material. O help identify the best belt and rod material com 			
Detailed material information is provided in Pro	, 11	auon.	
For applications where low back-pressure accuload is 5% to 10% of product weight.	umulation is required. P	roduct accumulation	
For low back-pressure applications, place wear applications, place wearstrips directly under ro		For driven	
If a standard edge or tabbed edge wearstrip is sprockets on the shaft. In this case, the wearst			A 1.50" NOM. 1.50" NOM.
Tab edge belt width does not include tabs. (Tab 0.25 in (6 mm) on each side of belt.)		()	(38.1 mm) (38.1 mm) / Ø 0.925"
Belts 16 in (406 mm) wide and less have a turn belts have a turn radius of 2.6 times the belt w	n radius of 2.2 times the idth.	e belt width. Wider	0.375" (23.5 mm)
For belts wider than 24 in (610 mm), contact In	tralox Customer Service	9.	(9.5 mm)
Do not place sprockets inline with rollers.			
Minimum roller indent: 2.5 in (63.5 mm).			
 Standard roller spacing: across width: staggered 4 in (102 mm) or inl mm). 	ine 2 in (51 mm), 3 in (7	76 mm), or 4 in (102	A preferred run direction for flat, turning
- along length: staggered 1.5 in (38.1 mm) or	inline 3 in (76.2 mm)		
- Custom roller placement is available.			

						Belt	Data							
	Default Rod		Str	aight B	elt Stre	ngth								
	Material.	Roller Width Spacing]						
	Diameter			_	7.6	_	102	1			Temp. Range			
	0.24 in	2 in	51 mm	3 in	mm	4 in mm Roller Indents				Curved Belt	(contir	nuous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	in	mm	Strength	°F	°C	lb/ft ²	kg/m²
Polypropylene	Acetal	400	5,840	710	10,400	900	13,100	2.5, 3.5 to 4.5	64, 89 to 114	For curved belt strength	34 to 200	1 to 93	1.86	9.08
Acetal	Nylon	630	9,190	1,110	16,200	1,410	20,600	2.5, 3.5 to 4.5	64, 89 to 114	calculations, contact	-50 to 200	-46 to 93	2.82	13.8
Polypropylene	Polypropylene ^a	350	5,110	620	9,050	790	11,500	2.5, 3.5 to 4.5	64, 89 to 114	Intralox Customer Service.	34 to 220	1 to 104	1.78	8.69
a Dolymonylana ra	de een he instelled	in nolym	ronulono	holto wh	on outro	ohomioo	Iropioton		rad Dlaga	o noto lowor holt	otronath			

^a Polypropylene rods can be installed in polypropylene belts when extra chemical resistance is required. Please note lower belt strength.

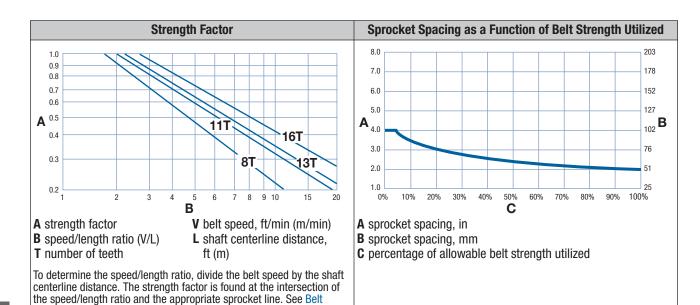
	Sprocket and Support Quantity Reference										
Belt Wi	dth Range ^a	Minimum Number of Sprockets	V	/earstrips ^c							
in	mm	Per Shaft ^b	Carryway	Returnway							
5	127	2	2	2							
6	152	2	2	2							
7	178	2	2	2							
8	203	2	2	2							
10	254	3	3	2							
12	305	3	3	2							
14	356	5	3	3							
15	381	5	3	3							
16	406	5	3	3							
18	457	5	3	3							
20	508	5	4	3							
24	610	7	4	3							
30	762	9	5	4							
32	813	9	5	4							
36	914	9	5	4							
42	1,067	11	6	5							
48	1,219	13	7	5							
54	1,372	15	7	6							
60	1,524	15	8	6							
72	1,829	19	9	7							
84	2,134	21	11	8							
96	2,438	25	12	9							
120	3,048	31	15	11							
144	3,658	37	17	13							
For other widths (102 mm) cente	, use an odd numb rline spacing.	er of sprockets at maximum 4 in	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing							

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 5 in (127 mm). If the actual width is critical, contact Intralox Customer Service. Intralox does not recommend turning belts wider than 36 in (914 mm). For turning applications that require wider belts, contact Intralox Customer Service.

^b This number is a minimum. Heavy-load applications can require additional sprockets (Place sprockets every inch for heavily loaded applications). For lockdown location, see Retainer Rings and Center Sprocket Offset.

^C The number of wearstrips given does not include the hold down wearstrip.

Selection Instructions for more information.



Molded Sprockets Nom. Pitch Nom. Outer Nom. Hub Number Diameter Diameter Width **Available Bore Sizes** of Teeth (Chordal Round Square Round Square Action) in mm in mm in mm in in mm mm 3.9 102 8 (7.61%) 99 4.0 1.0 25 1.5 40 13 6.3 160 6.4 163 1.0 25 2.5 60 (2.91%) 1.5, 2.5 16 7.7 196 7.8 198 1.0 25 40,60 (1.92%)

							EZ CI	ean [™] Sj	orocket	s ^a			
Number of Teeth		Pitch neter	Nom. Outer Diameter		Nom. Hub Width		A	Available Bore Sizes		Available Bore Sizes		es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm			
11 (4.05%)	5.3	135	5.4	137	1.0	25		1.5		40			
13 (2.91%)	6.3	160	6.4	163	1.0	25		1.5		40			

^a When using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain the published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

							Aceta	l Split S	procke	ts	
Number of Teeth		Pitch neter	Nom. Outer Diameter		Nom. Hub Width		A	Available Bore Sizes		es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
13 (2.91%)	6.3	160	6.4	163	1.5	38	1.5	1.5			

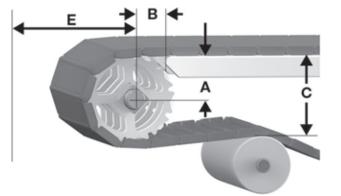
						Gla	ss-Filled	d Nylon	Split Sp	orocket ^a	
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	Available Bore Sizes			es	
(Chordal							Round	Square	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
13 (2.91%)	6.3	160	6.4	163	1.5	38	1-7/16				
^a Contact In	tralox C	ustomer	Service	for prefe	rred meth	nod of loc	king down	sprockets	and for p	roper spro	ocket timing.

		ghts	
Available F	ight Height		
in mm		Available Materials	
4	102	Polypropylene, polyethylene, acetal	
Streamline fli	ghts are smooth	on both sides.	
 Each flight ex No fasteners 		enter of the module, molded as one part.	
 Custom flight more information 		lable. Contact Intralox Customer Service for	
 Flights are av 	ailable in linear i	ncrements of 1.5 in (38 mm).	
Standard inde	ent: 0.625 in (15.	9 mm).	and the second se
			6
			20
			Shitter 1
			260.00

SERIES 2200

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 76: A, B, C, and E drive dimensions

	S2200 Conveyor Frame Dimensions									
Sprocket Description A				E	3	C		E		
Pitch D	iameter	Number	Range (Bott	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	Radius Flush Grid, Radius with Edge Bearing									
3.9	99	8	1.44	37	1.93	49	3.92	100	2.40	61
5.3	135	11	2.18	55	2.27	58	5.32	135	3.10	79
6.3	160	13	2.67	68	2.52	64	6.27	159	3.57	91
7.7	196	16	3.40	86	2.78	71	7.69	195	4.28	109

S2200 Conveyor Frame Dimensions										
Spro	cket Descri	ption		A		В		C		E
Pitch D	iameter	Number	Range (Bott	om to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				Radius Fr	iction Top					
3.9	99	8	1.44-1.58	36-40	1.93	49	4.17	106	2.65	67
5.3	135	11	2.18-2.29	55-58	2.27	58	5.57	142	3.35	85
6.3	160	13	2.67-2.76	68-70	2.52	64	6.52	166	3.82	97
7.7	196	16	3.40-3.47	86-88	2.78	71	7.94	202	4.53	115
	Radius Flush Grid with Insert Rollers									
3.9	99	8	1.44-1.58	36-40	1.93	49	4.00	102	2.48	63
5.3	135	11	2.18-2.29	55-58	2.27	58	5.42	138	3.19	81
6.3	160	13	2.67-2.76	68-70	2.52	64	6.36	162	3.66	93
7.7	196	16	3.40-3.47	86-88	2.78	71	7.78	198	4.37	111
		F	Radius Flush Grid	High Deck, Flush	n Grid High	Deck with E	dge Bearing	9		
3.9	99	8	1.44-1.58	36-40	1.93	49	4.42	112	2.90	74
5.3	135	11	2.18-2.29	55-58	2.27	58	5.82	148	3.60	91
6.3	160	13	2.67-2.76	68-70	2.52	64	6.77	172	4.07	103
7.7	196	16	3.40-3.47	86-88	2.78	71	8.19	208	4.78	121
^a For genera	For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.									

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S2200 Dead Plate Gap								
	Sprocket Description	Minimum Gap						
Pitch Diameter								
in	mm	Number of Teeth	in	mm				
3.9	99	8	0.150	3.8				
5.3	135	11	0.108	2.8				
6.3	160	13	0.091	2.3				
7.7	196	16	0.074	1.9				

HOLD DOWN WEARSTRIPS

S2200 is available with and without an edge tab. A hold down wearstrip style is available for each edge style. The tab edge design allows the belt to be held down without the wearstrip interfering with the carryway surface.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

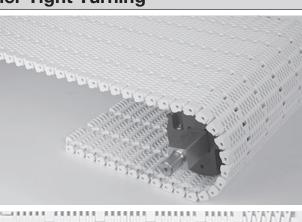
- Contact Intralox Customer Service for inside turn radius guidelines.
- The minimum straight run required between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run (leading to drive shaft) must be a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths (down to 1.5 × belt width) require a gravity take-up to avoid sprocket wear and tracking problems. See Take-Ups.
- The minimum length of the first straight run (immediately after the idle shaft) is 1.5 times the belt width. When shorter lengths are required (down to 1.0 × the width), an idle roller can be used in place of sprockets.

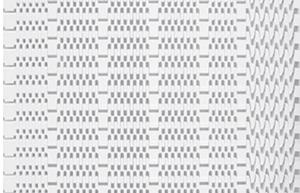
Flush Grid Nose-Roller Tight Turning

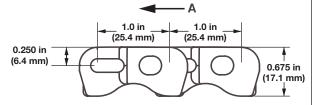
	in	mm		
Pitch	1.0	25.4		
Minimum Width	12.0	305		
Maximum Width	36.0	914		
Width Increments	3.0	76.2		
Maximum Opening Size (Sphere)	0.245 6.2			
Open Area (fully extended)	28%			
Hinge Style	Closed			
Rod Retention; Rod Type	Occluded edge; unheaded			

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Smooth upper surface provides free product movement.
- Smaller opening size enhances belt safety
- The underside design allows the belt to run smoothly around a 0.75 in (19.1 mm) nosebar.
- Available with tight turning modules built on one side.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprockets have large lug teeth that enhance sprocket life.
- Designed for sideflexing applications with a standard turn radius of 1.7 times belt width (measured from inside edge) for belt widths up to 27.0 in (686 mm). The standard turn radius is 1.75 times belt width for 30.0 in (762 mm) wide belts, 1.8 times belt width for 33-36.0 in (838-914 mm) wide belts.
- Minimum turn radius information is available in the S2300 Conveyor Design Guidelines. Contact Intralox Customer Service for more information.
- Can make 180 degree turns
- Belts can turn either clockwise or counterclockwise. Turning direction must be specified at order. Not available for S-turn applications.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Minimizes floor space requirements.
- · Minimal back tension required for sprocket engagement
- Sprocket placement: every 3.00 in (76.2 mm) from outer edge, except drive pocket nearest inner edge. Drive pocket nearest inner edge is 3.75 in (95.3 mm) from the inner edge.







A preferred run direction for flat, turning applications

Belt Data									
	Default Rod Material, Diameter 0.18 in	Straight Belt Strength			Temp. Range (continuous)		Belt	Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²	
Acetal	Nylon	900	13,100	For curved belt strength calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	2.40	11.72	

Flush Grid Nose-Roller Tight Turning with Edge Bearing

	in	mm					
Pitch	1.00	25.4					
Minimum Width	12.0	305					
Maximum Width	36.0	914					
Width Increments	3.0	76.2					
Maximum Opening Size (sphere)	0.245	6.2					
Open Area	28%						
Hinge Style	Closed						
Rod Retention; Rod Type	Occluded edge; unheaded						

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Smaller opening size enhances belt safety.
- Edge bearings are stainless steel and are retained by stainless steel pins.
- Edge bearings are available on one side of the belt. Bearings must be placed on the inside edge of the turn, and must be configured in every other row of the belt.
- The underside design allows the belt to run smoothly around a 0.75 in (19.1 mm) nosebar.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Designed for sideflexing applications with a standard turn radius of 1.7 times belt width (measured from inside edge) for belt widths up to 27.0 in (686 mm). The standard turn radius is 1.75 times belt width for 30.0 in (762 mm) wide belts, 1.8 times belt width for 33-36.0 in (838-914 mm) wide belts.
- Minimum turn radius information is available in the S2300 Conveyor Design Guidelines. Contact Intralox Customer Service for more information.
- Belts can turn either clockwise or counterclockwise. Turn direction must be specified when ordering. Not available for S-turn applications.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Use the *Intralox*® *Engineering Program* to determine if edge bearings are suitable for each application.

0.250 in (25.4 mm) (25.4 m



Belt Data									
	Default Rod Material, Diameter 0.18 in	Straight Belt Strength			Temperature Range (continuous)		Belt	Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²	
Acetal	Nylon	900	13,100	For curved belt strength calculations, contact Intralox Customer Service.	0 to 200	-17.8 to 93	2.40	11.72	

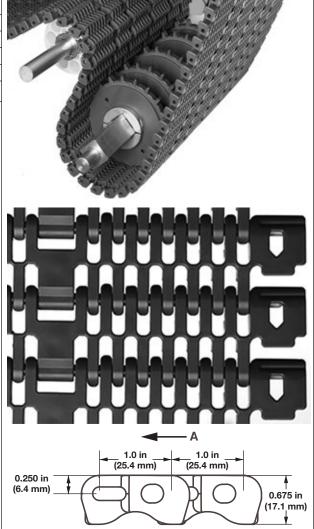
2025 Engineering Manual-Modular Plastic Belts

Flush Grid Nose-Roller Dual Turning

	in	mm	
Pitch	1.0	25.4	
Minimum Width	12	305	
Maximum Width	36	914	
Width Increments	3	76.2	
Opening Size (Sphere)	0.245 6.2		
Open Area	28%		
Hinge Style	Closed		
Rod Retention; Rod Type	Occluded edge; unheaded		

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Use the *Intralox*® *Engineering Program* to determine the strength requirement of most radius applications and ensure the belt is strong enough for the application.
- Minimizes floor space requirements.
- Can be used in S-turn applications.
- Unheaded rods simplify maintenance.
- The underside design allows the belt to run smoothly around a 0.75-in (19.1 mm) nosebar.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Designed for sideflexing applications with a minimum turn radius of 2.2 times belt width (measured from inside edge) for widths up to 27.0 in (686 mm). The standard turn radius is 2.3 times the belt width for 30-36.0 in (762-914 mm) wide belts.
- Minimum turn radius information is available in the S2300 Conveyor Design Guidelines. Contact Intralox Customer Service for more information.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Sprockets have large lug teeth that enhance sprocket life.
- Sprocket placement: every 3.00 in (76.2 mm) from outer edge, except drive pocket nearest flush edge. Drive pocket nearest flush edge is 3.75 in (95.3 mm) from belt edge.



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A preferred run direction for flat, turning applications

Belt Data								
	Default Rod Material, Diameter 0.18 in	Ó har a stála			Temperature Range (continuous)		Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²
Acetal	Nylon	900	13,100	For curved belt strength calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	2.40	11.72

Flush Grid Nose-Roller Dual Turning with Edge Bearing

	in	mm					
Pitch	1.00	25.4					
Minimum Width	12	305					
Maximum Width	36	914					
Width Increments	3.0	76.2					
Maximum Opening Size (sphere)	0.245	6.2					
Open Area	28	8%					
Hinge Style	Clo	sed					
Rod Retention; Rod Type	Occluded edg	ge; unheaded					

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Edge bearings are stainless steel and are retained by stainless steel pins.
- Edge bearings are on both sides of the belt and must be configured in every other belt row.
- The underside design allows the belt to run smoothly around a 0.75 in (19.1 mm) nosebar.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Designed for dual-turning applications.
- Designed for sideflexing applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge) for widths up to 27.0 in (686 mm). The standard turn radius is 2.3 times the belt width for 30-36.0 in (762-914 mm) wide belts.
- Minimum turn radius information is available in the S2300 Conveyor Design Guidelines. Contact Intralox Customer Service for more information.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Before finalizing a conveyor design, use CalcLab to calculate the estimated belt pull and ensure the belt is strong enough for the application. To access CalcLab, go to <u>calclab.intralox.com</u>.
- Sprocket placement: every 3.00 in (76.2 mm) from the outer edge, except the drive pocket nearest the flush edge. The drive pocket nearest the flush edge is 3.75 in (95.3 mm) from the belt edge.

1.00 in 1.00 in (25.4 mm) (25.4 mm) 0.675 in (17.1 mm) 0.250 in (6.4 mm) A preferred run direction for flat, turning applications

Belt Data										
Default Rod Material, Diameter 0.18 in		Straight Belt Strength			Temperat (conti	Belt Mass				
Belt Material	(4.6 mm)	lbf/ft N/m		Curved Belt Strength	°F°C		lb/ft ²	kg/m²		
Acetal	Nylon	900	13,100	For curved belt strength calculations, contact Intralox Customer Service.	-50 to 200	-46 to 93	2.40	11.72		

Flush Grid Mold to Width Nose-Roller Dual Turning

	in	mm		
Pitch	1.00	25.4		
Minimum Width	6.0	152.4		
Opening Size (Sphere)	0.245	6.2		
Open Area	28%			
Hinge Style	Closed			
Rod Retention; Rod Type	Snap-lock; headed			

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Flush edge design features an extension to reduce the opening size.
- Sprockets have large lug teeth that enhance sprocket life.
- Flush edge or tab edge available.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Designed for sideflexing applications with a standard turn ratio of 2.2 times the belt width (measured from inside edge).
- Use the *Intralox Engineering Program* to determine the strength requirement of most radius applications and ensure the belt is strong enough for the application.
- Intralox recommends using Dynamic Nose-Rollers in tight transfer applications.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Minimum nose-roller diameter: 0.75 in (19.1 mm).
- Available widths: 6 in (152.4 mm) and 9 in (228.6 mm).
- Required number of sprockets:
 - 6 in (152.4 mm) belts: two sprockets. Avoid split sprockets. These sprockets do not fit on a 6 in (152.4 mm) wide belt.
 - 9 in (228.6 mm) belts: two sprockets. Split sprockets can be used.
- Tab edge belt measurement does not include tabs. Tabs extend approximately 0.3 in (8 mm) x 0.24 in (6 mm) on each side of belt, inside the wearstrip.

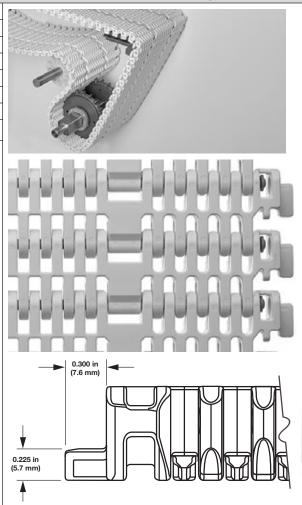
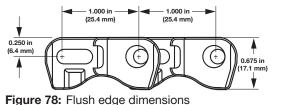


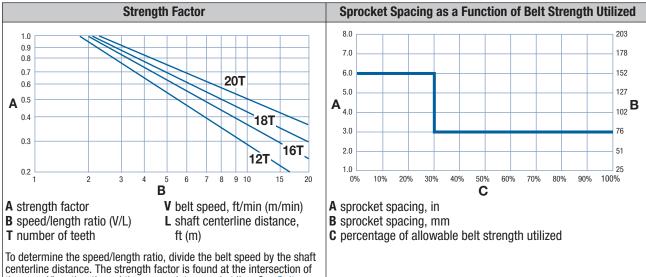
Figure 77: Tab edge dimensions



Belt Data Belt Width Straight Belt **Default Rod Temperature Range** Strength Material, (continuous) **Belt Mass** Diameter Belt 0.18 in **Curved Belt** in mm Material (4.6 mm) lbf Ν Strength °F °C lb/ft kg/m 6 152.4 Acetal Nylon 700 3,110 For curved belt -50 to 200 -46 to 93 1.20 1.79 strength calculations, 9 228.6 Acetal Nylon 700 3.110 -50 to 200 -46 to 93 1.80 2.68 contact Intralox Customer Service.

Sprocket and Support Quantity Reference

NOTE: For sprocket carryway and returnway support wearstrip spacing, contact Intralox Customer Service or see the Series 2300 Design Guidelines.



the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.

Number Nom. Pitch Nom. Outer Nom. Hub	Nylon Split S							
of Teeth Diameter Diameter Width Available Bore Sizes							-	Number of Teeth
		mm	in	mm	in	mm	in	(Chordal Action)
16 (1.92%) 5.1 130 5.2 132 1.9 48 1.25 1.5 30, 40 40	8 1.25 1.5	48	1.9	132	5.2	130	5.1	16 (1.92%)
18 (1.52%) 5.8 147 5.9 150 1.9 48 1.25, 1-7/16 1.5 40 40		48	1.9	150	5.9	147	5.8	18 (1.52%)
20 6.4 163 6.5 165 1.9 48 1.25, 1.5 40 40 (1.23%)		48	1.9	165	6.5	163	6.4	20 (1.23%)

	Nylon Sprockets														
Number of Teeth	Nom. Pitch Diameter		Nom. Outer Diameter						-	. Hub dth	Av	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm					
12 (3.41%)	3.9	99	3.9	99	1.0	25	1.25	1.5		40	phile and a second seco				
16 (1.92%)	5.1	130	5.2	132	1.0	25	1.25	1.5	40	40					
18 (1.52%)	5.8	147	5.9	150	1.0	25	1.25	1.5	40	40					
20 (1.23%)	6.4	163	6.5	165	1.0	25	1.25	1.5	40	40					

Dynamic Nose-Rollers

	- ,								
Standard Nose-Roller Widths									
U.S. Sizes (in)	Metric Sizes (mm)								
4.5	170.0								
6.0	255.0								
9.0	340.0								
12.0	425.0								
15.0									
18.0									
24.0									

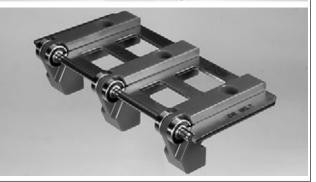
• U.S. sizes are available in 4.5 in, 6 in, and then in 3 in increments. Metric sizes are available in 85 mm (3.35 in) increments.

• For other belt widths, combine multiple nose-rollers in the available increments. For assistance, contact Intralox Customer Service.

• Made of FDA-compliant, blue, oil-filled nylon.

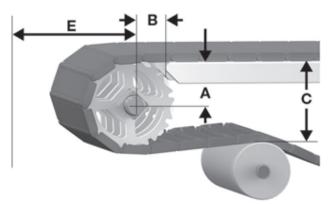
• Roller diameter: 0.75 in (19 mm)





CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- \bm{B} horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- C vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 79: A, B, C, and E drive dimensions

S2300 Conveyor Frame Dimensions										
Spro	cket Descri	ption	l l	E	В		C			
Pitch D	iameter	Number	Range (Bott							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
3.9	99	12	1.44-1.51	37-38	1.92	49	3.69	94	2.24	57
5.1	130	16	2.09-2.14	53-54	2.27	58	4.95	126	2.88	73
5.8	147	18	2.41-2.45	61-62	2.46	62	5.58	142	3.19	81
6.4	163	20	2.73-2.77	69-70	2.57	65	6.22	158	3.51	89
a Eor gonora	For general applications and applications where and transfer of tip-sensitive product is not critical use the bottom of the range									

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S2300 Dead Plate Gap									
	Sprocket Description	Minimu	Minimum Gap						
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
3.9	99	12	0.065	1.7					
5.1	130	16	0.050	1.3					
6.4	163	20	0.039	1.0					

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

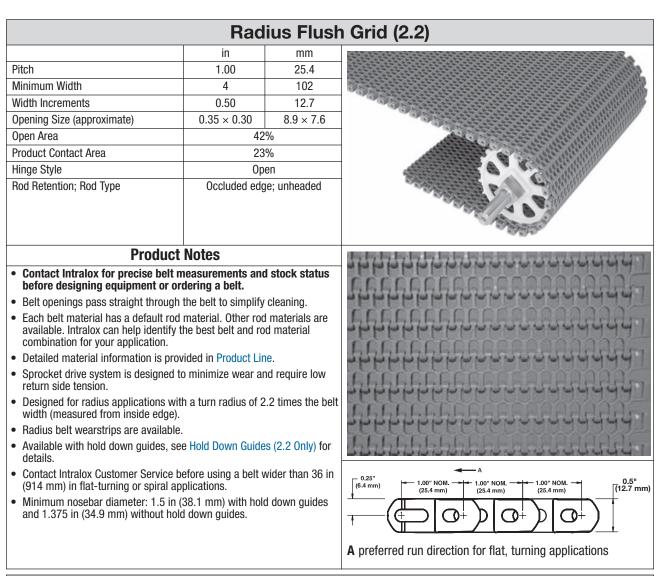
DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for the standard edge S2300 belts is 2.2 times the belt width, measured from the inside edge. For widths 30 in to 36 in (762 mm to 914 mm), use 2.3 times the belt width for minimum turn radius.
- The minimum straight run required between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run (leading to the drive shaft) must be a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths (down to 1.5 × belt width) require a gravity take-up to avoid sprocket wear and tracking problems. See Take-Ups.
- The minimum length of the first straight run (immediately after the idle shaft) is 1.5 times the belt width. When shorter lengths are required (down to 1.0 × the width), an idle roller or an Intralox Dynamic Nose-Roller can be used in place of sprockets.

	Tig	ht Turnir	ng Radius
	in	mm	
Pitch	1.00	25.4	
Minimum Width	7	178	
Width Increments	0.50	12.7	
Opening Size (approximate)	0.35 × 0.30	8.9 × 7.6	
Open Area	42	%	
Product Contact Area	23	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type Occluded edge; unheaded			
			A day of the provide of the
Product	Notes		1'A'A'AAAAAAAAAAAAAAAAA
 Contact Intralox for precise belt measure designing equipment or ordering a bell 		status before	
 Belt openings pass straight through the b 	elt to simplify cleanir	ıg.	
 Available with tight turning modules built inside 1.7 modules and outside 2.2 modules 			
 Each belt material has a default rod mate Intralox can help identify the best belt an application. 			
Detailed material information is provided	in Product Line.		
 Sprocket drive system is designed to mir tension. 	nimize wear and requ	ire low return-side	
 Contact Intralox Customer Service before (457 mm) in spiral and flat turning applic 	ations.		
 Designed for sideflexing applications with belt width (measured from inside edge) for 	or belt widths up to 1	8 in (457 mm).	100000000000000000000000000000000000000
 For belt widths over 18 in (457 mm) to radius is 1.8 times the belt width. 			
 For belt widths over 24 in (610 mm) to radius is 2.0 times the belt width. 			
 For belt widths over 30 in (762 mm) to radius is 2.2 times the belt width. 	36 in (914 mm), the	standard turn	1.00" NOM. 1.00" NOM. 1.00" NOM. (25.4 mm) (25.4 mm)
 Radius belt wearstrips are available. 		0.25" (6.4 mm)	
 Looking in the direction of flat-turning tra the right side belt edge with tight turning 	modules is 2.625 in	(66.7 mm).	0.5" (12.7 mm) (+ + + + + + + + + + + + + + + + + + +
 Minimum sprocket indent from the left si modules: 2.875 in (73 mm). 		nt turning	
 Minimum nosebar diameter: 1.375 in (34) 	l.9 mm).		A preferred run direction for flat, turning applications

	Belt Data												
	Default Rod Material, Diameter	U U	ht Belt ngth		Temp. Range (continuous)		Belt	Belt Mass					
Belt Material	0.18 in (4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	0°	lb/ft²	kg/m²					
Polypropylene	Acetal	600	8,760	For curved belt strength	34 to 200	1 to 93	1.20	5.86					
Acetal	Nylon	600	8,760	calculations, contact Intralox	-50 to 200	-46 to 93	1.73	8.44					
Polypropylene	Polypropylene ^a	600	8,760	Customer Service.	34 to 220	1 to 104	1.12	5.47					
^a Polypropylene ro	ds can be installed in polypropy	lene belts/	when extra	a chemical resistance is required. Ple	ase note lower be	elt strength.							

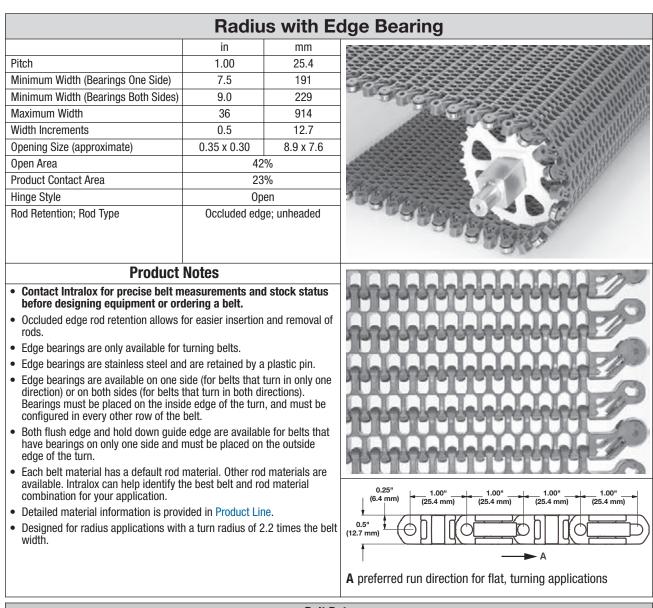


	Belt Data											
	Default Rod Material,	Straight Belt Strength		Curved Belt	•	ure Range 1uous)	Belt Mass					
Belt Material	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	Strength	°F	°C	lb/ft ²	kg/m²				
Detectable acetal	HR nylon	1,300	19,000	For curved belt	-50 to 200	-46 to 93	1.70	8.30				
X-ray detectable acetal ^a	X-ray detectable acetal	1,700	24,800	strength calculations,	-50 to 200	-46 to 93	1.85	9.03				
HHR nylon	HHR nylon	1,700	24,800	contact Intralox Customer Service.	-50 to 310	-46 to 154	1.43	6.98				
^a Designed specifically for det	ection by X-ray machines.											

	Mold to Wi	dth Rad	ius Flush Grid 2.2
	in	mm	
Pitch	1.00	25.4	
Molded Width	4	101.6	
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6	100200
Open Area	42	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock		
Produ	ct Notes		
Contact Intralox for precise bel before designing equipment or		l stock status	Garring
Belt openings pass straight throu	gh the belt to simplify	cleaning.	Charalaa
 Each belt material has a default r available. Intralox can help identi combination for your application. 	fy the best belt and ro		
• Detailed material information is p	provided in Product Lir	ie.	
Sprocket drive system minimizes tension.	wear and requires lo	w return-side	
• Available with hold down guides, details.	see Hold Down Guide	es (2.2 Only) for	SUCCESSION
 Hold down guides cannot be used sprockets or 3.9 in pitch diamete 			
Radius belt wearstrips are available	ble.		
 Minimum nosebar diameter: 1.5 and 1.375 in (34.9 mm) without h 		0.25 in NOM. (6.4 mm) (25.4 mm)	

Belt Data Default Rod Straight Belt Material, Strength Temp. Range (continuous) **Belt Mass** Diameter 0.18 in **Curved Belt Strength Belt Material** (4.6 mm) lbf Ν °F °C lb/ft kg/m For curved belt strength calculations, contact Intralox Customer Service. 2,490 Nylon 560 -50 to 200 -46 to 93 0.56 0.83 Acetal Acetal 400 1,780 0.39 0.57 Polypropylene 34 to 200 1 to 93

A preferred run direction for flat, turning applications



	Belt Data											
	Default Rod Material, Diameter 0.18 in	-	ht Belt ngth		Temperat (conti	Belt Mass						
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²				
Acetal	Nylon	1,700	24,800	For curved belt strength calculations, contact Intralox Customer Service.	0 to 200	-18 to 93	1.59	7.76				

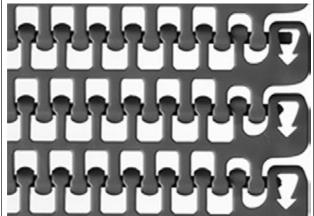
Radius Flush Grid with Heavy-Duty Edge

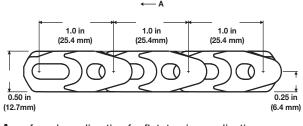
	in	mm
Pitch	1.0	25.4
Minimum Width	4.0	101.6
Width Increments	0.50	12.7
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6
Open Area	42	2%
Hinge Style	Ор	en
Rod Retention; Rod Type	Occluded edg	ge; unheaded

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Heavily reinforced and carefully sculpted edge is designed to resist belt snagging and edge damage while maintaining cleanability.
- Flush edge features an intuitive molded-in arrow to indicate preferred run direction, and extensions to reduce finger entrapment.
- Load-Sharing[™] belt edge improves how the load is shared and minimizes belt fatigue failure.
- Belt openings pass straight through the belt to simplify cleaning.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Designed for radius applications with a turn radius of 2.2 times the belt width (measured from the inside edge).
- Sprocket drive system minimizes wear and requires low return-side tension.
- Contact Intralox Customer Service before using a belt wider than 36 in (914 mm) in flat-turning or spiral applications.
- Temperature, environmental conditions, and product characteristics affect the maximum degree of incline. Consider these factors when designing conveyor systems using these belts.
- Available with hold down guides
- Radius belt wearstrips are available.
- Minimum nosebar diameter: 1.375 in (34.9 mm).

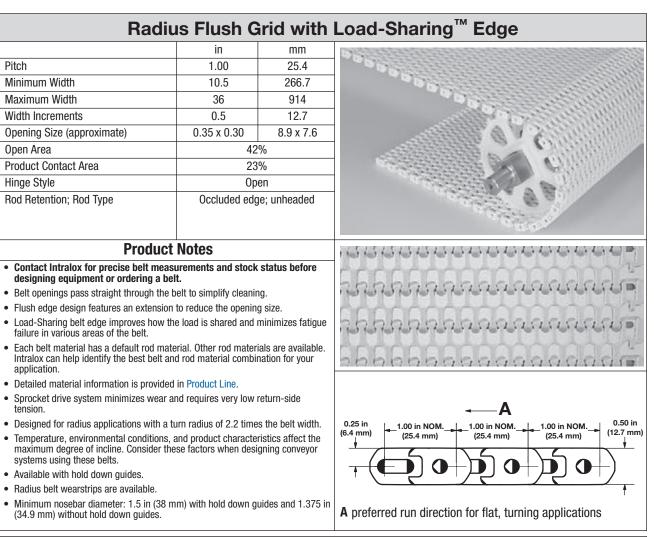






A preferred run direction for flat, turning applications

	Belt Data											
	Default Rod Material, Diameter 0.18 in	U U	ght Belt ength		Temp. (contin	Belt Mass						
Base Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft²	kg/m²				
Polypropylene	РК	1,200	17,500		34 to 176	1 to 80	1.10	5.37				
Acetal	РК	1,700	24,800	For curved belt strength calculations, contact Intralox	-40 to 176	-40 to 80	1.59	7.7624				
HR Nylon	HR Nylon	1,700	24,800	Customer Service.	-50 to 240	-46 to 116	1.43	6.98				
РК	РК	1,700	24,800		-40 to 176	-40 to 80	1.4	6.8348				
^a Sideflexing application	ons must not exceed 180°F (82°C).										

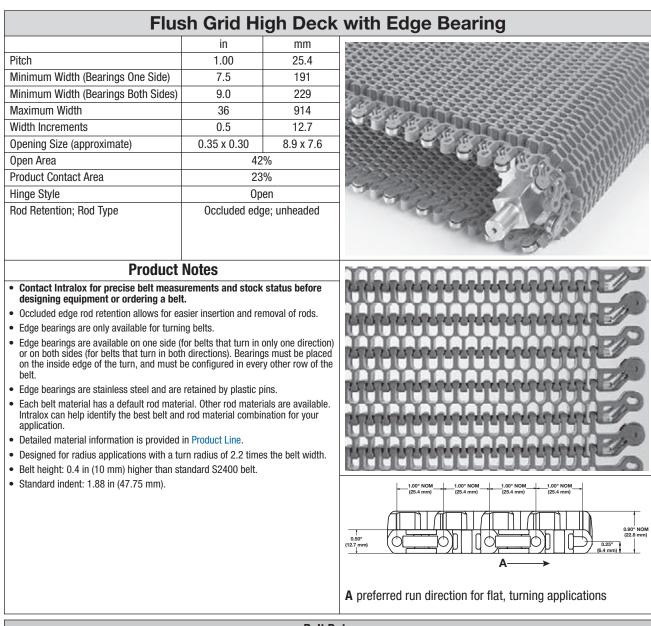


	Belt Data											
Default Rod Material, Diameter 0.18 in		Straight Belt Strength			Temp. (contin	Belt Mass						
Base Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²				
Polypropylene	Acetal	1,200	17,500		34 to 200	1 to 93	1.10	5.37				
Acetal	Nylon	1,700	24,800	For curved belt strength	-50 to 200	-46 to 93	1.59	7.76				
Polypropylene	Polypropylene	1,000	14,600	calculations, contact Intralox	34 to 200	1 to 104	1.04	5.10				
X-ray detectable acetal	X-ray detectable acetal	1,700	24,800	Customer Service.	-50 to 200	-46 to 93	1.85	9.03				
^a Sideflexing applicati	ons must not exceed 180° F (8	2° C).										

Radius F	lush Grid	MTW wi	ith Load-Sharing [™] Edge
	in	mm	
Pitch	1.00	25.4	
Minimum Width	4.0	101.6	and the set of the set
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6	ORIENTED AND AND AND AND AND AND AND AND AND AN
Open Area	42	%	Children and the second of the second s
Hinge Style	Ор	en	
Rod Retention; Rod Type	Snap-lock	k; headed	
			0000
Product	Notes		
 Contact Intralox for precise belt measurement equipment or ordering a belt. 	nts and stock status b	efore designing	
• Flush edge design features an extension to redu	ice the opening size.		
 Load-Sharing[™] belt edge improves how the loa failure. 	ad is shared and minimi	zes belt fatigue	
 Each belt material has a default rod material. Of help identify the best belt and rod material com 			
Detailed material information is provided in Proc	duct Line.		10 7373737373
Designed for sideflexing applications with a star	ndard turn ratio of 2.2 ti	mes the belt width.	
Minimum recommended turn ratio is 1.95. Cons considering minimum turn ratio.	sult Intralox Customer Se	ervice when	
 Temperature, environmental conditions, and pro- degree of incline. Consider these factors when o belts. 			BABBBBB
Available with hold down guides			E / / / / / / / / / / / D
Radius belt wearstrips are available.			
• Available widths: 4 in (101.6 mm), 6 in (152.4 n		, ,	
 For 4 in (102 mm) wide belts with hold down gu sprockets. 	lides, do not use glass-t	liled nylon split	
• Maximum number of sprockets for 4 in (101.6 r	nm) belts:		
 without hold down guides: two 			
 with hold down guides: one 			
Maximum number of sprockets for 6 in (152.4 r for 6 in (152.4 mm) belts	nm) belts: Maximum nu	mber of sprockets	
•			
 without hold down guides: four. 			→
- with hold down guides: three.			1.00 in NOM 1.00 in NOM (25.4 mm) (25.4 mm)
 Maximum number of sprockets for 8 in (203.2 r guides: five. 	nm) belts with and with	out hold down	0.25 in NOM
 Maximum number of sprockets for 10 in (254 m guides: seven. 	nm) belts with and witho	out hold down	(6.4 mm) (6.4 mm) (13 mm)
Minimum nosebar diameter for belts:			
- without hold down guides: 1.375 in (34.9 mm	1)		A proferred run direction for flat turning applications
- with hold down guides: 1.50 in (38.1 mm).			A preferred run direction for flat, turning applications

Belt Data	Be	elt	D	a	ta
-----------	----	-----	---	---	----

	Default Rod Material,		Straig	Straight Belt Strength lbf (N)				Temp. Range (continuous)		Belt Mass Ib/ft (kg/m)			
	Diameter	Hold	4 in	6 in	8 in	10 in							
Base Belt	0.18 in	Down	(101.6	(152.4	(203.2	(254	Curved Belt			4 in	6 in	8 in	10 in
Material	(4.6 mm)	Guides	mm)	mm)	mm)	mm)	Strength	°F	°C	(101.6)	(152.4)	(203.2)	(254)
Acetal	Nylon Without With	Without	484 (2,150)	850 (3,780)	1,133 (5,040)	1,417 (6,300)	For curved	-50 to 200	-46 to 93	0.57 (0.85)	0.89 (1.32)	1.19 (1.77)	1.50 (2.23)
Acetai		With	242 (1,080)	726 (3,230)	1,133 (5,040)	1,417 (6,300)	belt strength calculations, contact	-50 to 200	-46 to 93	0.64 (0.95)	0.96 (1.42)	1.26 (1.88)	1.56 (2.32)
Delugranulana	Nylon	Without	400 (1,780)	600 (2,670)	800 (3,560)	1,000 (4,450)	Intralox Customer	34 to 220	1 to 104	0.39 (0.58)	0.60 (0.89)	0.82 (1.22)	1.01 (1.50)
Polypropylene	Nylon Wit	With	242 (1,080)	600 (2,670)	800 (3,560)	1,000 (4,450)	Service.	34 to 220	1 to 104	0.43 (0.64)	0.65 (0.978)	0.86 (1.28)	1.06 (1.58)



	Belt Data											
	Default Rod Material, Diameter 0.18 in	Ólara a stála			Temp. (contin	Belt Mass						
Base Belt Material	(4.6 mm)	lbf/ft	Ibf/ft N/m Curved Belt Strength		°F	°C	lb/ft ²	kg/m²				
Acetal	Nylon	1,700	24,800	For curved belt strength calculations, contact Intralox Customer Service.	0 to 200	-18 to 93	2.83	13.82				
^a Sideflexing applicati	ons must not exceed 180°F (8	2°C).										

Radius Flush Grid High Deck with Heavy-Duty Edge

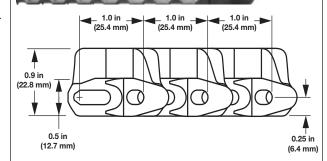
		-			
	in	mm			
Pitch	1.00	25.4			
Minimum Width	4	101.6			
Width Increments	0.5	12.7			
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6			
Open Area	42	2%			
Product Contact Area	23	8%			
Hinge Style	Open				
Rod Retention; Rod Type	Occluded edge; unheaded				

Product Notes

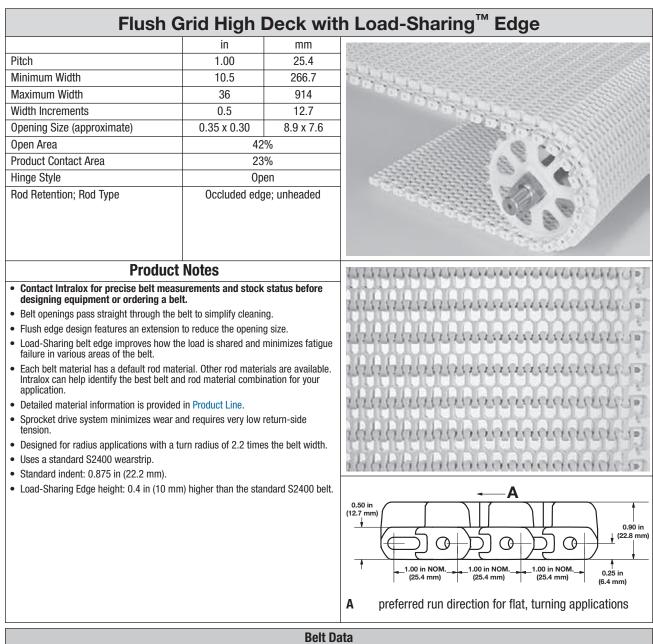
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Heavily reinforced and carefully sculpted edge is designed to resist belt snagging and edge damage while maintaining cleanability.
- Flush edge features an intuitive molded-in arrow to indicate preferred run direction, and extensions to reduce finger entrapment.
- Load-Sharing[™] belt edge improves how the load is shared and minimizes belt fatigue failure.
- Belt openings pass straight through the belt to simplify cleaning.
- Sprocket drive system minimizes wear and requires low return-side tension.
 Each belt material has a default rod material. Other rod materials are available.
- Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Makes turns with an inside radius of 2.2 times the belt width
- Radius belt wearstrips are available.
- Contact Intralox Customer Service before using a belt wider than 36 in (914 mm) in flat-turning or spiral applications.
- Flush Grid High Deck is 0.4 in (10 mm) higher than the standard S2400 belt.
- Standard indent: 0.875 in (22.2 mm)
- Minimum nosebar diameter: 1.375 in (34.9 mm)







	Belt Data									
	Default Rod Material, Diameter 0.18 in Belt Strength			Temperati (contii	Belt Mass					
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²		
Polypropylene	PK	1,200	17,500		34 to 176	1 to 80	1.90	9.28		
Acetal	PK	1,700	24,800	For curved belt strength calculations, contact Intralox	-40 to 176	-40 to 80	2.83	13.82		
HR Nylon	HR Nylon	1,700	24,800	Customer Service.	-50 to 240	-46 to 116	2.3	11.23		
PK	PK	1,700	24,800		-40 to 176	-40 to 80	2.49	12.16		



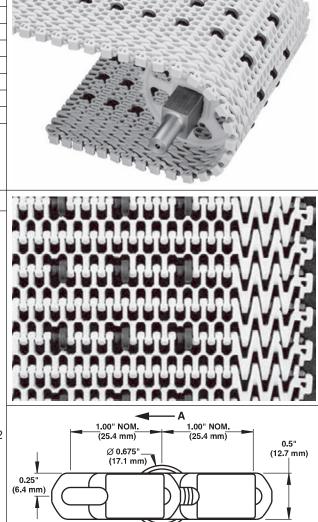
Belt Data											
	Default Rod Material, Diameter 0.18 in	, Straight Belt Strength			Temp. Range (continuous) ^a		Belt Mass				
Base Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²			
Polypropylene	Acetal	1,200	17,500	For curved belt strength	34 to 200	1 to 93	1.90	9.28			
Acetal	Nylon	1,700	24,800	calculations, contact Intralox	-50 to 200	-46 to 93	2.83	13.82			
Polypropylene	Polypropylene	1,000	14,600	Customer Service.	34 to 200	1 to 104	1.84	8.99			
^a Sideflexing applicati	^a Sideflexing applications must not exceed 180°F (82°C).										

Radius Flush Grid (2.4) with Insert Rollers

	in	mm				
Pitch	1.00	25.4				
Minimum Width	9	229				
Width Increments	1.00	25.4				
Opening Size (approximate)	0.35 × 0.30	8.9 × 7.6				
Open Area	42	42%				
Product Contact Area	23	3%				
Hinge Style	Op	ben				
Rod Retention; Rod Type	Occluded edge; unheaded					

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Uses acetal rollers.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- For radius applications requiring low back pressure accumulation with minimum radius of 2.4 times belt width (measured from inside edge).
- For low back pressure applications, place wearstrip between rollers. For driven applications, place wearstrip directly under rollers.
- Do NOT place sprockets in line with rollers.
- Belts 12 in (305 mm) wide and less have a turn ratio of 1.7.
- Contact Intralox Customer Service before using a belt width greater than 24 in (610 mm) in a flat turning or spiral applications.
- Standard roller width spacings: 2 in (51 mm), 3 in (76 mm) or 4 in (102 mm).
- Standard roller row spacings: 2 in (51 mm) or 4 in (102 mm).
- Roller indents: 3.5 in (89 mm) or 4 in (102 mm) based on roller width spacing selected.



A preferred run direction for flat, turning applications

	Belt Data										
	Default Rod Material,	aterial, Strength Roller Indents		Indents		Temperatu (contin	Belt Mass				
Belt Material	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	in	mm	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²	
Polypropylene	Acetal	500	7,300	3.5 or 4.0	89 or 102	For curved belt strength	34 to 200	1 to 93	1.20	5.86	
Acetal	Nylon	500	7,300	3.5 or 4.0	89 or 102	calculations, contact	-50 to 200	-46 to 93	1.73	8.44	
Polypropylene	Polypropylene	500	7,300	3.5 or 4.0	89 or 102	Service.	34 to 220	1 to 104	1.12	5.47	

Ra	adius Flush	Grid (2.8) with Insert Rollers
	in	mm	
Pitch	1.00	25.4	
Minimum Width	6	152	
Width Increments	1.00	25.4	
Dpening Size (approximate)	0.35 × 0.30	8.9 × 7.6	
)pen Area	42	%	
roduct Contact Area	23	%	
linge Style	Оре	en	
Rod Retention; Rod Type	Occluded edg	e; unheaded	The .
Produ	ict Notes		
 designing equipment or ordering a Each belt material has a default rod Intralox can help identify the best be application. Detailed material information is prov This belt uses the Series 2400 Radiu placement, turn radius increases to 2 For low back-pressure applications, applications, place wearstrips under Do not place sprockets in-line with re For radius applications requiring low minimum radius of 2.8 times belt wii Contact Intralox Customer Service be (610 mm) in flat-turning or spiral app Standard roller row spacing: 2 in (51 	material. Other rod materi It and rod material combir ided in Product Line. Is Flush Grid (2.2) as a bas 2.8. place wearstrips between rollers. ollers. back-pressure accumulai dth (measured from inside efore using a belt width gr plications. mm) or 4 in (102 mm).	nation for your se. Due to roller rollers. For driven tion with a e edge). eater than 24 in	
 Minimum width with hold down guid Roller indents: 2 in (51 mm), 2.5 in (based on roller width spacing. Minimum roller indent with hold down 	es: 8 in (203 mm). 63 mm), 3 in (76 mm), or 3	A preferred run direction for flat, turning applications	
		Polt D	

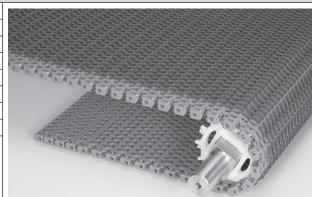
	Belt Data													
	Straight Belt Strength													
	Default Rod	Roller Width Spacing												
	Material, Diameter 0.18 in	2 in	51 mm	3 in	76 mm	4 in	102 mm	Roller I	ler Indents Curved Belt		Temp. Range (continuous)		Belt Mass	
Belt Material	(4.6 mm)	lbf/ft	N/m	lbf/ft	N/m	lbf/ft	N/m	in	mm	Strength	°F	°C	lb/ft ²	kg/m²
								2	51		34 to	1 to		
Polypropylene	Acetal	700	10,200	800	11,700	900	13,100	2.5 to 3.5	64 to 89	For curved belt strength	200	93	1.21	1.21
								2	51	calculations,	-50 to	-46 to		
Acetal	Nylon	1,000	14,600	1,200	17,500	1,300	12,749	2.5 to 3.5	64 to 89	contact Intralox	200	93	1.61	7.68
								2	51	Customer Service.	34 to	1 to		
Polypropylene	Polypropylene	600	8,760	700	10,200	800	11,700	2.5 to 3.5	64 to 89		220	104	1.04	5.11

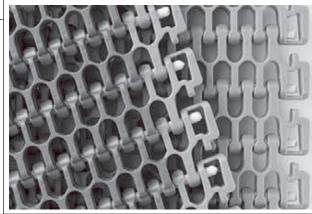
Flush Grid Friction Top 2.2 with Load-Sharing[™] Edge

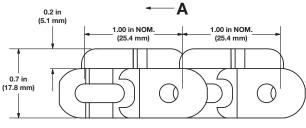
	in	mm			
Pitch	1.00	25.4			
Minimum Width	10.5	266.7			
Maximum Width	36.0	914.0			
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6			
Open Area	42%				
Product Contact Area	23	%			
Hinge Style	Ор	en			
Rod Retention; Rod Type	Occluded edge; unheaded				

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Belt openings pass straight through the belt to simplify cleaning.
- Flush edge design features an extension to reduce the opening size.
- Load-Sharing belt edge improves how the load is shared and minimizes fatigue failure in various areas of the belt.
- Available in grey polypropylene with grey rubber and white polypropylene with white rubber.
 Each belt material has a default rod material. Other rod materials are available. Intralox can
- help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprocket drive system minimizes wear and requires very low return-side tension.
- Designed for radius applications with a turn radius of 2.2 times the belt width.
 Temperature, environmental conditions, and product characteristics affect the maximum degree of incline. Consider these factors when designing conveyor systems using these belts.
- Available with hold down guides.
- Radius belt wearstrips are available.
- Indent for friction surface: 1.125 in (28.6 mm).
- Minimum nosebar diameter: 1.5 in (38 mm) with hold down guides and 1.375 in (34.9 mm) without hold down guides.







A preferred run direction for flat, turning applications

	Belt Data											
		Default Rod Material,	Belt S			p. Range ntinuous) Belt Mass				Agency Acceptability		
Base Belt Material	Base/Friction Top	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	Curved Belt Strength	۴	°C	lb/ft²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/Grey	Acetal	1,200	17,500	For curved belt	34 to 150	1 to 66	1.35	6.59	64 Shore A		
Polypropylene	White/White	Acetal	1,200	17,500	strength calculations,	34 to 150	1 to 66	1.35	6.59	55 Shore A	b	С
Polypropylene	Grey/Grey	Polypropylene	1,000	14,600	contact Intralox Customer	34 to 150	1 to 66	1.29	6.30	64 Shore A		
Polypropylene	White/White	Polypropylene	1,000	14,600	Service.	34 to 150	1 to 66	1.29	6.30	55 Shore A	b	С

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

 $^{b}\,\mathrm{FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

^CEU compliant with restriction: Do not use in direct contact with fatty foods.

Radius Frict	in	mm
Pitch	1.00	25.4
Minimum Width	4.0	101.6
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6
Open Area		2%
Hinge Style	Or	ben
Rod Retention; Rod Type		k; headed
Produ	ict Notes	
 Contact Intralox for precise belt measur equipment or ordering a belt. 	rements and stock status	before designing
Flush edge design features an extension to	reduce the opening size.	
 Load-Sharing[™] belt edge improves how the failure. 	he load is shared and minim	izes belt fatigue
Available in grey polypropylene with grey r	ubber and white polypropyle	ene with white rubber.
 Each belt material has a default rod material help identify the best belt and rod material 	ial. Other rod materials are a combination for your applic	available. Intralox can ation.
Detailed material information is provided in	n Product Line.	
Detailed material information is provided in		
Designed for sideflexing applications with		
Minimum recommended turn ratio is 1.95. considering minimum turn ratio.		
 Temperature, environmental conditions, an degree of incline. Consider these factors w belts. 		
Available with hold down guides		
Radius belt wearstrips are available.		
Available widths: 4 in (101.6 mm), 6 in (15	52.4 mm), 8 in (203.2 mm), a	and 10 in (254 mm).
 Indent for friction surface: On 4 in (101.6 mm) and 6 in (152.4 mm)) widther indept molded at (70 in (17 79 mm)
 On 4-in (101.6 mm) and 6-in (152.4 mm) On 8-in (203.2 mm) and 10-in (254 mm) 	,	, ,
. , . ,	,	, ,
 For 4 in (102 mm) wide belts with hold dow sprockets. 	wi guides, do not use glass:	-mieu nyion spiit
Maximum number of sprockets:		
- 4 in (101.6 mm) belts without hold dowr	n guides: two sprockets.	
- 4 in (101.6 mm) belts with hold down gu		
- 6 in (152.4 mm) belts without hold dowr	•	
 6 in (152.4 mm) belts with hold down gu 8 in (203.2 mm) belts with and without h 		kote
 - 8 in (203.2 mm) belts with and without h - 10 in (254 mm) belts with and without h 	• ·	
, , , , , , , , , , , , , , , , , , ,	Sia aowin guidoo. Soveri opri	001010.
 Minimum nosebar diameter: belts without hold down guides: 1.375 ir 	n (34 9 mm)	
	н (от. э нин).	

- belts with hold down guides: 1.50 in (38.1 mm).

A preferred run direction for flat, turning applications

	Belt Data												
	Default Rod Material,		Strai	ght Belt S	trength Ib	f (N)		Temp. I (contin	-	В	elt Mass II	o/ft (kg/m)
	Diameter		4.0 in	6.0 in	8.0 in	10.0 in				4.0 in	6.0 in	8.0 in	10.0 in
Base Belt	0.18 in	Hold Down	(101.6	(152.4	(203.2	(254	Curved Belt			(101.6	(152.4	(203.2	(254
Material	(4.6 mm)	Guides	mm)	mm)	mm)	mm)	Strength	F°	C°	mm)	mm)	mm)	mm)
		Without	400 (1,780)	600 (2,670)	800 (3,560)	1,000 (4,450)	For curved belt strength	34 to 150	1 to 66	0.39 (0.58)	0.60 (0.89)	0.82 (1.22)	1.01 (1.50)
Polypropylene	Nylon	With	242 (1,080)	600 (2,670)	800 (3,560)	1,000 (4,450)	calculations, contact Intralox Customer Service.	34 to 150	1 to 66	0.43 (0.64)	0.65 (0.978)	0.86 (1.28)	1.06 (1.58)

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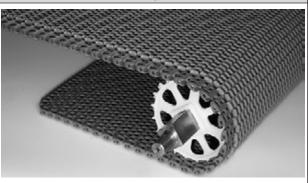
SERIES 2400

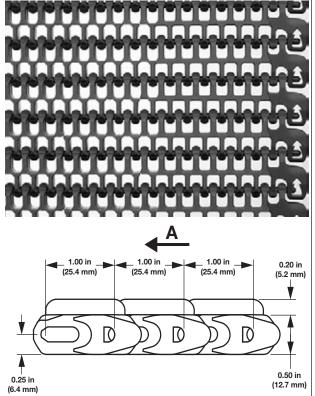
Radius Friction Top with Heavy-Duty Edge

	in	mm							
Pitch	1.0	25.4							
Minimum Width	4.0	101.6							
Width Increments	0.50	12.7							
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6							
Open Area	42	%							
Product Contact Area	23	%							
Hinge Style	Open								
Rod Retention; Rod Type	Occluded edge; unheaded								

Product Notes

- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Heavily reinforced and carefully sculpted edge is designed to resist belt snagging and edge damage while maintaining cleanability.
- Load-Sharing[™] belt edge improves how the load is shared and minimizes belt fatigue failure.
- · Belt openings pass straight through the belt to simplify cleaning.
- Available in grey polypropylene with grey rubber, white polypropylene with white rubber, and blue polypropylene with high-performance blue rubber.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- Sprocket drive system minimizes wear and requires low return-side tension.
- Contact Intralox Customer Service before using a belt wider than 36 in (914 mm) in flat-turning or spiral applications.
- Designed for radius applications with a turn radius of 2.2 times the belt width.
- Temperature, environmental conditions, and product characteristics affect the maximum degree of incline. Consider these factors when designing conveyor systems using these belts.
- Available with hold down guides.
- Indent for friction surface: 1.125 in (28.6 mm).
- Minimum nosebar diameter: 1.375 in (34.9 mm).





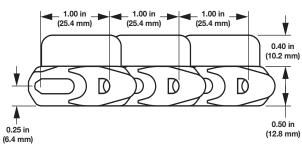
A preferred run direction for flat, turning applications

					Belt Data							
		Default Rod Material.	Belt S	trength		Temperature Range (continuous)		Belt	Mass		Agency Acceptability	
Base Belt Material	Base/Friction Top	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Polypropylene	Grey/grey	РК	1,200	17,500	For curved belt strength	34 to 150	1 to 66	1.29	6.30	64 Shore A		
Polypropylene	White/white	РК	1,200	17,500	calculations, contact	34 to 150	1 to 66	1.29	6.30	55 Shore A	b	с
Polypropylene	Blue/high- performance FT blue	РК	1,200	17,500	Intralox Customer Service.	34 to 176	1 to 80	1.35	6.59	59 Shore A	b	С
	ation Certificate prov with restriction: Do					ition 10/20)11.					

^CEU compliant with restriction: Do not use in direct contact with fatty foods.

0.4 in High	h Radius F	Friction 1					
	in	mm					
Pitch	1.0	25.4					
Minimum Width	4.0	101.6					
Width Increments	0.50	12.7					
Opening Size (approximate)	0.35 x 0.30	8.9 x 7.6					
Open Area	42	.%					
Product Contact Area	23	%					
Hinge Style	Ор	en					
Rod Retention; Rod Type Occluded edge; unheaded							
Product Notes							
 Contact Intralox for precise belt r before designing equipment or or Heavily reinforced and carefully scu snagging and edge damage while n Load-Sharing[™] belt edge improves minimizes belt fatigue failure. Belt openings pass straight through Available in white polypropylene with polypropylene with high-performance Each belt material has a default rod 	rdering a belt. Ilpted edge is desig naintaining cleanab how the load is sha the belt to simplify th white rubber and ce blue rubber. I material. Other roc	ned to resist beli ility. ared and cleaning. I blue 1 materials are					
 available. Intralox can help identify combination for your application. Detailed material information is pro Sprocket drive system minimizes w tension. 	vided in Product Lir	10.					
Temperature, environmental conditi affect the maximum degree of inclin designing conveyor systems using t	ne. Consider these f these belts.	factors when					
 Makes turns with an inside radius of 2.2 times the belt width Contact Intralox Customer Service before using a belt wider than 36 in 							

- Contact Intralox Customer Service before using a belt wider than 36 in (914 mm) in flat-turning or spiral applications.
- Indent for friction surface: 0.95 in (24.1 mm)
- Minimum nosebar diameter: 1.375 in (34.9 mm)



					Belt Data							
		Default Rod Material,	Belt S	trength		Tempe Rar (contir	Belt	Mass		Age Accept	ency tability	
Belt Material	Base/Friction Top	Diameter 0.18 in (4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^b
Polypropylene	White/white	РК	1,200	17,500	For curved belt strength	34 to 150	1 to 66	1.69	8.25	55 Shore A	С	d
Polypropylene	Blue/high- performance blue	РК	1,200	17,500	calculations, contact Intralox Customer Service.	34 to 176	1 to 80	1.77	8.65	59 Shore A	С	d

^b European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

^cFDA compliant with restriction: Do not use in direct contact with fatty foods.

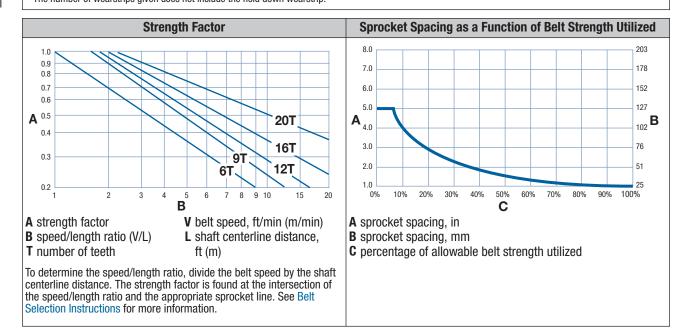
 $^{\rm d}$ EU compliant with restriction: Do not use in direct contact with fatty foods.

		Ra	dius Ra	ised Rib		
	i	n	mm	J (#199393939393939393	<i></i>	93388999
Pitch	1.	00	25.4	The second		11122222EEE
Minimum Width	4	4	102			KU16222
Width Increments	0.	.50	12.7			11.14 <i>9362</i>
Opening Size (approximate)	0.35 >	× 0.30	8.9 × 7.6			1.H.S.H.B.B.
Open Area		42%				STAND
Product Contact Area		18%			and a substitution	
Hinge Style		Open				
Rod Retention; Rod Type	Occl	luded edge;	unheaded		1000	S. S. Market
Prod	uct Notes			NUNUN	NANANANANANANAN	NUMBER
 before designing equipment Permits airflow through the bel applications. Each belt material has a defaul available. Intralox can help ider combination for your applicatio Detailed material information is Makes turns with an inside turn Facilitates smooth transfers of transfer plates. Works with standard S2400 we Standard indent: 1.12 in (28.6 in Belt deck height: 0.5 in (12.7 m belt. 	t to provide coo tt rod material. htify the best bo n. s provided in Pr n radius of 2.2 small package: earstrips. mm).	oling in food Other rod n elt and rod n roduct Line. times the b s with the a				
			Polt D	A preferred run dire		(25.4 mm) (25.4 mm) (6.4 mm)
		01	Belt D	้อเล	T	
Default Boo	d Material.	Straight B	ieit		Temperature Range	

				Belt Data				
	Default Rod Material, Diameter 0.18 in	•	ht Belt ngth		Temperati (contin	•	Belt	Mass
Belt Material	(4.6 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²
Polypropylene	Acetal	1,200	17,500		34 to 200	1 to 93	1.98	9.68
Acetal	Nylon	1,700	24,800	For curved belt strength calculations, contact Intralox	-50 to 200	-46 to 93	3.00	14.67
Polypropylene	Polypropylene ^a	1,000	14,600	Customer Service.	34 to 220	1 to 104	1.92	9.39
HR nylon	Nylon	1,700	24,800		-50 to 240	-46 to 116	2.5	12.25
^a Polypropylene rods	can be installed in polypropyler	ie belts wh	en extra cl	nemical resistance is required. Pleas	se note lower be	lt strength.		

Belt Wid	ith Range ^a	Minimum Number of Sprockets	Wear	strips ^c
in	mm	Per Shaft ^b	Carryway	Returnway
4	102	1	2	2
5	127	2	2	2
6	152	2	2	2
7	178	2	2	2
8	203	2	2	2
10	254	2	3	2
12	305	3	3	2
14	356	3	3	3
15	381	5	3	3
16	406	5	3	3
18	457	5	3	3
20	508	5	4	3
24	610	5	4	3
30	762	7	5	4
32	813	7	5	4
36	914	7	5	4
42	1,067	9	6	5
48	1,219	11	7	5
other widths 2 mm) cente	, use an odd num rline spacing	ber of sprockets at Maximum 6 in	Maximum 9 in (229 mm) centerline spacing	Maximum 12 in (305 mm) centerline spacing

^a If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.50 in (12.7 mm) increments beginning with minimum width of 4 in (102 mm). If the actual width is critical, contact Intralox Customer Service. ^b This number is a minimum. Heavy-load applications can require additional sprockets. For lockdown location, see Retainer Rings and Center Sprocket Offset. ^c The number of wearstrips given does not include the hold down wearstrip.





							Мо	Ided Sp	r ocket a	
Number of Teeth	Nom. Dian			Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^b	Square in	Round mm ^b	Square mm
6 ^{c, d} (13.40%)	2.0	51	2.0	51	0.54	14	0.75		20	
9 ^{c, d} (6.03%)	2.9	74	2.9	74	1.0	25	1	1	25	25
12 (3.41%)	3.9	99	4.0	102	1.0	25	1 to 1.5	1.5 ^d	25 to 40	40 ^d
16 (1.92%)	5.1	130	5.2	132	1.0	25	1 to 1.5	1.5	25 to 40	40
20 (1.23%)	6.4	163	6.4	163	1.0	25	1 to 1.5	1.5	25 to 40	40

^a When using polyurethane sprockets, the belt strength for belts rated over 750 lbf/ft (10,900 N/m) is de-rated to 750 lbf/ft (10,900 N/m). All other belts maintain the published rating. The temperature range for polyurethane sprockets is 0°F to 120°F (-18°C to 49°C). Contact Intralox Customer Service for availability of polyurethane sprockets.

^b Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

^c The 2.0 in (51 mm) pitch diameter 6 tooth sprocket and the 2.9 in (74 mm) pitch diameter 9 tooth sprocket have a recommended belt pull of 60 lbf/sprocket (267 N/sprocket).

^d Do not use this sprocket with hold down guides.

Split Ultra Abrasion Resistant Polyurethane Sprockets ^a														
Number of Teeth	D' D' D' D'			Nom Wie	. Hub dth	Av	vailable E	Bore Size	es					
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm				
16 (1.92%)	5.1	130	5.2	132	1.0	25		1.5 ^b		40 ^b	, Martine			
20 (1.23%)	6.4	163	6.4	163	1.0	25		1.5		40				

^bFDA-compliant materials are available.

							Nylon	(FDA) S	procke	ts	
Number of Teeth		Pitch neter		Nom. Outer Nom. Hub Diameter Width		Available Bore Sizes					
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
12 (3.41%)	3.9	99	4	102	1.0	25	1, 1-1/4	1.5 ^b			
16 (1.92%)	5.1	130	5.2	132	1.0	25	1.25			40	
20 (1.23%)	6.4	163	6.4	163	1.0	25		1.5			

^aU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885. ^bDo not use this sprocket with hold down guides.

					\$						
Number of Teeth		Pitch neter	Nom. Outer Diameter		-	Nom. Hub Width		Available Bore Sizes			
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
20 (1.23%)	6.4	163	6.4	163	1.5	38		1.5			

Number of Teeth	Nom. Dian	Pitch neter	-	Outer neter	Nom. Hub Width		Nom. Hub Width Availat			es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
12 (3.41%)	3.9	99	3.9	99	1.0	25	1-1/4	1.5 ^b			

Number of Teeth		Pitch neter				Nom. Hub Width		vailable E	Bore Size	es	
(Chordal			_					Square		Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
16 (1.92%)	5.1	130	5.2	132	1.0	25		1.5		40	

	Glass-Filled Nylon Split Sprockets													
Number of Teeth		Pitch neter				Available Bore Sizes								
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm				
16 (1.92%)	5.1	130	5.2	132	1.5	38	1-1/4		30, 40					

^aU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

	HR Nylon EZ Clean [™] Sprockets												
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable E	Bore Size	es			
(Chordal								Square		-			
Action)	in	mm	in	mm	in	mm	in	in	mm	mm			
16 (1.92%)	5.1	130	5.2	132	1.0	25				40			

	Heavy-Duty Edge Flights									
Available F	light Height									
in	mm	Available Materials								
3.0	76	Acetal, polypropylene, PK								
		ly sculpted edge is designed to resist belt hile maintaining cleanability.								
		ve molded-in arrow to indicate preferred to reduce finger entrapment.								
 Flights do no bottom hold mm). 	t have bottom ho down belt style, v	ld down guides, but can be used with the vith a minimum flight spacing of 4 in (102								
Minimum ind	lent: 1.125 in (29	mm).	SSSER.							
			33555555555555555555555555555555555555							
			338834							

	Heavy-Duty Edge Sideguards									
Available Sid	eguard Height									
in	mm	Available Materials								
1.0	25	Delverenviene, pelvethvienei, eestel								
3.0	76	Polypropylene, polyethylene ^a , acetal	and a second							
Fastens to beEasily cleana	elt with hinge rod: ble. Suitable (FDA	res product containment. s. No other fasteners required. A accepted) for food applications. in (22 mm) for 2.2 turn ratios, 1.4 in (35 old down guide, 2.9 in (73 mm) for 1.7 turn								

^aOnly available in 3.0 in (76 mm)

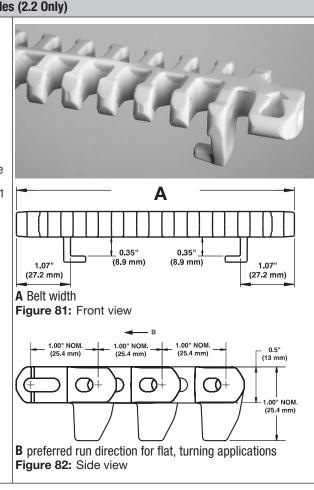
			Finger Transfe	Plates	;	;	;
Availabl	e Widths	Number of					
in	in mm Fingers		Available Materials				
4	102	16	Acetal		and the second se		
 transfer and The fingers e of the product 	tipping problems extend between th et flow as the belt er plates are easi	ne belt ribs, to all t engages the spr	belts, to eliminate product ow a smooth continuation rockets. e conveyor frame with				

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			Di	mensional Requirements for S2400 Finger Transfer Plate Installation
		in	mm	
F		2.38	61	г H
G		0.19	5	
Η		5.83	148	
I		3.96	101	
J		2.50	64	
Κ		0.74	19	
L		2.00	51	
М	PP	3.979	101.1	
	AC	3.976	101.0	M spacing between finger transfer plates, at ambient temperature Figure 80: Finger transfer plate and conveyor assembly

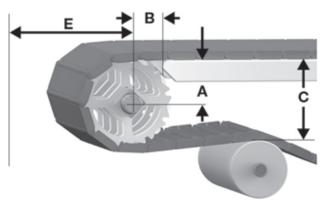
Hold Down Guides (2.2 Only)

- Materials available: polypropylene, acetal, HR nylon.
- Hold down guides are on the bottom of the belt for use when the belt edges must be clear. Also available on friction top modules.
- Hold down guides allow two belts to run next to each other without a large gap in between.
- The belt edge is smooth for reduced friction, and is relatively thick to provide wear resistance and protection for the rod retention.
- Not recommended for low-tension capstan drive spiral applications.
- Cannot be used with 2 in and 2.9 in pitch diameter sprockets or 3.9 in pitch diameter square bore sprockets.
- Other sprocket PDs with large bores may not produce enough clearance between the hold down guide and shaft. Subtracting bore size from the PD easily identifies these sprockets. If the number is less than 2.0 in (51 mm), this sprocket cannot be used with hold down guides.
- Minimum nosebar diameter: 1.5 in (38.1 mm).



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- **E** minimum horizontal distance between shaft centerline and other components

Figure 83: A, B, C, and E drive dimensions

Spro	cket Descri	ption		1		B	(;	E	E
Pitch D	iameter	Number	Range (bot	tom to top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mn
		11	Radius Flush Gri	d - Straight Edg	e with or wit	hout hold d	own guides			
2.0 ^b	51 ^b	6	0.62-0.75	16-19	1.22	31	2.00	51	1.31	33
2.9 ^b	74 ^b	9	1.12-1.21	28-31	1.51	38	2.92	74	1.77	45
3.9	99	12	1.62-1.68	41-43	1.86	47	3.86	98	2.24	57
5.1	130	16	2.26-2.31	57-59	2.11	54	5.13	130	2.88	73
6.4	163	20	2.91-2.95	74-75	2.31	59	6.39	162	3.51	89
			Radius Flush	Grid High Deck	0.4-in High	Radius Fric	tion Top			
2.0 ^b	51 ^b	6	0.62-0.75	16-19	1.22	31	2.40	61	1.71	43
2.9 ^b	74 ^b	9	1.12-1.21	28-31	1.51	38	3.32	84	2.17	55
3.9	99	12	1.62-1.68	41-43	1.86	47	4.26	108	2.64	67
5.1	130	16	2.26-2.31	57-59	2.11	54	5.53	140	3.28	83
6.4	163	20	2.91-2.95	74-75	2.31	59	6.79	172	3.91	99
			Radius Fri	ction Top - with	or without h	old down g	uides			
2.0 ^b	51 ^b	6	0.62-0.75	16-19	1.22	31	2.20	56	1.51	38
2.9 ^b	74 ^b	9	1.12-1.21	28-31	1.51	38	3.12	79	1.97	50
3.9	99	12	1.62-1.68	41-43	1.86	47	4.06	103	2.44	62
5.1	130	16	2.26-2.31	57-59	2.11	54	5.33	135	3.08	78
6.4	163	20	2.91-2.95	74-75	2.31	59	6.59	167	3.71	94
			Radius with	Insert Rollers (a	all styles) - f	ree floating	rollers			
2.0 ^b	51 ^b	6	0.62-0.75	16-19	1.22	31	2.09	53	1.40	36
2.9 ^b	74 ^b	9	1.12-1.21	28-31	1.53	39	3.01	76	1.86	47
3.9	99	12	1.62-1.68	41-43	1.78	45	3.95	100	2.33	59
5.1	130	16	2.26-2.31	57-59	2.06	52	5.21	132	2.96	75
6.4	163	20	2.91-2.95	74-75	2.31	59	6.48	165	3.60	91
			Radius w	ith Insert Rollers	s (all styles)	- Driven Ro	llers		-	
2.0 ^b	51 ^b	6	0.53-0.66	13-17	1.24	31	2.09	53	1.40	36
2.9 ^b	74 ^b	9	1.04-1.12	26-31	1.57	40	3.01	76	1.86	47
3.9	99	12	1.53-1.59	39-40	1.92	49	3.95	100	2.33	59
5.1	130	16	2.18-2.23	55-57	2.19	56	5.21	132	2.96	75
6.4	163	20	2.82-2.86	72-73	2.41	61	6.48	165	3.60	91
				Radius	Raised Rib					
2.0	51	6	0.62-0.75	16-19	1.22	31	2.50	64	1.81	46
2.9	74	9	1.12-1.21	28-31	1.51	38	3.42	87	2.27	58
3.9	99	12	1.62-1.68	41-43	1.86	47	4.36	111	2.74	70
5.1	130	16	2.26-2.31	57-59	2.11	54	5.63	143	3.38	86
6.4	163	20	2.91-2.95	74-75	2.31	59	6.89	175	4.01	10

^b Cannot be used with hold down guides.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S2400 Dead Plate Gap										
	Sprocket Description	Minimum Gap									
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
2.0	51	6	0.134	3.4							
2.9	74	9	0.088	2.2							
3.9	99	12	0.065	1.7							
5.1	130	16	0.050	1.3							
6.4	163	20	0.039	1.0							

HOLD DOWN WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for the standard edge S2400 is 2.2 times the belt width, measured from the inside edge. For the tight turning style, the minimum turn radius is 1.7 times the belt width.
- The minimum required straight run between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run leading to the drive shaft is a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths, down to 1.5 times the belt width, require a gravity take-up to avoid sprocket wear and tracking problems. For more information, see Take-Ups.
- The minimum length of the first straight run immediately after the idle shaft is 1.5 times the belt width. When shorter lengths are required, down to 1.0 × the width, an idle roller can be used in place of sprockets.

	Knuckle	Chain		
	in mm			1055
Pitch	2.00 50.8			
Molded Width	2.25 57	-		1 and 1
Open Area	-	-		10 2 6
Hinge Style	Closed	11	10 10 IN IN IN IN IN	a la
Rod Retention; Rod Type	Press fit; knurled pin	F		-
Product	Notes	1 B		
 WARNING: Hold down wearstrips a outside edges of all turns, on both the belt. Unless they interfere with the opeuse hold down wearstrips throughout a personnel next to the conveyor. Contact Intralox for precise belt n before designing equipment or or 	carrying and return side of the eration of the carrying equipment, the conveyor to protect the belt and neasurements and stock status dering a belt.			
 Thick, durable plastic surface aroun and less breakage. 	d stainless steel pins for long life		1500	
 Available with extended pins. 				
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			S. Marson	
 Detailed material information is prov 	vided in Product Line.			
 Can run on the same tracks as other 	r common chains.	0.90" (23 mm)	←	
 Available in both straight and turning cannot be used for turning applications urganization of turning applications only. The turning version is designed for a centerline turn radius of 16 in (406 in Available in 10 ft (3 m) increments 	ons. Use the turning version for applications with a minimum		2.25" 2.79" (57.2 mm) (70.9 mm)	
		Figure 84: Serie	es 3000T	
		0.4" (10.2 mm) (20.4 mm)	2.00" (50.8 mm)	0.25" (6.4 mm)
) oto		
	Relt			
	Belt [Tomporatura Danga	
Chain Material	Belt I Default Rod Material, Diameter 0.25 in (6.4 mm)	Chain Strength	Temperature Range (continuous) °F °C	Chain Mass

700

560

303 Stainless steel

303 Stainless steel

3,110

2,490

-50 to 200

-50 to 200

-46 to 93

-46 to 93

0.88

0.90

1.21

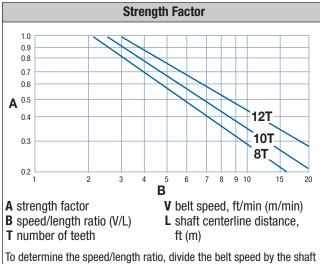
1.25

Acetal (straight)

Acetal (turning)

		Mesh T	ор™
	in	mm	
Pitch	2.00	50.8	An Calm
Minimum Width	2.3	57.2	
Opening Size (approximate)	-	-	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Press fit; I	knurled pin	The search and the se
Produc	ct Notes		And the second s
 WARNING: Hold down wearstrips outside edges of all turns, on both the belt. Unless they interfere with the c use hold down wearstrips throughout personnel next to the conveyor. Contact Intralox for precise belt before designing equipment or Mesh Top design eliminates open Thick, durable plastic surface aro life and less breakage. Available with extended pins. Each belt material has a default rr available. Intralox can help identific combination for your application. 	he carrying and retur operation of the carry ut the conveyor to pro t measurements an ordering a belt. area for improved w und stainless steel p od material. Other roo fy the best belt and ro	n side of the ing equipment, otect the belt and d stock status orker safety. ins provides long d materials are od material	
 Detailed material information is p Can run on the same tracks as ot 		ne.	0.9" (23 mm)
 Can run on the same tracks as ot Improved design simplifies cleani 			
 Available in both straight and turn 	0		
NOTE: Only the turning version	can be used for turni	ng applications.	
The straight version cannot be us	ed for turning application	ations.	(57.2 mm) (70.9 mm)
 The turning version is designed for centerline turn radius of 16 in (40) 	or applications with a	minimum	
 Available in 10 ft (3 m) increment 	,		\)↓
			0.4" (10.2 mm) (20.4 mm) (20.4 mm) (20.4 mm) (0.4" (0.4 mm) (0.4 m

Belt Data											
	Default Rod Material,	-	ure Range 1uous)	Chain Mass							
Chain Material	0.25 in (6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m				
Acetal (straight)	303 Stainless steel	700	3,110	-50 to 200	-46 to 93	0.89	1.32				
Acetal (turning)	303 Stainless steel	560	2,490	-50 to 200	-46 to 93	0.91	1.36				



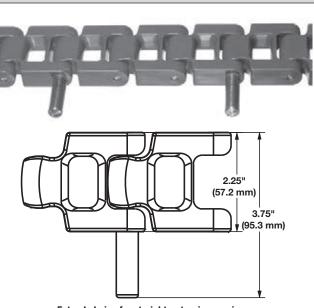
To determine the speed/length ratio, divide the belt speed by the shaft centerline distance. The strength factor is found at the intersection of the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.

	Chain Pull Limit with UHMW-PE Sprockets, Based on Bore Size													
	Nom.	Pitch		Sprocket Bore Size										
No. of Diameter		1.5 in square		40 mm	square	1 in round		1.25 in round		1.5 in round				
Teeth	in	mm	lbf	N	lbf	N	lbf	N	lbf	N	lbf	N		
8	5.2	132	640	2,850	640	2,850	74	330	90	400	162	720		
10	6.5	165	520	2,310	520	2,310	78	250	95	420	172	770		
12	7.7	196	432	1,920	432	1,920	65	290	79	350	143	640		

Nom.	Ditch	M	-	1						
Diam			Outer neter	Nom. Wie		A	/ailable E	Bore Size	es	
in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
5.2	132	5.3	135	1.5	38		1.5		40	
5.2	132	5.3	135	1.2	30	1-1/4				
6.5	165	6.7	170	1.5	38	1-1/4	1.5		40	
7.7	196	8.0	203	1.5	38	1-1/4	1.5		40	
	5.2 5.2 6.5	5.2 132 5.2 132 6.5 165	5.2 132 5.3 5.2 132 5.3 6.5 165 6.7	5.2 132 5.3 135 5.2 132 5.3 135 6.5 165 6.7 170	5.2 132 5.3 135 1.5 5.2 132 5.3 135 1.2 6.5 165 6.7 170 1.5	5.2 132 5.3 135 1.5 38 5.2 132 5.3 135 1.2 30 6.5 165 6.7 170 1.5 38	in mm in mm in ina 5.2 132 5.3 135 1.5 38	in mm in mm in ^a in 5.2 132 5.3 135 1.5 38 1.5 5.2 132 5.3 135 1.2 30 1-1/4 5.2 132 5.3 135 1.2 30 1-1/4 6.5 165 6.7 170 1.5 38 1-1/4 1.5	in mm in mm in ^a in mm ^a 5.2 132 5.3 135 1.5 38 1.5 1.5 5.2 132 5.3 135 1.5 38 1.5 1.5 5.2 132 5.3 135 1.2 30 1-1/4 1.5 6.5 165 6.7 170 1.5 38 1-1/4 1.5	in mm in mm in ^a in mm ^a mm 5.2 132 5.3 135 1.5 38 1.5 1.5 40 5.2 132 5.3 135 1.2 30 1-1/4 40 5.2 132 5.3 135 1.2 30 1-1/4 40 6.5 165 6.7 170 1.5 38 1-1/4 1.5 40

Extended Pins

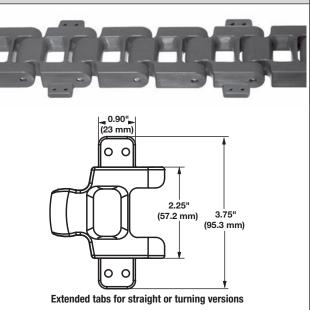
- Modules with 303 stainless steel extended pins can be spliced into both the basic turning and straight running chains.
- These pins are commonly used in side-by-side chain strands where rollers are used for low back pressure applications.
- The minimum extended pin spacing is 2.0 in (50.8 mm).
- The extended pin modules can be spliced into the standard chain every 2.0 in (50.8 mm).
- Intralox offers only extended tabs and extended pins. Attachments for either of these accessories are not available through Intralox. Contact Intralox Customer Service for lead times.



Extended pins for straight or turning versions

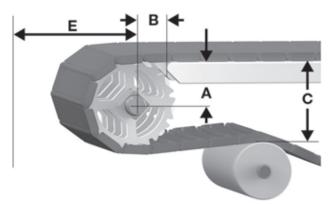
Extended Tabs

- Modules with extended tabs can be spliced into both the basic turning and straight running chains.
- These extended tabs can be used to attach flights, cleats, etc.
- The extended tab modules are based on the turning chain design, so the rating for the turning chain should be used even if the extended tab modules are spliced into straight running chain.
- The minimum tab spacing is 2.0 in (50.8 mm).
- The tabs can be spliced into the standard chain every 2.0 in (50.8 mm).
- Intralox offers only extended tabs and extended pins. Attachments for either of these accessories are not available through Intralox. Contact Intralox Customer Service for lead times.



CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 85: A, B, C, and E drive dimensions

			S 3	000 Conveyor F	rame Dim	ensions				
Sprocket Description		A		В		C		E		
Pitch D	iameter	Number	Range (bot	tom to top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	Knuckle Chain, Mesh Top									
5.2	132	8	2.01-2.21	51-56	2.29	58	5.23	1.33	3.14	80
6.5	165	10	2.68-2.84	68-72	2.63	67	6.47	164	3.76	96
7.7	196	12	3.33–3.46	85-88	2.94	75	7.73	196	4.39	112
8	lonnlingtions	and annliantia	we where and transf	an of the constitute an	aluatia matan	tical use the	hotton of the			

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S3000 Dead Plate Gap							
	Sprocket Description	Minimum Gap					
Pitch D	iameter						
in	mm	Number of Teeth	in	mm			
5.2	132	8	0.200	5.1			
6.5	165	10	0.158	4.0			
7.7	196	12	0.132	3.4			

	S 4	009 Flush	Grid	
Pitch Molded Width Open Area Hinge Style Rod Retention; Rod Type	in 1.00 3.3 13% Closed Press fit; knur			
 Produ Contact Intralox for precise be before designing equipment or Same deck thickness as the stra 900 Flush Grid: 0.344 in (8.7 mn Detailed material information is p Uses S1400 sprockets All S1400 and S4000 sprockets a removed for retrofits and change Use the Intralox Engineering Prog pull for your application. Contact information. Corner tracks, with bevel design, all turns. Available in 10 ft (3 m) incremen 	r ordering a belt. ight-running belt counter i). orovided in Product Line. are split, so shafts do not overs. gram to calculate the estin Intralox Customer Service , are mandatory on the ins	part Series have to be mated belt e for more		
			3.299" (83.8 mm) 0.500" (12.7 mm) (12.7 mm) 1.657" (42.1 mm)	8° 0.188" (4.8 mm) 0.344" (8.7 mm)
		Belt Data		Minimum
			Tomporature Dance	Minimum Contorlino Turr

				Belt	Data						
	Belt Width		Default Rod Material, Diameter 0.25 in	Belt Strength		Temperature Range (continuous)		Belt Mass		Minimum Centerline Turn Radius	
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm
Acetal	3.3	84	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	0.97	1.44	18	457
HHR nylon	3.3	84	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	0.97	1.44	18	457

		S4	4009 Flat 1	ор		
Pitch Molded Width Open Area Hinge Style Rod Retention; Re	od Type	in 1.00 3.3 0% Closed Press fit; knurl	mm 25.4 84			
	Produc	t Notes			1000	
 before design Detailed mater Uses S1400 sp All S1400 and removed for re Use the Intraloo pull for your ap information. See the belt da Corner tracks, all turns. 	ing equipment or of ial information is prorockets S4000 sprockets ar trofits and changeo x Engineering Progr pplication. Contact In ta table for minimu	ovided in Product Line. re split, so shafts do not i vers. am to calculate the estin ntralox Customer Service m centerline turn radius. are mandatory on the ins	have to be nated belt of or more side edges of	3.299" (83.8 mm) (83.8 mm) (12.7 mm) (12.7 mm) (12.7 mm) (12.7 mm) (12.7 mm) (12.7 mm) (12.7 mm) (12.7 mm)	0.384" (9.8 mm)	
			Belt Data			
	Belt Width	Default Rod Material, Diameter 0.25 in	Belt Strength	Temperature Range (continuous)	Belt Mass	Minimum Centerline Turn Radius

Ν

2,220

2,220

lbf

500

500

(6.4 mm)

303 Stainless steel

303 Stainless steel

Temperati (contin	Belt	Mass	Minimum Centerline Turn Radius		
°F	°C	lb/ft	kg/m	in	mm
-50 to 200	-46 to 93	1.11	1.65	18	457
-50 to 310	-46 to 154	0.98	1.46	18	457
-50 to 310	-46 to 154	0.98	1.46	18	457

Belt Material

Acetal

HHR nylon

in

3.3

3.3

mm

84

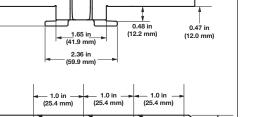
84

		S	4014 Flat 1	Гор	
		in	mm	•	
Pitch		1.00	25.4		17 The second second
Molded Width		3.3	84		- The second second
Open Area		0%		12250	6
Hinge Style		Closed		12 4 1-4	
Rod Retention; Rod	Туре	Press fit; knur	led pin		
Contact Intralox	Product for precise belt	measurements and st	ock status		\bigcap
-	g equipment or o ness as the straig 12.7 mm).	ordering a belt. ht-running belt counter	part, S1400	L	_
Detailed material	information is pro	ovided in Product Line.		and a first of the	and the second se
 Uses S1400 spro 					
 All S1400 and S4 removed for retro 	1000 sprockets are ofits and changeov	e split, so shafts do not	have to be		
 Use the Intralox E pull for your appliinformation. 	Engineering Progra ication. Contact In ith bevel design, a	am to calculate the estin tralox Customer Servic re mandatory on the ins	e for more	~	
	(*)			3.299" (83.8 mm)	1.00" NOM. (25.4 mm)
				0.500" (12.7 mm) 1.657" (42.1 mm)	8° 0.188" (4.8 mm) 0.500" (12.7 mm)
			Belt Data		
					Minimum

							(42.1 1111)		-		
				Belt	t Data						
	Belt \	Nidth	Default Rod Material, Diameter 0.25 in		rength		ure Range 1uous)	Belt	Mass	Minii Centerli Rad	ne Turn
Belt Material			lbf	N	°F	°C	lb/ft	kg/m	in	mm	
Acetal	3.3	84	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	1.29	1.92	18	457

0100011	J-111 FTUTTa	ix Side	flexing Flat Top with Tabs
	in	mm	///////////////////////////////////////
Pitch	1.00	25.4	
Molded Width	7.5	191.0	
Open Area	09	%	11777777777777
Hinge Style	Clos	sed	777777777777777777777777777777777777777
Rod Retention; Rod Type	Press fit; k	nurled pin	MALLED
Produ	ct Notes		
 Contact Intralox for precise bel before designing equipment or 	ordering a belt.		
 Two powerful, blue, Teflon[™]-coat module (one magnet per wing). C guidance on how temperature aff 	ontact Intralox Custon	ner Service for	
 Blue, metal-detectable, nylon cap 	os retain magnets in n	nodules.	
Hold down tabs match dimension	s of S4090.		
Thicker deck than Series 409X FI	at Top for increased w	vear resistance.	
 Standard configuration consists or modules and Series 403X Sidefle 	f alternating rows of r xing Flat Top modules	magnetic	
Detailed material information is p	rovided in Product Lin	ie.	
Uses the same sprockets as S140	00 and S4000.		and the second se
 Needs only one drive sprocket an 	d one idle sprocket pe	er belt strand.	
 Determine belt spacing based on bottom surface of the conveyed p 	maximum surface co roduct.	ntact with the	
 Ideal for incline, decline, vertical s 	switch, and other app	lications.	
 Minimum sprocket pitch diamete 	r: 3.9 in (99.0 mm).		0.64 in (16.3 mm) (16.3 mm) (12.2 mm) (12.2 mm) (12.0 mm) (12
			- 1.0 in 1.0 in - (25.4 mm) (25.4 mm) (23.1 mm) (23.1 mm) (23.1 mm) (23.1 mm) (23.1 mm) (25.4 mm) (25.

	Belt Data												
	Default Rod Material, Belt Width Diameter 0.25 in			Temperature R Belt Strength (continuous			U I			mum ine Turn dius			
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm		
HHR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	2.44	3.63	24	610		



S4031 7.5-in ProTrax[™] Sideflexing Flat Top with Tabs

S4031 7.5	-in ProTra	ax ^m Side	flexing Flat Top with Tabs
	in	mm	17777777777777777
Pitch	1.00	25.4	
Molded Width	7.5	191.0	
Open Area	0	%	
Hinge Style	Clo	sed	
Rod Retention; Rod Type	Press fit; k	nurled pin	
Product	Notes		An another setting the set of the
 Contact Intralox for precise belt m before designing equipment or or 		d stock status	
 Two powerful, blue, Teflon[™]-coated module (one magnet per wing). Con guidance on how temperature affect 	tact Intralox Custor	ner Service for	
 Blue, metal-detectable, nylon caps r 			
 Hold down tabs match dimensions of 	•		
• Thicker deck than S409X Flat Top fo	r increased wear r	esistance.	
 Standard configuration consists of a modules and S403X Sideflexing Flat 	lternating rows of Top modules.	magnetic	
• Detailed material information is prov	rided in Product Lir	ne.	
• Uses the same sprockets as S1400	and S4000.		the second s
Needs only one drive sprocket and o	ne idle sprocket p	er belt strand.	
 Determine belt spacing based on ma bottom surface of the conveyed proc 	aximum surface co luct.	ntact with the	
• Ideal for incline, decline, vertical swi	tch, and other app	lications.	0.66 in
Minimum sprocket pitch diameter: 3	9.9 in (99.0 mm).		(16.8 mm) (16.8 mm) (16.8 mm) (16.8 mm) (13.5 mm) (13.5 mm) (12.0 mm) (12.0 mm) (12.0 mm) (12.0 mm)
			- 1.0 in - 1.0 in - 1.0 in - (25.4 mm) (25.4 mm) (25.4 mm) (25.4 mm) (23.1 mm) (23.1 mm) (28.2 mm)

				Belt	t Data						
	Default Rod Material Belt Width Diameter 0.25 in				rength	Temperature Range (continuous)		Belt Mass		Minimum Centerline Turn Radius	
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm
HHR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	2.44	3.63	24	610

540327.3	o-in Proira	ax Side	flexing Flat Top with Tabs
	in	mm	LALLALLALALALALALALALA
Pitch	1.00	25.4	
Nolded Width	7.5	191.0	
Open Area	C)%	
Hinge Style	Clo	osed	man and an
Rod Retention; Rod Type	Press fit;	knurled pin	
Produc	t Notes		
 Contact Intralox for precise belt before designing equipment or 	ordering a belt.		
 Two powerful, blue, Teflon[™]-coate module (one magnet per wing). Co guidance on how temperature affe 	ontact Intralox Custo	mer Service for	
Blue, metal-detectable, nylon cap	s retain magnets in	modules.	
 Hold down tabs match dimensions 	s of S4092.		
 Thicker deck than S409X Flat Top 			
 Standard configuration consists of modules and S403X Sideflexing FI 	at Top modules.	0	
 Detailed material information is pr 		ne.	
Uses the same sprockets as S140			
 Needs only one drive sprocket and 			
 Determine belt spacing based on r bottom surface of the conveyed pr 	maximum surface ci roduct	ontact with the	0.47
 Ideal for incline, decline, vertical s lidding, and radius applications. 		, metering, de-	0.90 in (22.9 mm) (17.8 mm)
 Minimum sprocket pitch diameter. 	: 5.1 in (129.5 mm).		2.22 in (56.4 mm) 2.98 in (75.6 mm)
			91 in (23.1 mm) (34.9 mm)

				Belt	Data						
	Belt Width Default Rod Material Diameter 0.25 in				rength	Temperature Range (continuous)		Belt Mass		Minimum Centerline Turn Radius	
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm
HHR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	2.66	3.95	24	610

S40)33 7.5-in F	ProTrax™	Sideflexing Flat Top
	in	mm	TTTTTTTTTTTTT
Pitch	1.00	25.4	
Nolded Width	7.5	191.0	delated of the later of the later of the
Open Area	0	1%	
linge Style	Clo	osed	
Rod Retention; Rod Type	Press fit; I	knurled pin	
Produ	ct Notes		
 Contact Intralox for precise bel before designing equipment or 	t measurements an ordering a belt.	d stock status	
 Two powerful, blue, Teflon[™]-coat module (one magnet per wing). C guidance on how temperature aff 	Contact Intralox Custo	mer Service for	
 Blue, metal detectable, nylon cap 	os retain magnets in r	modules.	
 The standard configuration consist modules and Series 403X Sidefle 			
 Thicker deck than Series 409X FI 	at Top for increased v	wear resistance.	
 Detailed material information is p 	rovided in Product Li	ne.	
 Uses the same sprockets as S140 	00 and S4000.		
 Needs only one drive sprocket an 			the second state of the second state of the second
 Determine belt spacing based on bottom surface of the conveyed p 	maximum surface co product.	ontact with the	
 Ideal for incline, decline, vertical 	switch, and other app	plications.	0.44 in (12.0 i
 Minimum sprocket pitch diameter 	r: 3.9 in (99.0 mm).		(11.2 mm)
 Contact Intralox for sideflexing re- 	commendations.		1.65 in (41.9 mm)
			- 1.0 in - 1.0 in - 1.0 in - (25.4 mm) (25.4 mm) (25.4 mm) (25.4 mm) (25.4 mm)

	Belt Data											
	Belt Width Default Rod Material Diameter 0.25 in			Belt St	rength		ure Range 1uous)	Belt	Mass	Centerli	mum ine Turn lius	
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm	
HHR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	2.29	3.41	18	457	

			S4090 S	idefle	exing	Flat To	р				
			in	mm				17	r/		
Pitch			1.00	25.4				/	2 -1		
Molded Width			3.25	83				1	5	12	
			4.5	114		~		5	4 5	1	
			7.5	191			2 P		/ /	11/	
Open Area			0%			E.S.	**	11	11	/	
Hinge Style			Closed				SIA K	-	6//		
Rod Retention;	Rod Type		Press fit; knurl	led pin		a a la la			C/		
		Prod	uct Notes		100	Contraction in the		1.40	10 M	100	TO LAN
before desig	ning equ	uipment	elt measurements and sto or ordering a belt.		6			~	134		
Top: 0.384 in	(9.8 mm).	raight-running counterpart S	5900 Flat		123.00		~			
• Uses S1400 s					18	And the second	and the second second	a fair an	-	Conter I	-
	feature a	a split des	sign, so shafts do not have t geovers.	o be		1999		~		377	_
 Use the Intral pull for your s information. 	ox Engino system. C	eering Pr Contact In	ogram to calculate the estin tralox Customer Service for	nated belt more				2			
See Belt Dat	a for min	imum ce	nterline turn radius.		1.8						8.3
 Available in 1 	0 ft (3 m) increme	ents		100	A CONTRACTOR	-			11.13	-
 Minimum bac 											1
			in (114 mm) wide belts, the	e minimun	ו ו						
backbend - For 7.5 in ((235 mm)	(191 mm)	wide, th	e minimum backbend radiu i) is recommended	s is 9.25 i	n 0.6 (16.3		1.65	mm)	0.48" (12.2 m		0.384' (9.8 mm
							(59.9)				
			1	Belt	Data			1			
	Default Pin Material, Belt Width Diameter 0 25 in		Default Pin Material, Diameter 0.25 in	Belt St	rength	-	ure Range nuous)	Belt	Mass	Cent	mum erline Radius
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm
Acetal	3.25	83	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	1.21	1.80	18	457
Acetal	4.5	114	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	1.40	2.08	18	457
ACELAI		191	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	1.86	2.77	24	610
	7.5	131			,						0.0
Acetal	3.25	83	303 Stainless steel	500	2,220	-50 to 240	-46 to 116	1.02	1.52	18	457
Acetal Acetal HR nylon HR nylon HHR nylon				-			-46 to 116 -46 to 116 -46 to 154				

1.18

1.57

1.76

2.34

-46 to 154

-46 to 154

18

24

457

610

HHR nylon

HHR nylon

114

191

4.5

7.5

303 Stainless steel

303 Stainless steel

500

500

2,220

2,220

-50 to 310

-50 to 310

			S4091 S	idefl	exing	y Flat To	p				
Pitch Molded Width Open Area Hinge Style Rod Retention; I	Rod Type		in 1.00 3.25 4.5 7.5 0% Closed Press fit; knurl	mm 25.4 83 114 191 ed pin							
		Prod	uct Notes			Constanting of the	Sector Sector	1000		States 1	
 before desig Same deck th Top: 0.384 in Detailed mate Uses S1400 s All sprockets removed for r See Belt Data Use the Intral pull for your s information. Available in 1 	ning equ nickness (9.8 mm erial infor sprockets feature a retrofits a a for min lox Engir system. C	ipment (as the str). mation is a split des ind chang imum cen beering F contact In) increme	nterline turn radius. Program to calculate the est tralox Customer Service for	900 Flat o be iimated be							
backbend ı - For 7.5 in ((83 mm) radius is 191 mm)) and 4.5 6 in (152) wide, th	in (114 mm) wide belts, the 4 mm) e minimum backbend radius) is recommended				1.6 (41.9) (55.1)	mm) ⁼ 7"	0.53" (13.5 mm	n)	0.384" (9.8 mm)
				Bel	t Data						
	Belt	Width	Default Pin Material, Diameter 0.25 in	Belt St	rength	(conti	ure Range nuous)	Belt	Mass	Cent	mum erline Radius
Belt Material	in	mm	(6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	in	mm
Acetal	3.25	83	303 Stainless steel	500	2,220	-50 to 200	-46 to 93	1.22	1.81	18	457
Acetal	4.5	114	303 Stainless steel	500	2,220	-50 to 200 -50 to 200	-46 to 93	1.40 1.84	2.08	18	457
Acetal HR nylon	7.5	191 83	303 Stainless steel 303 Stainless steel	500 500	2,220 2,220	-50 to 200	-46 to 93 -46 to 116	1.84	2.74 1.52	24 18	610 457
HR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 240	-46 to 116	1.54	2.29	24	610
HHR nylon	3.25	83	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	1.04	1.55	18	457
HHR nylon	4.5	114	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	1.18	1.76	18	457
HHR nylon	7.5	191	303 Stainless steel	500	2,220	-50 to 310	-46 to 154	1.57	2.34	24	610

						<i>a</i>									
			S409	92 S	Side	flex		Flat Top)						
			in		mm		5	K/ /	/	/	1	El			
Pitch			1.00		25.4	4			1		/	1 1			
Molded Width			3.25		83				1	1	1)		2	
			4.5		114	ŀ		~	2	~	5	A	51	1	
			7.5		191			2	3	7		1	1 11		
Open Area				0%				2	1		110		11		
Hinge Style				Closed				5/5/2		6			//		
Rod Retention	; Rod T	уре	Press fi	t; knur	led pin		(T	- million		Y			
		F	Product Notes				1972	Constanting of the		1000	1000	1		100	12.3
 Contact Int before desi 	ralox f igning	or pre equipi	cise belt measurements nent or ordering a belt.	and st	ock sta	atus				-	2			100	
	thickne	ess as	the straight-running count	erpart	S900 FI	lat					-				
	•	,	tion is provided in Product	line			1000	Mar Marth		5	2	1991	131	-	
 Uses S1400 							1000	The second						212	
	•		lit design, so shafts do not	t have t	to he		150			_	-				
removed for	r retrofi	ts and	changeovers.				Second	-	-	200	-			-	
S4092 belts	i.		neter sprockets are not co							-	-			8	
 Use the Intra pull for your information. 	' syster	gineer n. Con	ing Program to calculate th tact Intralox Customer Serv	ne estir vice for	nated b r more	oelt		All the second		_	_				
Available in	10 ft (:	3 m) in	crements						100		1000			-	_
 Minimum ba 		,													
backbend - For 7.5 in	l radius (191 r	s is 6 ir nm) wi	d 4.5 in (114 mm) wide ba n (152.4 mm) de, the minimum backben 95 mm) is recommended				0.90" (22.9 mi	n)		2.22 (56.4 r 2.98 (75.6 r	nm) "		0.70" (17.8 mm		0.384 (9.8 m
						Belt Da	ta								
											Mini	mum			
						Te		ure Range				erline		genc	
	Belt	Nidth		Belt St	trength		(conti	nuous)	Belt	Mass	Turn I	Radius	Acce	eptab	
D-44.4			Default Pin Material,				F		11. 10	1			FDA	a	EL
Belt Material	in	mm	Diameter 0.25 in (6.4 mm)	lbf	N		° F	°C	lb/ft	kg/m	in	mm	(USA)	Ja	MC
Acetal	3.25	83	303 Stainless steel	500	2,220		to 200	-46 to 93	1.43	2.13	18	457	C	C	C
Acetal Acetal	4.5 7.5	114 191	303 Stainless steel	500 500	2,220 2,220		to 200 to 200	-46 to 93 -46 to 93	1.61 2.05	2.40 3.05	18 24	457 610	C	C	C
HR nylon	3.25	83	303 Stainless steel 303 Stainless steel	500	2,220		to 200	-46 to 93	1.26	3.05	24 18	457	C C	С	C C
HR nylon	7.5	191	303 Stainless steel	500	2,220		to 240	-46 to 116	1.71	2.55	24	610	C		
	1.5	191	202 Stainless Steel	500	2,220		0 240	-40 to 110	1.71	2.33	10	457			

^a Japan Ministry of Health, Labour, and Welfare

83

114

191

303 Stainless steel

303 Stainless steel

303 Stainless steel

3.25

4.5

7.5

^b European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

500

500

500

2,220

2,220

2,220

-50 to 310

-50 to 310

-50 to 310

-46 to 154

-46 to 154

-46 to 154

1.28

1.40

1.80

1.92

2.08

2.68

18

18

24

457

457

610

С

С

С

С

С

С

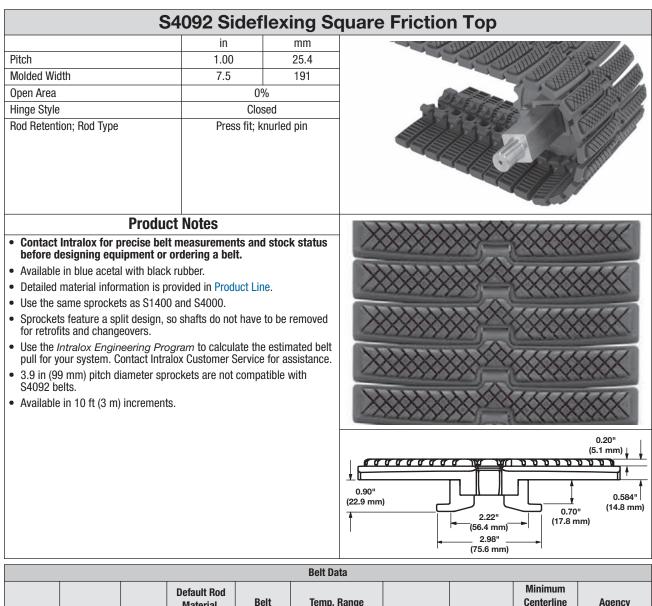
^C Fully compliant

HHR nylon

HHR nylon

HHR nylon

SERIES 4000

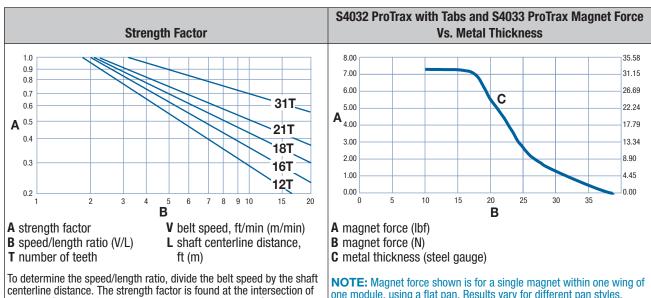


	Belt Width		Base/	iviatorial,		elt ngth		Range nuous)	Belt	Mass		Minii Cente Turn F	erline	•	ency tability
Base Belt Material	in	mm	Friction Top	0.25 in (6.4 mm)	lbf	N	°F	°C	lb/ft	kg/m	Friction Top Hardness	in	mm	FDA (USA)	EU MC ^a
Acetal	7.5	191	Blue/black	303 Stainless steel	500	2,220	-10 to 130	-23 to 54	2.35	3.50	54 Shore A	24	610	b	с

^a European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

^bFDA compliant with restriction: Do not use in direct contact with fatty foods.

^CEU compliant with restriction: Do not use in direct contact with fatty foods.



the speed/length ratio and the appropriate sprocket line. See Belt Selection Instructions for more information.

NOTE: Magnet force shown is for a single magnet within one wing of one module, using a flat pan. Results vary for different pan styles, surface textures, and temperatures.

							Mo	Ided Spi	rockets							
Number of Teeth		Pitch neter	-	Outer neter	-	al Hub dth	A	vailable E	Bore Size	es						
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm						
12 (3.41%)	3.9 ^a	99 ^a	3.9	99	1.5	38		1.5		40						
15 (2.19%)	4.9	124	4.9	124	1.5	38		2.5		60						
18 (1.52%)	5.7	145	5.8	148	1.5	38	2	2.5	50	60						
24 (0.86%)	7.7	196	7.8	198	1.5	38		2.5		60						
^a 3.9 PD sp	3.9 PD sprockets are not compatible with S4092 belts.															

							Nylon (F	DA) Spl	it Sproc	kets	
Number of Teeth		Pitch neter		Outer 1eter	Nom Wi	. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in ^a	Square in	Round mm ^a	Square mm	
16 (1.92%)	5.1	130	5.2	132	1.5	38	1.25, 1.5	1.5	30	40	

^aU.S. key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885.

	Maximum Load per Glass-Filled Nylon Split Sprocket													
							Ro	und Bore	Size Ran	ige				
	Nom.	Pitch			1-1/4 in	to 1-3/8	1-7/1	6 in to						
No. of	Dian	neter	1 in to 1-3/16 in		i	n	1-3/	/4 in	1-13/16	in to 2 in	25 mm t	o 35 mm	40 mm t	o 50 mm
Teeth	in	mm	lbf	Ν	lbf	N	lbf	Ν	lbf	Ν	lbf	Ν	lbf	Ν
18	5.7	145	300	1,330	340	1,510	400	1,780	540	2,400	240	1,070	410	1,820
21	6.7	170	225	1,000	275	1,220	350	1,560	500	2,220	175	780	400	1,780

						Gla	ss-Filled	Nylon S	Split Sp	rockets	
Number of Teeth	Nom. Dian	Pitch neter		Outer 1eter	-	. Hub dth	Av	ailable E	Bore Size	es	
(Chordal	_		_		_			-		Square	
Action)	in	mm	in	mm	in	mm	in ^a	in	mm ^a	mm	
18 (1.52%)	5.7	145	5.8	148	2.0	51	1 to 2 ^b	1.5, 2.5	25 to	40, 60	
21 (1.12%)	6.7	170	6.8	172	2.0	51	1102	1.5, 2.5	50 ^c	40, 60	your state

^a Imperial key sizes on round bore sprockets are based on ANSI standard B17.1-1967 (R1989) and metric key sizes are based on DIN standard 6885. ^b in 1/16 in increments

^c in 5 mm increments

						Polypro	opylene	Compos	ite Spli	t Sprocl
Number of Teeth		Pitch neter	-	Outer neter	-	. Hub dth	A	vailable E	Bore Size	es
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
18 (1.52%)	5.7	145	5.8	148	2.0	51		1.5, 2.5		40, 60
21 (1.12%)	6.7	170	6.8	172	2.0	51		1.5, 2.5		40, 60
31 (0.51%)	9.9	251	10.1	257	2.0	51		3.5		

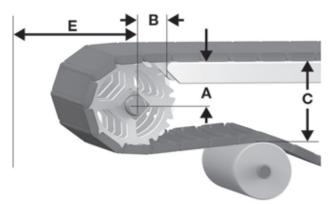
Number of Teeth		Pitch neter	Nom. Dian	Outer 1eter	-	. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
31	9.9	251	10.1	257		38, 44		3.5			
(0.51%)					1.67			2.5 ^a			

^aThe 2.5 in square bore is created by using a bore adapter in the 3.5 in square bore sprocket.

							Machir	ned Spro	ckets		
Number of Teeth	Nom. Diam			Outer neter		. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
18 (1.52%)	5.7	145	5.8	148	1.5	38			30, 40		

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



 \boldsymbol{A} vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 86: A, B, C, and E drive dimensions

			S 4	1000 Conveyor I	rame Dim	ensions				
Spro	cket Descri	ption		A		B	(;	E	
Pitch D	iameter	Number	Range (Bot	tom to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				S4009 F	lush Grid					
3.9	99	12	2.07-2.14	53-54	2.31	59	4.62	117	2.73	69
5.1	130	16	2.73-2.78	69-71	2.51	64	5.90	150	3.37	86
5.7	145	18	3.05-3.10	77-79	2.54	65	6.54	166	3.69	94
6.7	170	21	3.54-3.58	90-91	2.70	69	7.50	191	4.17	106
9.9	251	31	5.15-5.18	131-132	3.15	80	10.70	272	5.77	147
				S4009	Flat Top					
3.9	99	12	2.07-2.14	53-54	2.31	59	4.66	118	2.77	70
5.1	130	16	2.73-2.78	69-71	2.51	64	5.94	151	3.41	87
5.7	145	18	3.05-3.10	77-79	2.54	65	6.58	167	3.73	95
6.7	170	21	3.54-3.58	90-91	2.70	69	7.54	192	4.21	107
9.9	251	31	5.15-5.18	131-132	3.15	80	10.74	273	5.81	148
				S4014	Flat Top					
3.9	99	12	2.07-2.14	53-54	2.31	59	4.24	108	2.68	68
5.1	130	16	2.73-2.78	69-71	2.51	64	5.49	139	3.64	92
5.7	145	18	3.05-3.10	77-79	2.54	65	6.09	155	3.95	100
6.7	170	21	3.54-3.58	90-91	2.70	69	7.09	180	4.43	113
9.9	251	31	5.15-5.18	131-132	3.15	80	10.86	276	5.93	151
			S4030 and S4	031 7.5-in ProTra	x Sideflexin	g Flat Top	with Tabs			
3.9	99	12	2.07-2.17	53-54	2.31	59	4.66	118	2.77	70
5.1	130	16	2.73-2.78	67-71	2.51	64	5.989	152	3.459	88
5.8	147	18	3.05-3.10	77-79	2.54	65	6.629	168	3.779	96
6.7	170	21	3.54-3.58	90-91	2.7	69	7.589	193	4.259	108
9.9	251	31	5.15-5.18	131-132	3.15	80	10.789	274	5.859	149

S4032 7.5-in ProTrax Sideflexing Flat Top with Tabs 5.1 130 16 2.73-2.78 67-71 2.51 64 5.99 152 3.46 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.63 168 3.78 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.59 193 4.26 108 3.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 149 S4033 7.5-in ProTrax Sideflexing Flat Top S4033 15 S40 <th colspa<="" th=""><th></th><th></th><th></th><th>S4</th><th>1000 Conveyor</th><th>Frame Dim</th><th>ensions</th><th></th><th></th><th></th><th></th></th>	<th></th> <th></th> <th></th> <th>S4</th> <th>1000 Conveyor</th> <th>Frame Dim</th> <th>ensions</th> <th></th> <th></th> <th></th> <th></th>				S4	1000 Conveyor	Frame Dim	ensions				
in mm of Teeth in mm in mm in mm in mm in mm mm in mm in mm mm mm mm in mm mm mm mm in mm mm mm in mm mm mm mm mm in mm <	Spro	cket Descr	iption	1	Α	E	3	(;	E		
S4032 7.5-in ProTrax Sideflexing Flat Top with Tabs Tab Tab 5.1 130 16 2.73-2.78 67-71 2.51 64 5.99 152 3.46 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.63 168 3.78 96 3.7 170 21 3.54-3.58 90-91 2.7 69 7.59 193 4.26 108 3.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 149 S4033 7.5-in ProTrax Sideflexing Flat Top S4033 7.5-in ProTrax Sideflexing Flat Top S4033 7.5-in ProTrax Sideflexing Flat Top S4030 7.5-in ProTrax Sideflexing Flat Top S4030 7.5-i.8 2.31 59 4.66 118 2.77 70 5.1 130 16 2.73-2.78 67-71 2.51 64 5.99 193 4.259 108 5.8 147 18 <th>Pitch D</th> <th>iameter</th> <th>Number</th> <th>Range (Bot</th> <th>tom to Top)^a</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	Pitch D	iameter	Number	Range (Bot	tom to Top) ^a							
5.1 130 16 2.73-2.78 67-71 2.51 64 5.99 152 3.46 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.63 168 3.78 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.59 193 4.26 108 5.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 149 S4033 7.5-in ProTrax Sideflexing Flat Top S4030 16 2.73-2.78 67-71 2.51 64 5.989 152 3.459 88 S4090, S4091, S4092 Sideflexing Flat Top S4090, S4091, S4092 Sideflexing Flat Top S4090, S4091, S4092 Sideflexing Flat Top S4090, S4091, S4092 Si	in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
5.8 147 18 3.05-3.10 77-79 2.54 65 6.63 168 3.78 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.59 193 4.26 108 3.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 144 S403 7.5-in ProTrax Sideflexing Flat Top 3.9 99 12 2.07-2.17 53-54 2.31 59 4.66 118 2.77 70 5.1 130 16 2.73-2.78 67-71 2.54 65 6.629 168 3.779 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.589 193 4.259 108 6.9 251 31 5.15-5.18 131-132 3.15 80 10.789 274 5.859 1449 6.7 145 18 3.05-3.10 77-79 2.				S4032 7	5-in ProTrax Side	eflexing Flat	Top with T	abs				
5.7 170 21 3.54-3.58 90-91 2.7 69 7.59 193 4.26 108 3.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 149 3.9 99 12 2.07-2.17 53-54 2.31 59 4.66 118 2.77 70 5.1 130 16 2.73-2.78 67-71 2.51 64 5.989 152 3.459 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.629 168 3.779 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.589 193 4.259 108 6.9 251 31 5.15-5.18 131-132 3.15 80 10.789 274 5.859 149 6.9 2.51 31 5.15-5.18 131-132 3.15 80 10.789 274	5.1	130	16	2.73-2.78	67-71	2.51	64	5.99	152	3.46	88	
9.9 251 31 5.15-5.18 131-132 3.15 80 10.79 274 5.86 149 S4033 7.5-in ProTrax Sideflexing Flat Top 3.9 99 12 2.07-2.17 53-54 2.31 59 4.66 118 2.77 70 5.1 130 16 2.73-2.78 67-71 2.51 64 5.89 152 3.459 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.629 168 3.779 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.589 193 4.259 108 6.9 251 31 5.15-5.18 131-132 3.15 80 10.789 274 5.859 149 S4090, S4091, S4092 Sideflexing Flat Top S4090, S4091, S4092 Sideflexing Flat Top S4090, S4091, S4092 Sideflexing Flat Top S409 12.07-2.14	5.8	147	18	3.05-3.10	77-79	2.54	65	6.63	168	3.78	96	
S4033 7.5-in ProTrax Sideflexing Flat Top 3.9 99 12 2.07-2.17 53-54 2.31 59 4.66 118 2.77 70 5.1 130 16 2.73-2.78 67-71 2.51 64 5.989 152 3.459 88 5.8 147 18 3.05-3.10 77-79 2.54 65 6.629 168 3.779 96 5.7 170 21 3.54-3.58 90-91 2.7 69 7.589 193 4.259 108 3.9 251 31 5.15-5.18 131-132 3.15 80 10.789 274 5.859 149 S4090, S4091, S4092 Sideflexing Flat Top												

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S4000 Dead Plate Gap											
	Sprocket Description		Minimu	um Gap							
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
3.9	99	12	0.066	1.7							
5.1	130	16	0.050	1.3							
5.7	145	18	0.044	1.1							
6.7	170	21	0.038	1.0							
9.9	251	31	0.025	0.6							

ENGINEERING ANALYSIS FOR SPIRAL AND RADIUS BELTS

Intralox can provide an engineering analysis for spiral and radius applications, to determine the estimated belt pull, and ensure that the belt is strong enough for the application. Contact Intralox Customer Service for more information.

The following information is required for an engineering analysis:

- Any environmental conditions which can affect the friction coefficient. For dirty or abrasive conditions, use higher-than-normal friction coefficients.
- Belt width
- Length of each straight section
- Angle, direction, and inside radius of each turning section
- Carryway and hold down wearstrip materials.
- Product load lbf/ft² (N/m²)
- Product accumulation conditions
- Belt speed
- Elevation changes in each section
- Operating temperatures
- Sprocket and shaft specifications

Intralox can help select radius belt and low-tension capstan drive spiral belts for your application. Contact Intralox Customer Service for more information.

			Spi	ral 1.0)				
		in	mm	-	1	The second		-	
Pitch		2.0	50.8		52	322		33	59
Minimum Width		18	660		22				2.3
Maximum Width		50	1270	22	Hat 1	and if some fill some	I STATE AND ADDRESS OF	Ste	
Width Increments		1.0	25.4	10.0			1		A sum a
Opening Size (app	roximate)	0.85 x 0.88	21.6 x 22	2.5		and \$ out \$ out	Front II and F		All Acres 2
Open Area (fully ex	(tended)	56	%	-	mama		Con Kung F.	Table Inc.	-
Minimum Open Ar	ea (1.0TR)	22	%				I the I the I		
Hinge Style		Оре	en	are V	and and it		1-1-1	The Local Division of the	and Month
Rod Retention; Rod	1 Туре	Occluded edg	e; unheaded	1-1					
	Product No	otes		000	Town of the local diversion	AL PROPERTY.	Town of the local division of the local divi	and the second	at a lot
 before designin Lightweight, relation Each belt mater available. Intraloc combination for Detailed materia Designed for low minimum turn raedge). Use the Intralox requirements for enough for the a For belt widths to contact Intralox applications. 	inder 26 in (660 mm) a Customer Service. Customer Service for p ket indent from the insid	ring a belt. smooth surface aterial. Other rod best belt and roo ed in Product Lin e spiral applicati pelt width (measure to predict stren and ensure that th and over 50 in (1 preferred run dire	grid. I materials a d material ions with a ured from in ugth he belt is str 270 mm), ection on sp	re side ong		2.00" <u>NOM.</u> (50.8 mm)	2.00" NOM. (50.8 mm)	2.00" N (50.8 m	
			Be	It Data					
			wht Dolt			•	ure Range		
	Default Rod Mater	ial, Straig Stre	ength	Spiral Bel	t Strength ^a	(contii	nuous)	Belt	Mass
Belt Material		Stre		Spiral Bel Ibf	t Strength ^a N	(contin °F	nuous) °C	Belt Ib/ft ²	Mass kg/m²
Belt Material Acetal	Diameter	Stre	ength	•		•			

^a Published spiral belt strengths and their method of calculation vary among belt manufacturers. Please consult an Intralox spiral engineer for accurate comparison of spiral belt strengths.

		Spiral	1.1
	in	mm	N. CONTRACT TRANS. MATERIAL CONTRACTOR AND TRACKING RECTATIONS.
Pitch	2.0	50.8	1 - CEEEEE
Minimum Width	15	381	
Maximum Width	44	1,118	Contract and the first that the first the
Width Increments	1.0	25.4	The faile faile for the faile
Opening Size (approximate)	0.85 × 0.88	21.6 × 22.5	C THEIEIEIEIEIEIEIEI
Open Area (fully extended)	56	%	Televene te te te te te
Minimum Open Area (1.1 turn ratio)	22	%	
Hinge Style	Ор	en	anter for for for for for for for the
Rod Retention; Rod Type	Occluded edg	e; unneaded	
Product	Notes		KANNER FRANKLIKI
This belt has pinch points. See the Conveyor Belting Installation, N Troubleshooting Manual for more	laintenance &	n the <i>Intralox</i>	
 Contact Intralox for precise belt n before designing equipment or or Lightweight, relatively strong belt wi Belt openings pass straight through Each belt material has a default rod available. Intralox can help identify t combination for your application. Detailed material information is prov Designed for low-tension, capstan d minimum turn radius of 1.1 times th edge). 	dering a belt. ith smooth surface the belt to simplify material. Other roo he best belt and ro rided in Product Lir rive spiral applicat	grid. cleaning. I materials are d material ie. ions with a	
 For belt widths under 15 in (381 mm contact Intralox Customer Service. Contact Intralox Customer Service for applications. Minimum sprocket indent from the i spiral: 9.0 in (228.6 mm). 	or preferred run dire	ection on spiral	2.00" NOM. (50.8 mm) (50.8 mm) 2.00" NOM. (50.8 mm) (50.8 mm)

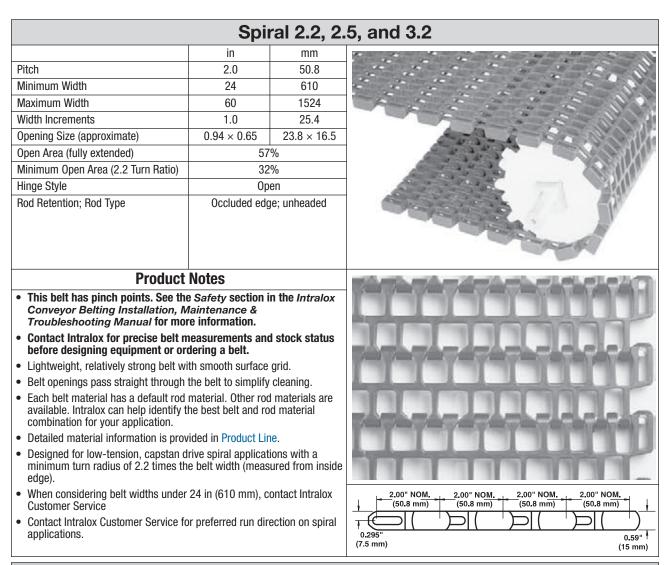
Belt Data									
	Default Rod Material, Diameter 0.24 in		ht Belt ngth	Spiral Bel	t Strength ^a	Temperati (contii	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,300	19,000	300	1,330	-50 to 200	-46 to 93	1.44	7.03
SELM	Acetal	1,100	16,100	300	1,330	-50 to 200	-46 to 93	1.24	6.05
^a Published spiral belt comparison of spiral	strengths and their method of belt strengths.	calculation v	ary among b	elt manufactı	irers. Please d	consult an Intralox	spiral engineer f	or accurate	

Spiral 1.6		
in mm		
Pitch 2.0 50.8		
Minimum Width 24 610		
Maximum Width 60 1,524		
Width Increments 1.0 25.4		
Opening Size (approximate) 0.94×0.65 23.8×16.5		
Open Area (fully extended) 54%		
Minimum Open Area (1.6 Turn Ratio) 40%		
Hinge Style Open		
Rod Retention; Rod Type Occluded edge; unheaded		
Product Notes This belt has pinch points. See the Safety section in the Intralox		
Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.		
• Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.		
 Lightweight, relatively strong belt with smooth surface grid. 		
 Belt openings pass straight through the belt to simplify cleaning. 		
• Each belt material has a default rod material. Other rod materials are		
available. Intralox can help identify the best belt and rod material combination for your application.		
 Detailed material information is provided in Product Line. 		
 Designed for low-tension, capstan drive spiral applications with a 		
minimum turn radius of 1.6 times the belt width (measured from inside edge).		
When considering belt widths under 24 in (610 mm), contact Intralox Customer Service		
• Contact Intralox Customer Service for preferred run direction on spiral		

Belt Data									
	Default Rod Material, Diameter 0.24 in		ht Belt ngth	Spiral Beli	t Strength ^a	•	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,700	24,800	375	1,670	-50 to 200	-46 to 93	1.41	6.88
Polypropylene ^b	Acetal	1,500	21,900	300	1,330	34 to 200	1 to 93	1.01	4.93
SELM	Acetal	1,500	21,900	300	1,330	-50 to 200	-46 to 93	1.24	6.05

^a Published spiral belt strengths and their method of calculation vary among belt manufacturers. Please consult an Intralox spiral engineer for accurate comparison of spiral belt strengths.

^bAvailable in 1.6 radius only.



Belt Data									
	Default Rod Material, Diameter 0.24 in	-	ht Belt ngth	Spiral Beli	t Strength ^a	-	ure Range nuous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,700	24,800	475	2,110	-50 to 200	-46 to 93	1.54	7.52
Polypropylene	Acetal	1,500	21,900	400	1,780	34 to 200	1 to 93	1.04	5.08
SELM	Acetal	1,500	21,900	375	1,670	-50 to 200	-46 to 93	1.24	6.05
		,	,		,			-	

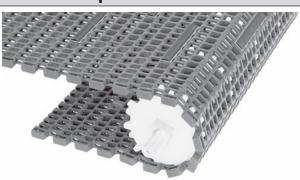
^a Published spiral belt strengths and their method of calculation vary among belt manufacturers. Please consult an Intralox spiral engineer for accurate comparison of spiral belt strengths.

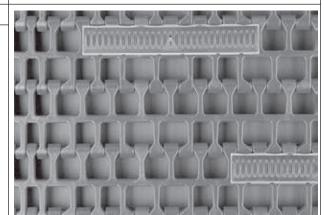
Spiral	Rounded	Friction	Тор
--------	---------	-----------------	-----

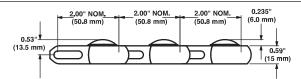
	in	mm
Pitch	2.0	50.8
Minimum Width	24	610
Maximum Width	60	1524
Width Increments	1.0	25.4
Opening Size (approximate)	0.94 × 0.65	23.8 × 16.5
Hinge Style	Op	ben
Rod Retention; Rod Type	Occluded edg	ge; unheaded

Product Notes

- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status • before designing equipment or ordering a belt.
- · Lightweight, relatively strong belt with smooth surface grid.
- Belt openings pass straight through the belt to simplify cleaning.
- Friction Top is available in white polypropylene with white rubber, blue • polypropylene with black rubber, and natural polyethylene with white rubber.
- · Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- When considering belt widths under 24 in (610 mm), contact Intralox • Customer Service
- Contact Intralox Customer Service for preferred run direction on spiral • applications.
- Contact Intralox Customer Service for minimum indent requirements.







Belt Data												
	Default Rod Material, Diameter	Belt Si	trength	Strengt	h 1.6 TR	Ran	ge	Belt	Mass		Agei Accept	
Base/Friction Top	0.24 in (6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^a
Blue/black	Acetal	1,700	24,800	375 (475)	1,670 (2,110)	34 to 150	1 to 66	1.44 (1.54)	7.03 (7.52)	55 Shore A	b	с
White/white	Acetal	1,700	24,800	375 (475)	1,670 (2,110)	35 to 150	2 to 66	1.44 (1.54)	7.03 (7.52)	55 Shore A	d	С
Blue/black	Acetal	1,500	21,900	300 (400)	1,330 (1,780)	34 to 150	1 to 66	1.01 (1.04)	4.93 (5.08)	55 Shore A	d	
White/white	Acetal	1,500	21,900	300 (400)	1,330 (1,780)	34 to 150	1 to 66	1.01 (1.04)	4.93 (5.08)	55 Shore A	d	С
	Top Blue/black White/white Blue/black	Base/FrictionMaterial, Diameter 0.24 in (6.1 mm)Blue/blackAcetalWhite/whiteAcetalBlue/blackAcetal	Material, Diameter 0.24 in (6.1 mm)Belt StBlue/blackAcetal1,700White/whiteAcetal1,700Blue/blackAcetal1,500	Material, Diameter 0.24 in (6.1 mm)Belt StephBlue/blackAcetal1,70024,800White/whiteAcetal1,70024,800Blue/blackAcetal1,70024,800Blue/blackAcetal1,50021,900	Default Rod Material, DiameterSpiral StrengthBase/Friction Top0.24 in (6.1 mm)Belt StrengthBlue/blackAcetal1,70024,800White/whiteAcetal1,70024,800375 (475)Blue/blackAcetal1,70024,800375 (475)Blue/blackAcetal1,50021,900300 (400)	Default Rod Material, Diameter Belt Strength Spiral Belt Strength 1.6 TR (2.2, 2.5, 3.2 TR) Base/Friction Top 0.24 in (6.1 mm) Ibf/ft N/m Ibf N Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) White/white Acetal 1,700 24,800 375 (475) 1,670 (2,110) Blue/black Acetal 1,500 21,900 300 (400) 1,330	Default Rod Material, Diameter Spiral Belt Belt Strength Spiral Ist Strength Temper 1.6 TR (2.2, 2.5, 3.2 TR) Base/Friction Top 0.24 in (6.1 mm) Ibf/ft N/m Ibf N °F Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 White/white Acetal 1,700 24,800 375 (475) 1,670 (2,110) 35 to 150 Blue/black Acetal 1,500 21,900 300 (400) 1,330 (1,330 34 to 150	Default Rod Material, Diameter Jefault Rod Material, Diameter Jefault Rod Belt Strength Spiral Belt Strength Temperature Strength Temperature (c.1, 2, 2, 5, 3, 2 TR) Base/Friction Top 0.24 in (6.1 mm) Ibf/ft N/m Ibf N °F °C Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 White/white Acetal 1,700 24,800 375 (475) 1,670 (2,110) 35 to 150 2 to 66 Blue/black Acetal 1,500 21,900 300 (400) 1,330 34 to 150 1 to 66	Default Rod Material, Diameter 0.24 in fop Belt Strength Spiral Belt Strength Temperature (continuous) Belt Base/Friction Top 0.24 in (6.1 mm) Belt N/m Ibf N °F °C Ib/ft² Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) Blue/black Acetal 1,500 21,900 300 1,330 (1,780) 34 to 150 1 to 66 1.01 (1.04) White/white Acetal 1,500 21,900 300 1,330 (1,780) 34 to 150 1 to 66 1.01 (1.04)	Default Rod Material, Diameter 0.24 in fop Belt Strength Spiral Belt Strength Temperature (c.2, 2.5, 3.2 TR) Belt Strengthure (continuus) Belt Mass Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) 7.03 (7.52) White/white Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) 7.03 (7.52) Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) 7.03 (7.52) Blue/black Acetal 1,700 24,800 375 (475) 1,670 (2,110) 34 to 150 1 to 66 1.44 (1.54) 7.03 (7.52) Blue/black Acetal 1,500 21,900 300 1,330 (1.780) 34 to 150 1 to 66 1.01 (1.04) 4.93 (5.08)	Default Rod Material, Diameter 0.24 in (6.1 mm)Belt StrengthSpiral Belt StrengthTemperature (c.2, 2, 5, 3.2 TR)Temperature (continuos)Belt MassFriction TopBase/Friction Top0.24 in (6.1 mm)lbf/ttN/mlbfN°F°Clb/ft2kg/m2Friction Top HardnessBlue/blackAcetal1,70024,800 375 (475)1,670 (2,110)34 to 1501 to 661.44 (1.54)7.03 (7.52)55 Shore AWhite/whiteAcetal1,70024,800 375 (475)1,670 (2,110)35 to 1502 to 661.44 (1.54)7.03 (7.52)55 Shore ABlue/blackAcetal1,50021,900 300 (400)1,330 (1,780)34 to 1501 to 661.01 (1.04)4.93 (5.08)55 Shore AWhite/whiteAcetal1,50021,900 300 (400)1,330 (1,780)24 to 1501 to 661.01 (1.04)4.93 (5.08)55 Shore A	Default Rod Material, Diameter 0.24 in (6.1 mm) $Belt \ Strength$ Spiral Belt Strength 1.6 TR (2.2, 2.5, 3.2 TR)Temperature Range (continuos)Belt MassAgen AcceptBase/Friction Top0.24 in (6.1 mm)Ibf/tN/mIbfN $\circ^{\circ}F$ $\circ^{\circ}C$ Ib/ft2kg/m2Friction Top HardnessFDA (USA)Blue/blackAcetal1,70024,800 375 (475)1,670 (2,110)34 to 1501 to 661.44 (1.54)7.03 (7.52)55 Shore AbWhite/whiteAcetal1,70024,800 375 (475)1,670 (2,110)35 to 1502 to 661.44 (1.54)7.03 (7.52)55 Shore AdBlue/blackAcetal1,50021,900 300 (400)1,330 (1,780)34 to 1501 to 661.01 (1.04)4.93 (5.08)55 Shore Ad

ing app

^b Fully compliant

 $^{\rm C}\,{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm d}\,{\rm FDA}$ compliant with restriction: Do not use in direct contact with fatty foods.

	[Dual Tur	ning 2.0
	in	mm	
Pitch	2.0	50.8	
Minimum Width	18	457.2	
Maximum Width	60	1524	
Width Increments	1.0	25.4	
Opening Size (approximate)	0.94 x 0.65	23.8 x 16.5	
Open Area (fully extended)	57	7%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	ge; unheaded	and the second s
	ct Notes	-	
 This belt has pinch points. See Conveyor Belting Installation Troubleshooting Manual for n 	, Maintenance &	in the Intralox	
 Contact Intralox for precise bel before designing equipment or 		d stock status	
 Do not use in spiral conveyor s 	•		
 Designed for standard drive and i 			
 Rod insertion is accomplished fro tools are required. 		lt. No special	
 Each belt material has a default r available. Intralox can help identifi combination for your application. 			
 Detailed material information is p 	rovided in Product Li	مادادا والمساد والمساد والمساد والمساد	
 Contact Intralox Customer Service applications. 			
• Turn ratio of 2.0 times belt width	(radius measured at i	inside edge).	(50.8 mm) (50.8 mm) (50.8 mm)
Consult the Intralox Engineering F specific widths not listed here.	Program and i-Drive P	Program for	(1.295° (7.5 mm)

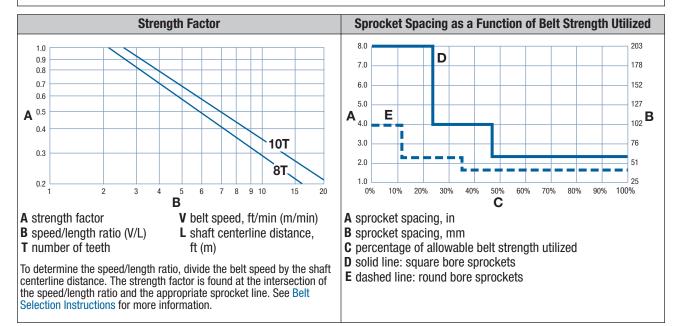
				Belt Data				
Base Belt	Default Rod Material, Diameter	Ŭ	ht Belt ngth			ure Range 1uous)	Belt	Mass
Material	0.24 in (6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,500	21,900	For curved belt strength	-50 to 200	-46 to 93	1.54	7.52
Polypropylene	Acetal	1,500	21,900	calculations, contact Intralox	34 to 200	1 to 93	1.04	5.08
SELM	Acetal	1,500	21,900	Customer Service.	-50 to 200	-46 to 93	1.24	6.05

Belt Wid	Ith Range ^b	Minimum Number of Sprockets	Wearstrips				
in	mm	Per Shaft ^c	Carryway	Returnway			
24	610	3	3	3			
26	660	3	3	3			
28	711	5	3	3			
30	762	5	3	3			
32	813	5	3	3			
34	864	5	3	3			
36	914	5	3	3			
38	965	5	4	4			
40	1,016	5	4	4			
42	1,067	5	4	4			
44	1,118	7	4	4			
46	1,168	7	4	4			
48	1,219	7	4	4			
50	1,270	7	4	4			
52	1,321	7	4	4			
54	1,372	7	5	5			
56	1,422	7	5	5			
58	1,473	7	5	5			
60	1,524	9	5	5			
her widths		er of sprockets at Maximum 6 in	Contact Intralox Customer Service for more information.	Maximum 12 in (305 mn centerline spacing			

^a For low-tension capstan drive spirals, contact Intralox Customer Service for suggested carryway support recommendations. Support belt edges using support rollers on drive shafts. Contact Intralox Customer Service for more information.

^b If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 1.00 in (25.4 mm) increments beginning with minimum width of 24 in (610 mm). If the actual width is critical, contact Intralox Customer Service.

^cThis number is a minimum. Heavy-load applications can require additional sprockets. For lockdown location, see Retainer Rings and Center Sprocket Offset.



							Half 1	footh Sp	orocket	S ^b	
Number		Pitch		Outer	-	. Hub	_				
of Teeth	Dian	neter	Dian	neter	Wi	dth		vailable E			
(Chordal								-	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
10 (4.89%)	6.5	165	6.7	170	0.8	20		1-1/2		40	

^b Contact Intralox Customer Service for preferred method of locking down sprockets and for proper sprocket timing.

Machined Sprockets ^c											
						Av	ailable E	Bore Size	es		
_		-				1	-		-		
in	mm	in	mm	in	mm	in	in	mm	mm		
5.2	132	5.4	136	0.8	20	1-1/4, 1-7/16, 1-1/2, 2	1-1/2, 2-1/2		40, 60		
6.5	165	6.7	170	0.8	20	1-1/4, 1-7/16, 1-1/2, 2	1-1/2, 2-1/2		40, 60		
	Dian in 5.2	5.2 132	Diameter Diameter in mm in 5.2 132 5.4	Diameter Diameter in mm in mm 5.2 132 5.4 136	Diawer Diawer With in mm in mm in 5.2 132 5.4 136 0.8	Diaweter Diaweter Width in mm in mm mm 5.2 132 5.4 136 0.8 20	Nom. Pitch Diaweter Nom. ∪uter Diaweter Nom. Hub Width Au in mm in mm fragmentary in mm in mm in fragmentary 5.2 132 5.4 136 0.8 20 1-1/4, 1-7/16, 1-1/2, 2 6.5 165 6.7 170 0.8 20 1-1/4, 1-7/16,	Nom. Pitch Diaweter Nom. Outer Diaweter Nom. Hub Width Available E in mm in mm in Round in Square in 5.2 132 5.4 136 0.8 20 1-1/4, 1-7/16, 1-1/2, 2 1-1/2, 2-1/2 6.5 165 6.7 170 0.8 20 1-1/4, 1-7/16, 2-1/2 1-1/2, 2-1/2	Nom. Pitch Diameter Nom. Outer Diameter Nom. Hub Width Available Bore Size in mm in mm In Round in Square in Round in Square in Round mm 5.2 132 5.4 136 0.8 20 1-1/4, 1-7/16, 1-1/2, 2 1-1/2, 2-1/2 1-1/2, 2-1/2 6.5 165 6.7 170 0.8 20 1-1/4, 1-7/16, 2-1/2 1-1/2, 2-1/2	Nom. Pitch Diameter Nom. Outer Diameter Nom. Hub Width Aurilable Bore Sizes in mm in mm in Round in Square in Round mm Square mm 5.2 132 5.4 136 0.8 20 1-1/4, 1-7/16, 1-1/2, 2-1/2 1-1/2, 2-1/2 40, 60 6.5 165 6.7 170 0.8 20 1-1/4, 1-7/16, 1-7/16, 2-1/2 1-1/2, 2-1/2 40, 60	

^c Contact Intralox Customer Service for preferred method of locking down sprockets and for proper sprocket timing.

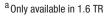
							EZ CI	ean [™] S	procket	s	
Number of Teeth		Pitch neter		Outer neter		. Hub dth	A	vailable E	Bore Size	es	
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm	
10 (4.89%)	6.5	165	6.7	170	0.8	20.32		2.5			E.

				;	Support WI	heel
Pitch D	iameter	ameter Available Bore Sizes				
					Square	
in	mm	Round in	Square in	Round mm	mm	
5.2	132	1.25, 1-7/16, 1.5, 2	1.5, 2.5		40, 60	
6.5	165	1.25, 1-7/16, 1.5, 2	1.5, 2.5		40, 60	

		Universal Side	guards
Availabl	e Height		
in	mm	Available Materials	
0.50	12.7		
1.00	25.4	Acetal, SELM	
2.00 ^a	50.8 ^a	-	
the belt, with	no indent.	apacity. Sideguards fit to the very edge of	

Assembly does not require "finger cuts" on the modules, so the belt beam strength is uncompromised.

• Compatible turn ratios: 1.6, 2.2, 2.5, and 3.2.



Overlapping Sideguards Available Height in **Available Materials** mm 0.50 12.7 Acetal, SELM 1.00 25.4 · Maximizes product carrying capacity. Sideguards fit to the very edge of the belt, with no indent. • Assembly does not require "finger cuts" on the modules, so the belt beam strength is not compromised. • Makes the outer edge of the belt more snag-resistant. • Keeps small products from falling through belt gaps.

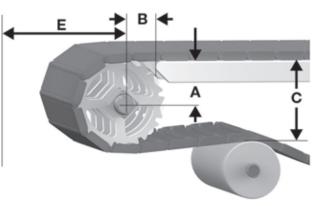
- Turn ratios for 0.50 in (12.7 mm) acetal overlapping sideguards are 1.6, 2.2, 2.5, and 3.2.
- Turn ratio for 1.00 in (25.4 mm) overlapping sideguards is 1.6 only.



	Lane Divi									
Availabl	e Height									
in	mm	Available Materials								
0.75	19.0	Acetal, polypropylene								
strength is ur	ncompromised.	ger cuts on the modules, so the belt beam								
1.5 in(38.1 m	m). 2.5 in (63.5 in	ane dividers can be placed on indents of mm), 3.5 in (88.9 mm), 4.5 in (114 mm), I .00 in (25.4 mm) increments.								
	 For 2.2 turn radius modules, lane dividers can be placed on indents of 4.5 in (114 mm) and up in 1.00 in (25.4 mm) increments. 									

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\ensuremath{\textbf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 87: A, B, C, and E drive dimensions

	S2600 Conveyor Frame Dimensions											
	Sproc	ket Descr	iption		A		E	В)	E	
Pitch D	iameter	Nomir	nal OD	Number	Range (Bott	tom to Top) ^a						
in	mm	in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	Spiral 1.0, 1.1, 1.6, 2.0, 2.2, 2.5, 3.2											
5.2	132	5.4	137	8	2.12-2.32	54-59	2.25	57	5.23	133	2.97	75
6.5	165	6.7	170	10	2.78-2.94	71-75	2.54	65	6.47	164	3.59	91
					Spiral Ro	unded Friction	Тор					
5.2	132	5.4	137	8	2.12-2.32	54-59	2.25	57	5.46	139	3.21	82
6.5	6.5 165 6.7 170 10 2.78-2.94 71-75 2.54 65 6.71 170 3.83 97											
^a For gene	ral applicati	ons and app	lications w	here end trai	nsfer of tip-sensiti	ive product is not	critical, use	the bottom	of the range	9.		

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S2600 Dead Plate Gap									
	Sprocket Description		Minimum Gap							
Pitch D	iameter									
in	mm	Number of Teeth	in	mm						
5.2	132	8	0.200	5.1						
6.5	165	10	0.158	4.0						

HOLD DOWN WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

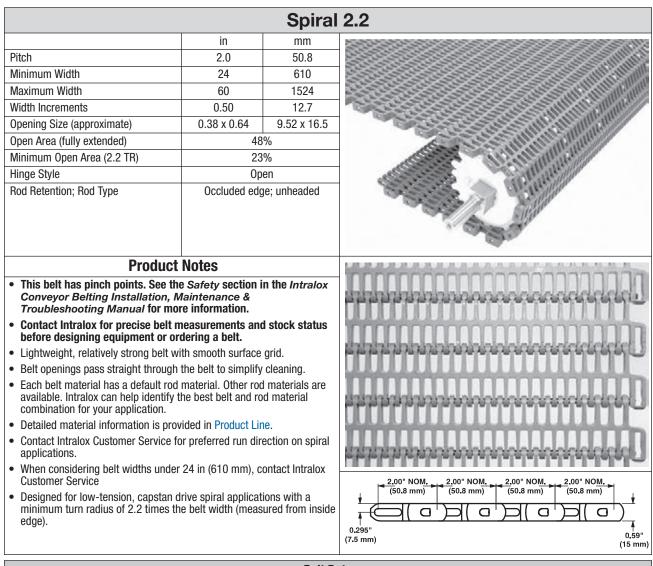
DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for S2600 is the turn radius times the belt width, measured from the inside edge.
- The minimum straight run required between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run (leading to the drive shaft) must be a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths (down to 1.5 times the belt width) require a gravity take-up to avoid sprocket wear and tracking problems. See Take-Ups.
- The minimum length of the first straight run (immediately after the idle shaft) is 1.5 times the belt width. When shorter lengths are required (down to 1.0 × the width), an idle roller can be used in place of sprockets.

		Spiral	1.6
	in	mm	
Pitch	2.0	50.8	and the second sec
Minimum Width	24	610	
Maximum Width	60	1524	
Width Increments	0.50	12.7	AS STREET
Opening Size (approximate)	0.38 × 0.64	9.52 × 16.5	
Open Area (fully extended)	45	%	
Minimum Open Area (1.6 TR)	27	%	The second second
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	je; unheaded	
			C/ Chan III
Product			
 This belt has pinch points. See th Conveyor Belting Installation, M Troubleshooting Manual for mo 	laintenance &	n the Intralox	
 Contact Intralox for precise belt n before designing equipment or or 	neasurements and dering a belt.	l stock status	
 Lightweight, relatively strong belt w 	ith smooth surface	grid.	14888888888888888
Belt openings pass straight through	the belt to simplify	cleaning.	
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
 Detailed material information is prov 	vided in Product Lir	ie.	
When considering belt widths under			14866666666666666
Customer Service			
 Contact Intralox Customer Service for applications. 	or preferred run dir	2.00" NOM 2.00" NOM 2.00" NOM 2.00" NOM	
 Designed for low-tension, capstan c minimum turn radius of 1.6 times th edge). 	lrive spiral applicat le belt width (meas	ions with a ured from inside	(50.8 mm) (50.8
			(7.5 mm) (15 mm

	Belt Data									
	Default Rod Material, Diameter 0.24 in	-	Straight Belt Strength Spiral Belt Stre			Temperature Range Strength ^a (continuous)			Belt Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²	
Acetal	Acetal	2,000	29,200	375	1,670	-50 to 200	-46 to 93	1.74	8.50	
SELM	Acetal	1,060	15,500	300	1,330	-50 to 200	-46 to 93	1.36	6.64	
^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.										



	Belt Data									
	Default Rod Material, Diameter 0.24 in		ht Belt ngth	Spiral Bel	t Strength ^a	Temperati (contii	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²	
Acetal	Acetal	1,700	24,800	375	1,670	-50 to 200	-46 to 93	1.85	9.03	
Polypropylene	Acetal	1,500	21,900	300	1,330	34 to 200	1 to 93	1.26	6.15	
SELM Acetal 1,060 15,500 300 1,330 -50 to 200 -46 to 93 1.44 7.03										
^a Intralox engineers a	re available to provide an accur	ate comparis	son of spiral l	celt strenaths	. Contact Intra	alox Customer Sei	rvice for more info	ormation.		

		Spiral	2.7
	in	mm	
Pitch	2.0	50.8	
Minimum Width	24	610	
Maximum Width	60	1524	
Width Increments	0.50	12.7	
Opening Size (approximate)	0.38 x 0.64	9.5 x 16.5	
Open Area (fully extended)	48	%	
Minimum Open Area (2.7 TR)	23	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	je; unheaded	CALLER SHOW
			and the second sec
Product	Notes		
This belt has pinch points. See the Conveyor Belting Installation, N Troubleshooting Manual for mo	<i>laintenance</i> & re information.		
 Contact Intralox for precise belt n before designing equipment or or 	neasurements and dering a belt.	l stock status	
• Lightweight, relatively strong belt with	th smooth surface	grid.	
Belt openings pass straight through	the belt to simplify	cleaning.	
 Each belt material has a default rod available. Intralox can help identify t combination for your application. 			
Detailed material information is prov	vided in Product Lir	ie.	
When considering belt widths under Customer Service			
 Contact Intralox Customer Service for applications. 	or preferred run dir	2.00" NOM. 2.00" NOM. 2.00" NOM. 2.00" NOM.	
 Designed for low-tension, capstan d minimum turn radius of 2.7 times th edge). 	rive spiral applicat e belt width (meas	(50.8 mm) (50.8	
		Rolt Da	

			Ве	lt Data					
	Default Rod Material, Diameter 0.24 in	U U	ht Belt ngth	Spiral Bel	t Strength ^a	Temperati (contii	ure Range 1uous)	Belt	Mass
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,700	24,800	375	1,670	-50 to 200	-46 to 93	1.86	9.08
Polypropylene	Acetal	1,500	21,900	300	1,330	34 to 200	1 to 93	1.26	6.15
SELM	Acetal	1,060	15,500	300	1,330	-50 to 200	-46 to 93	1.44	7.03
^a Intralox engineers a	re available to provide an accur	ate comparis	on of spiral b	celt strengths	. Contact Intra	alox Customer Sei	rvice for more info	ormation.	

		_	. –			
		Du	ual Tur	ning 2.0		
		in	mm			11/10/
Pitch		2.0	50.8			
Minimum Width (See Notes.)	e Product	12	304.8			and the second
Maximum Width		60	1524			1111111
Width Increments		0.50	12.7	and the		Walls and
Opening Size (appro	,	38 x 0.64	9.5 x 16.5		A A A A A A A A A A A A A A A A A A A	1 Martin Star
Open Area (fully external Product Notes)	,	44%				Supplied.
Minimum Open Area	a (2.0 TR)	23%				22.059
Hinge Style		Open		-8		
	Product Note	es				111111
Conveyor Beltin Troubleshooting	ch points. See the Safe og Installation, Mainte g Manual for more info	enance & ormation.				
before designing	for precise belt measu equipment or ordering		tock status			
-	iral conveyor systems.					mun
style, and are not	tions for S2700 Dual Tu directly comparable to o	ther S2700 styl	les.			THIN
required.	from the edge of the be					TITITI
	I has a default rod mater can help identify the be our application.					
Detailed material	information is provided i	n Product Line.				22/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2/2
Ŭ	dard drive and i-Drive sy					
	imes belt width (measure		0,			
When considering Customer Service	belt widths under 12 in	(305 mm), cont	tact Intralox			
Consult the Intrale specific widths not	ox Engineering Program t listed here.	n and I-Drive P	Program for	2.0" (50.8 mm)	2.0" 2.0" 2.0" (50.8 mm) (50.8 mm) (50.8 mm)	2.0" 50.8 mm) 0.59"
Contact Intralox C applications.	ustomer Service for pref	erred run direct	tion on spiral	0.295" (7.5 mm)		<u>) (15 mm)</u>
			Belt I	lata		
	Default Rod Material.	Straight B	elt		Temperature Range	
	Diameter 0 24 in	Strength	1		(continuous) ^a	Belt Mass

		-		Dell Dala						
	Default Rod Material, Diameter 0.24 in	U U	ht Belt ngth		Temperati (contin	ure Range luous) ^a	Belt	Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	Curved Belt Strength	°F	°C	lb/ft ²	kg/m²		
Acetal	Acetal	1,700	24,800		-50 to 200	-46 to 93	1.84	8.98		
Acetal	Nylon	1,700	24,800	For curved belt strength calculations, contact Intralox	-50 to 200	-46 to 93	1.81	8.84		
SELM	Acetal	1,060	15,500	Customer Service.	-50 to 200	-46 to 93	1.42	6.93		
SELM	Nylon	1,060	15,500		-50 to 212	-46 to 100	1.40	6.84		
^a Belt functions mechanically up to 240°F (116°C). Belt used in the temperature window of 212°F to 240°F (100°C to 116°C) is not FDA-compliant.										

SERIES 2700

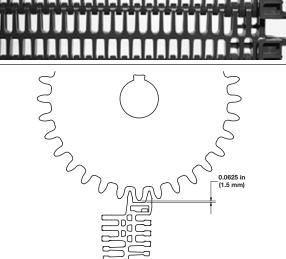
Side	Drive
------	-------

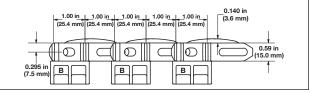
	in	mm
Module Pitch	2.0	50.8
Drive Tooth Pitch	1.0	25.4
Minimum Width	10	254.0
Maximum Width	42	1066.8
Width Increments	0.50	12.7
Opening Size (approximate)	0.38 x 0.64	9.5 x 16.5
Open Area	44	%
Hinge Style	Ор	en

Product Notes

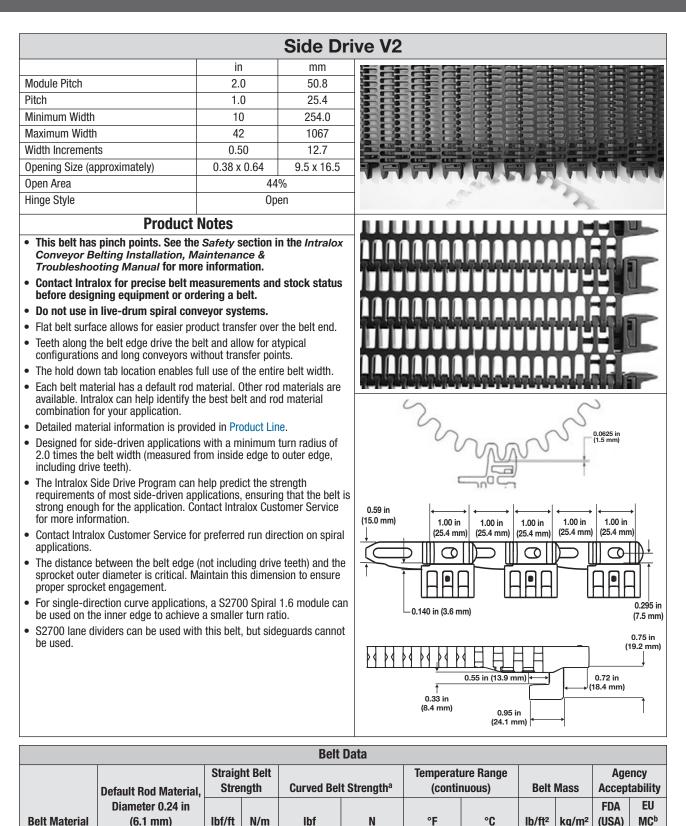
- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Do not use in live-drum spiral conveyor systems.
- Teeth along the belt edge drive the belt and allow for atypical configurations and long conveyors without transfer points.
- Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application.
- Detailed material information is provided in Product Line.
- A S2700 Spiral 1.6 module can be used on the inner edge to achieve a smaller turn ratio, but only for single-direction curve applications.
- The Intralox Side Drive Program can help predict the strength requirements of most side-driven applications, ensuring that the belt is strong enough for the application. Contact Intralox Customer Service for more information.
- Contact Intralox Customer Service for preferred run direction on spiral applications.
- The Z-dimension is the distance between the edge of the belt (not including drive teeth) and the outer diameter of the sprocket. Maintain this dimension to ensure proper engagement of the belt and sprocket.
- S2700 lane dividers can be used with this belt, but sideguards cannot be used.
- Designed for side-driven applications with a minimum turn radius of 2.0 times the belt width (measured from inside edge to outer edge, including drive teeth)







				Belt	Data						
	Default Rod Material, Straight Belt		Curved Belt Strength ^a		Temperature Range (continuous)		Belt Mass		Agency Acceptability		
Belt Material	Diameter 0.24 in (6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²	FDA (USA)	EU MC ^b
Acetal	Acetal	200	2,920	150	667	40 to 200	4 to 93	2.17	10.6	C	С
	rs are available to provide an ion Certificate providing app									tion.	



^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information. ^b European Migration Certificate providing approval for food contact according to EU Directive 2002/72/EC and all its amendments to date. ^c Fully compliant.

667

40 to 200

4 to 93

150

2,920

200

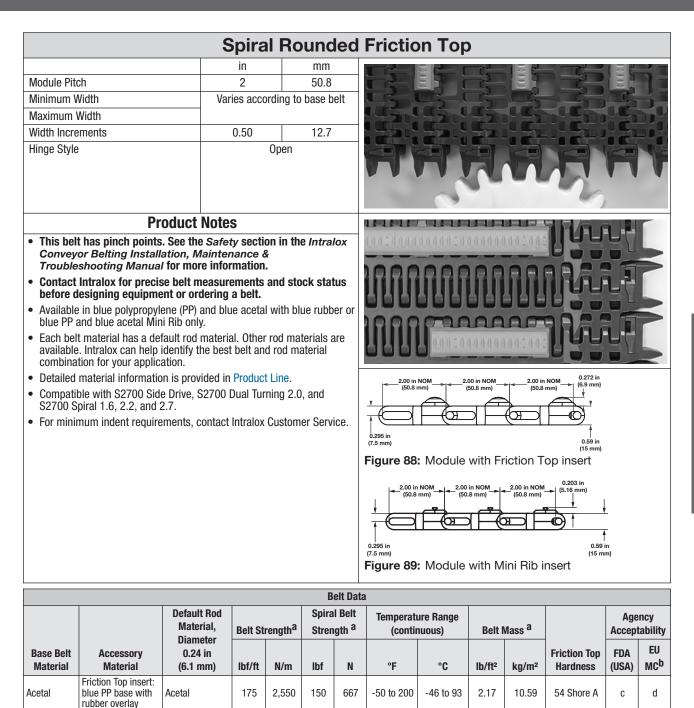
2.17

10.6

С

Acetal

Acetal



Acetal Acetal 175 2,550 150 667 -50 to 200 -46 to 93 2.17 10.59 d acetal ^a Provided values are for Side Drive base belts. Values for other compatible base belts are provided on the product page for each belt. Contact Intralox Customer Service for more information.

^bEuropean Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

^C FDA Compliant with restriction: Do not use in direct contact with fatty foods.

^dEU Compliant with restriction: Do not use in direct contact with fatty foods.

Mini Rib insert: blue

С

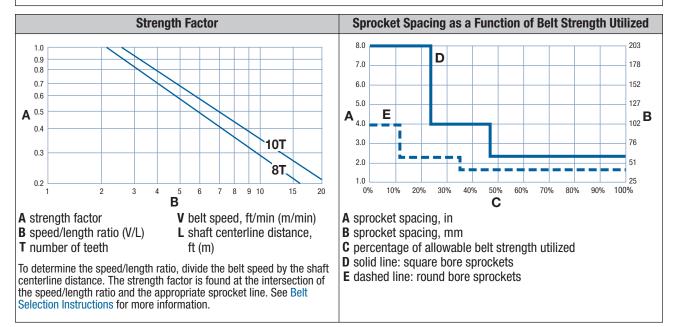
Belt Width Range ^b		Minimum Number of Sprockets	Wearstrips ^d				
in	mm	Per Shaft ^c	Carryway	Returnway			
24	610	5	2	2			
26	660	5	2	2			
28	711	5	2	2			
30	762	5	3	2			
32	813	5	3	2			
34	864	7	3	2			
36	914	7	3	2			
38	965	7	3	2			
40	1,016	7	3	2			
42	1,067	7	3	2			
44	1,118	7	3	2			
46	1,168	9	3	2			
48	1,219	9	3	2			
50	1,270	9	3	2			
52	1,321	9	3	2			
54	1,372	9	3	2			
56	1,422	9	4	3			
58	1,473	11	4	3			
60	1,524	11	4	3			

^a For low-tension capstan drive spirals, contact Intralox Customer Service for suggested carryway support recommendations. Support belt edges using support rollers on drive shafts. Contact Intralox Customer Service for more information.

^b If belt width exceeds a number listed in the table, see the sprocket and support material minimums for the next larger width range. Belts are available in 0.50 in (12.7 mm) increments beginning with minimum width of 24 in (610 mm). If the actual width is critical, contact Intralox Customer Service.

^c This number is a minimum. Heavy-load applications can require additional sprockets. For lockdown location, see Retainer Rings and Center Sprocket Offset.

^d Carryway spacing depends on a distributed 2 lb/ft² at 65°F (18.3°C) for acetal belts with acetal rods with a 2 in (50.8 mm) and 4 in (101.6 mm) overhang.



						Ace	etal Spro	ockets ^a	
Number Nom. of Teeth Diam			Outer 1eter	-	. Hub dth	Av	vailable E	Bore Size	es
(Chordal Action) in		in		in			Square		-
Action) in	mm		mm		mm	in	in	mm	mm
8 (7.61%) 5.2	132	5.4	136	0.8	20.32	1-1/4, 1-7/16, 2	1-1/2, 2-1/2		60
10 6.5 (4.85%)	165	6.7	170	0.8	20.32	1-1/4, 1-7/16, 2	1-1/2, 2-1/2		40, 60

^a Contact Intralox Customer Service for preferred method of locking down sprockets and proper sprocket timing.

				9	Support W	heel
Pitch Di	iameter		Available	Bore Sizes		
in	mm	Round in	Square in	Round mm	Square mm	
5.2	132	1.25, 1-7/16, 1.5, 2	1.5, 2.5		40, 60	
6.5	165	1.25, 1-7/16, 1.5, 2	1.5, 2.5		40, 60	

	Overlapping Sideguards											
Availabl	le Height											
in	mm	Available Materials										
0.50	12.7	Acetal, SELM										
1.00	25.4											
 Maximizes pr the belt, with 		apacity. Sideguards fit to the very edge of										
 Assembly do beam strengt 	es not require "fi th is not compror	nger cuts" on the modules, so the belt nised.										
Makes the out	uter edge of the b	elt more snag-resistant.										
Keeps small	products from fal	ling through belt gaps.										
• Turn ratio for	[.] 0.50 in (12.7 mr	n) acetal overlapping sideguards in acetal										

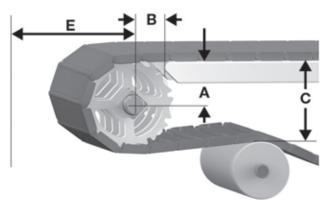
- Turn ratio for 0.50 in (12.7 mm) acetal overlapping sideguards in acetal is 1.6.
- The turn ratio for 1.00 in (25.4 mm) overlapping sideguard is 1.6 only.

		Universal Si	leguards
Availabl	e Height		
in	mm	Available Materials	
0.50	12.7		
1.00	25.4	Acetal, SELM	
2.00 ^a	50.8 ^a		
the belt, withAssembly doe	no indent.	apacity. Sideguards fit to the very edge of nger cuts" on the modules, so the belt nised.	
^a Only available in	1.6 TR		

	Lane Dividers										
Available	e Height										
in	mm	Available Materials									
0.75	19										
2.00	50.8		- a - a - a - a - a - a - a - a - a - a								
		Acetal, SELM									

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)

B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)

C vertical distance between carryway top and returnway support top

 ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components

Figure 90: A, B, C, and E drive dimensions

	S2700 Conveyor Frame Dimensions											
Sprocket Description					l	E	В)	E		
Pitch D	iameter	Nomir	nal OD	Number	Range (bottom to top) ^a							
in	mm	in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
Spiral 1.6, 2.2, 2.7												
5.2	132	5.4	137	8	2.12-2.32	54-59	2.25	57	5.23	133	2.97	75
6.5	165	6.7	170	10	2.78-2.94 71-75		2.54	65	6.47	164	3.59	91
					Spiral Ro	unded Friction	Тор					
5.2	132	5.4	137	8	2.12-2.32	54–59	2.25	57	5.50	140	3.24	82
6.5	165	6.7	170	10	2.78-2.94	71–75	2.54	65	6.74	171	3.87	98
a For gone	aral annlicati	one and anr	lications w	horo ond trai	nefor of tin_concit	ive product is not	critical use	the hottom	of the range	2		

^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S2700 Dead Plate Gap										
	Sprocket Description	Minim	um Gap								
Pitch D	iameter										
in	mm	Number of Teeth	in	mm							
5.2	132	8	0.200	5.1							
6.5	165	10	0.158	4.0							

HOLD DOWN WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for the standard edge S2700 is 2.2 times the belt width, measured from the inside edge. For the tight turning style, the minimum turn radius is 1.7 times the belt width.
- The minimum straight run required between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run (leading to the drive shaft) must be a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths (down to 1.5 times the belt width) require a gravity take-up to avoid sprocket wear and tracking problems. See Take-Ups.
- The minimum length of the first straight run (immediately after the idle shaft) is 1.5 times the belt width. When shorter lengths are required (down to 1.0 × the width), an idle roller can be used in place of sprockets.

	S	Spiral GT	ech 1.6
	in	mm	
Pitch	1.5	38.1	16644465555555544466
Minimum Width	24	609.6	222266666666666666222
Width Increments	1.00	25.4	
Opening Size (approximate)	1.1 x 0.42	27.9 x 10.7	
Open Area (fully extended)	50	%	
Minimum Open Area	36	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edç		
Product	Notes		
 Troubleshooting Manual for more Contact Intralox for precise belt methods Relatively uniform open area across freezing and cooling. Robust edge feature adds strength terms Belt openings pass straight through Lightweight, relatively strong belt wite Each belt material has a default rod available. Intralox can help identify terms Detailed material information is prove 	the width of the be o the outside edge the belt to simplify th smooth surface material. Other roo he best belt and ro rided in Product Lir		
 Designed for low-tension, capstan d minimum turn radius of 1.6 times th edge). Contact Intralox Customer Service for applications. Minimum sprocket indent from the interview of the service of the service	e belt width (meas or preferred run din nside belt edge and	ured from inside ection on spiral d from the	1.5" 1.5" 1.5" 1.5" 1.5" 1.5" 1.5" 1.5"
outside belt edge can vary. Contact determine exact placement.	Intralox Customer S	Service to	0.59" (14.9 mm)

0
80
S
Ш́ Ж
Ш

Belt Data										
Default Rod Material, Diameter 0.24 in	•		Spiral Belt	Strengtha	•	Belt Mass				
(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²		
Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.60	7.81		
Acetal	500	7,300	375	1,670	-50 to 200	-46 to 93	1.28	6.25		
	Diameter 0.24 in (6.1 mm) Acetal	Diameter 0.24 in (6.1 mm)StreetAcetal1,600	Default Rod Material, Diameter 0.24 in (6.1 mm) Straight Belt Strength Acetal 1,600 23,400	Default Rod Material, Diameter 0.24 in (6.1 mm)Straight Belt StrengthSpiral BeltIbf/ftN/mIbfAcetal1,60023,400475	Default Rod Material, Diameter 0.24 in (6.1 mm) Straight Belt Strength Spiral Belt Strength ^a Ibf/ft N/m Ibf N Acetal 1,600 23,400 475 2,110	Default Rod Material, Diameter 0.24 in (6.1 mm) Straight Belt Strength Spiral Belt Strength ^a Temperature (contin Difft Acetal 1,600 23,400 475 2,110 -50 to 200	Default Rod Material, Diameter 0.24 in (6.1 mm) Straight Belt Strength Spiral Belt Strength ^a Temperature Range (continuous) Ibf/ft N/m Ibf N °F °C Acetal 1,600 23,400 475 2,110 -50 to 200 -46 to 93	Default Rod Material, Diameter 0.24 in (6.1 mm) Straight Belt Strength Spiral Belt Strength ^a Temperature Range (continuous) Belt Ibf/ft N/m Ibf N °F °C Ib/ft ² Acetal 1,600 23,400 475 2,110 -50 to 200 -46 to 93 1.60		

^a Published spiral belt strengths and their method of calculation vary among belt manufacturers. Please contact Intralox Customer Service for accurate comparison of spiral belt strengths.

S	Spiral GTe	ch Roun	Ided Friction Top
	in	mm	CH_ CHA_ CHA_ 124_ 124_ 124_ 124_ 124 - 124 - 124
Pitch	1.5	38.1	
Minimum Width	24	609.6	
Width Increments	1.00	25.4	
Opening Size (approximate)	1.1 x 0.42	27.9 x 10.7	
Hinge Style	Or	pen	
Product	Notes		
 This belt has pinch points. See the Conveyor Belting Installation, Marcel Conveyor Belting Installation, Marcel Conveyor Belting Installation, Marcel Contact Intralox for precise belt restricted before designing equipment or or ended by the set of the second second	Maintenance & re information. measurements an rdering a belt. with smooth surface the belt to simplify to the outside edge the white rubber or loce blue rubber. material. Other ro the best belt and ro vided in Product Li inside belt edge an Intralox Customer	d stock status grid. y cleaning. e of the belt. olue d materials are od material ne. d from the Service to	

	Belt Data												
		Default Rod Material, Diameter	Belt Strength		Belt Strength Strength ^a		Temperature Range (continuous)		Belt Mass			-	ency ability ^b
Base Belt Material	Base/Friction Top	0.24 in (6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft²	kg/m²	Friction Top Hardness	FDA (USA)	EU MC ^C
Acetal	White/white	Acetal	1,700	24,800	375 (475)	1,670 (2,110)	34 to 150	1 to 66	1.44 (1.54)	7.03 (7.52)	55 Shore A	d	е
Acetal	High- Performance FT blue/blue	Acetal	1,700	24,800	375 (475)	1,670 (2,110)	34 to 212	1 to 100	1.44 (1.54)	7.03 (7.52)	59 Shore A	d	е

^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.

^b Before Intralox developed S2800, USDA-FSIS Meat and Poultry discontinued publishing a list of acceptable new products designed for food contact. As of the printing of this manual, third-party approvals are being investigated, but are not yet sanctioned by the USDA-FSIS.

^C European Migration Certificate providing approval for food contact according to EU Regulation 10/2011.

^d FDA compliant with restriction: Do not use in direct contact with fatty foods.

 $^{\rm e}{\rm EU}$ compliant with restriction: Do not use in direct contact with fatty foods.

	Spira	al GTech	2.2 and 3.2
	in	mm	22323523525724515451545154545
Pitch	1.5	38.1	
Minimum Width	24	609.6	Carlos and a start and a st
Width Increments	1.00	25.4	
Opening Size (approximate)	1.1 x 0.42	27.9 x 10.7	
Open Area (fully extended)	50	%	Street Parts and
Minimum Open Area	36	1%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edç	ge; unheaded	
Product	Notes		
 Troubleshooting Manual for mo Contact Intralox for precise belt in before designing equipment or o Relatively uniform open area across freezing and cooling. Robust edge feature adds strength Open hinge and slot design simplifi Lightweight belt with extreme beam buckling. Each belt material has a default root available. Intralox can help identify combination for your application. 	measurements and rdering a belt. s the width of the be to the outside edge les cleaning. n strength prevents d material. Other roo the best belt and ro		
 Detailed material information is pro 	ovided in Product Lir	ne.	
 Designed for low-tension, capstan minimum turn radius of 2.2 times t inside edge). 	he belt width (meas	ured from the	
 Contact Intralox Customer Service 1 applications. Minimum encoded indept from the 	•		1.5" 1.5" 1.5" 1.5" 1.5" (38.1 mm) (38.1 mm) (38.1 mm) (38.1 mm) ↓ 0.005
 Minimum sprocket indent from the outside belt edge can vary. Contact determine exact placement. 			↓0.295 0.59" (14.9 mm) ↓ ↓0.295

	Belt Data										
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength		Spiral Belt Strength ^a		Temperati (contii	Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²		
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.60	7.81		
SELM	Acetal	500	7,300	375	1,670	-50 to 200	-46 to 93	1.27	6.3		
^a Intralox engineers a	^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.										

	Sp	oiral Dire	ctDrive™
	in	mm	
Pitch	1.5	38.1	99888888888999
Minimum Width	24	609.6	필合부엌링링일일입입음단
Width Increments	1.00	25.4	PERFECCECCE
Opening Size (approximate)	1.1 x 0.42	27.9 x 10.7	
Open Area (fully extended)	50	%	CEEEEEEEEE
Minimum Open Area	36	%	
Hinge Style	Ор	en	
Rod Retention; Rod Type	Occluded edg	je; unheaded	
Product	Notes		
 This belt has pinch points. See th Conveyor Belting Installation, M Troubleshooting Manual for mo Contact Intralox for precise belt r before designing equipment or or Lightweight, relatively strong belt w 	Maintenance & ore information. measurements and rdering a belt. vith smooth surface		
 Belt openings pass straight through Relatively uniform open area across freezing and cooling. Robust edge feature adds strength i Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is pro Contact Intralox Customer Service from the straight of the straight	to the outside edge I material. Other roo the best belt and ro vided in Product Lir	of the belt. I materials are d material ne.	

	Belt Data										
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength		Spiral Belt Strength ^a (continu			•		Mass		
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	0°	lb/ft ²	kg/m²		
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.60	7.81		
SELM	Acetal	500	7,300	375	1,670	-50 to 200	-46 to 93	1.27	6.2		
Detectable MX	Detectable MX	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.85	9.03		
^a Intralox engineers a	re available to provide an accur	ate comparis	on of spiral b	oelt strengths	. Contact Intra	alox Customer Sei	rvice for more info	ormation.			

							Ace	etal Spr	ockets		
Number of Teeth		om. Pitch Nom. Outer Nom. Hub Diameter Diameter Width		Av	ailable E	Bore Size	es				
(Chordal	_		_		_			-	Round	Square	
Action)	in	mm	in	mm	in	mm	in	in	mm	mm	
13 (1.92%)	6.2	157	6.4	163	1.2	30.5	1-7/16, 1-1/2, 2	1.5, 2.5		40, 60	

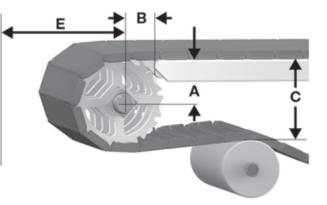
					Support WI	heel
Pitch D	iameter		Available	Bore Sizes		
					Square	
in	mm	Round in	Square in	Round mm	mm	
6.2	157	1-7/16, 2	1.5, 2.5		40, 60	

	Overlapping Sideguards Available Height Available Materials 0.50 12.7												
Availab	le Height												
in	mm	Available Materials											
0.50	12.7	Acetal											
1.00	25.4	Acetal	PERSENTATES STREET										
 the belt, with Assembly do beam streng Makes the o Keeps small 	n no indent. bes not require "fi th is not compror uter edge of the b products from fal	apacity. Sideguards fit to the very edge of nger cuts" on the modules, so the belt nised. belt more snag-resistant. lling through belt gaps. n) overlapping sideguards is 1.6.											

	Lane Dividers										
Availabl	le Height										
in	mm	Available Materials									
0.75	19	Acetal, SELM									
 strength is no Lane dividers belt. 	ot compromised. s can be spaced 2	ger cuts on the modules, so the belt beam 2 in (50.8 mm) apart along the width of the 5: contact Intralox Customer Service.									

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\ensuremath{\textbf{C}}}$ vertical distance between carryway top and returnway support top
- ${\bf E}\,$ minimum horizontal distance between shaft centerline and other components
- Figure 91: A, B, C, and E drive dimensions

	S2800 Conveyor Frame Dimensions										
Sprocket Description				Α		В		C			
Pitch D	iameter	Number	Range (Bottom to Top) ^a								
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm	
	Spiral GTech 1.6, 2.2 and 3.2 and DirectDrive										
6.2	157	13	2.75-2.84	70-72	2.51	64	6.27	159	3.49	89	
				Spiral GTech Rou	nded Frictio	on Top					
6.2	157	13	2.75-2.84	70-72	2.51	64	6.51	165	3.74	95	
^a For genera	l applications	and applicatio	ons where end transf	er of tip-sensitive pro	oduct is not cr	itical, use the	bottom of the	range.			

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S2800 Dead Plate Gap									
	Sprocket Description	Minimum Gap							
Pitch D	iameter								
in	mm	Number of Teeth	in	mm					
6.2	157	13	0.091	2.3					

HOLD DOWN WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for the S2800 standard edge is 1.6 times the belt width, measured from the inside edge.
- The minimum required straight run between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run leading to the drive shaft is a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths, down to 1.5 times the belt width, require a gravity take-up to avoid sprocket wear and tracking problems. For more information, see Take-Ups.
- The minimum length of the first straight run immediately after the idle shaft is 1.5 times the belt width. When shorter lengths are required, down to 1.0 × the width, an idle roller can be used in place of sprockets.

	Dir	ectDrive	[™] Stacker
	in	mm	Maxim Carlos Marine
Pitch	1.5	38.1	
Minimum Width	12	304.8	
Width Increments	2.00	50.8	
Opening Size (approximate)	1.1 x 0.42	27.9 x 10.7	
Open Area (fully extended)	50	0%	
Minimum Open Area	30	6%	
Hinge Style	Ot	pen	
Rod Retention; Rod Type	Occluded ed	ge; unheaded	CAPITAL CONTRACT
Product	Notes		
 Troubleshooting Manual for mor Contact Intralox for precise belt m before designing equipment or ord Lightweight, strong belt with smooth release. Belt openings pass straight through i Relatively uniform open area across freezing and cooling. Each belt material has a default rod available. Intralox can help identify th combination for your application. Detailed material information is prov Sideplates are permanently installed 	easurements an lering a belt. surface grid for g the belt to simplify the width of the b material. Other ro ne best belt and ro ided in Product Li and cannot be re	good product y cleaning. let to aid product d materials are od material ne. placed.	
 Designed for stacker applications us technology. Tier spacing: available in 60 mm, 80 Contact Intralox Customer Service fo applications. 	mm, or 100 mm.		

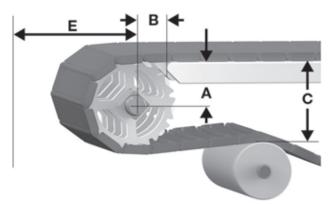
	Belt Data											
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength		Spiral Belt Strength ^a		Temperature Range (continuous) ^b		Belt Mass				
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf N		°F	°C	lb/ft ²	kg/m²			
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.96	9.57			
	^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information. ^b Sideflexing applications must not exceed 180°F (82°C).											

							Ac	etal Spr	ockets	
Number of Teeth		Pitch neter		Outer neter	-	. Hub dth	Δι	vailable E	Rore Size	26
(Chordal			Dian					Square		-
Action)	in	mm	in	mm	in	mm	in	in	mm	mm
13 (1.92%)	6.2	157	6.4	163	1.2	30.5	2, 1-7/16	1.5, 2.5		40, 60

	Support Wheel									
Pitch	Diameter		Available	Bore Sizes						
					Square					
in	mm	Round in	Square in	Round mm	mm					
6.2	157	1-7/16, 2	1.5, 2.5		40, 60					

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- **A** vertical distance between shaft centerline and carryway top, ± 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 92: A, B, C, and E drive dimensions

			S2	850 Conveyor F	rame Dim	ensions				
Spro	cket Descri	ption	4	4	E	3	(;	E	
Pitch D	iameter	Number	Range (Bott	om to Top) ^a						
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
				DirectDriv	e Stacker					
6.2	157	13	2.75-2.84	70-72	2.51	64	6.27	159	3.49	89
^a For genera	l applications	and application	ons where end transf	er of tip-sensitive pro	oduct is not cr	itical, use the	bottom of the	range.		

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

	S2850 Dead Plate Gap							
	Sprocket Description Minimum Gap							
Pitch D	iameter							
in	mm	Number of Teeth	in	mm				
6.2	157	13	0.091	2.3				

	Spira	I Direct	Drive [™] (DD)
	in	mm	
Pitch	1.5	38.1	25555555555
Minimum Width (See <i>Product</i> Notes.)	13.5	343	22222222222
Maximum Width (See <i>Product</i> Notes.)	61.7	1567	22222222222
Width Increments	1.0	25.4	2-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5
Opening Size (approximate)	0.52 x 0.39	13 x 10	
Open Area (fully extended)	44	%	
Minimum Open Area (collapsed)	26	%	
Hinge Style	Оре	en	+D+D+D+D+D+D+D+D+D+D+D+D+D+
Rod Retention; Rod Type	Occluded edg	e; unheaded	
Product	Notes		
This belt has pinch points. See the Conveyor Belting Installation, M Troubleshooting Manual for more	laintenance &	n the <i>Intralox</i>	
 Acute of Induction for succeive helds. 	neasurements and	I stock status	
 Contact intraiox for precise beit in before designing equipment or or 			
before designing equipment or or	dering a belt.		
 Contact Intralox for precise belt m before designing equipment or ore Width dimension includes tooth prote Belt openings pass straight through 	dering a belt. rusion		AIAIAIAI
before designing equipment or orWidth dimension includes tooth protection	dering a belt. rusion the belt to simplify	cleaning.	
 before designing equipment or or Width dimension includes tooth prot Belt openings pass straight through 	dering a belt. rusion the belt to simplify o the outside edge	cleaning. of the belt.	
 before designing equipment or or Width dimension includes tooth prote Belt openings pass straight through Robust edge feature adds strength to Relatively uniform open area across 	dering a belt. rusion the belt to simplify o the outside edge the width of the be material. Other rod	cleaning. of the belt. It to aid product I materials are	
 before designing equipment or ore Width dimension includes tooth prote Belt openings pass straight through Robust edge feature adds strength te Relatively uniform open area across freezing and cooling. Each belt material has a default rod available. Intralox can help identify te 	dering a belt. rusion the belt to simplify o the outside edge the width of the be material. Other rod he best belt and roo	cleaning. of the belt. It to aid product I materials are d material	
 before designing equipment or or Width dimension includes tooth prote Belt openings pass straight through Robust edge feature adds strength to Relatively uniform open area across freezing and cooling. Each belt material has a default rod available. Intralox can help identify to combination for your application. 	dering a belt. rusion the belt to simplify o the outside edge the width of the be material. Other rod he best belt and roo rided in Product Lin	cleaning. of the belt. elt to aid product I materials are d material e.	

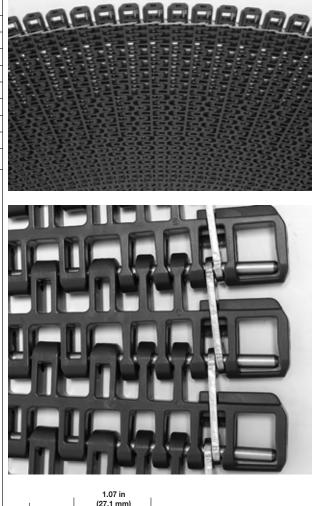
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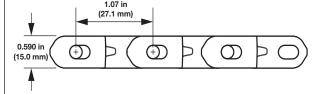
Belt Data										
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength Spiral Belt Strength ^a			Temperatı (contir	ure Range 1uous)	Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lbf/ft ²	kg/m²	
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.78	8.69	
SELM	Acetal	500	7,300	375	1,670	-50 to 200	-46 to 93	1.46	7.13	
Detectable MX	Detectable MX	1,600	23,400	475	2,110	-50 to 200	-46 to 93	2.08	10.16	
^a Intralox engineers a	re available to provide an accur	ate comparis	on of spiral b	oelt strengths	. Contact Intra	alox Customer Ser	vice for more info	ormation.		

	in	mm
		mm
Pitch	1.500	38.1
Minimum Width	14	342.9
Maximum Width	62	1,567
Width Increments	1.0	25.4
Opening Size (approximate)	0.52 x 0.39	13 x 10
Open Area (fully extended)	44	%
Minimum Open Area	26	i%
Hinge Style	Ор	en
Rod Retention; Rod Type	Occluded edg	je; unheaded

Product Notes

- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Width dimension includes tooth protrusion
- Belt openings pass straight through the belt to simplify cleaning.
- Relatively uniform open area across the belt width to aid product freezing and cooling
- Stainless steel links (SSL) are integrated into the belt design to manage high loads associated with temperature variations.
- Detailed material information is provided in Product Line.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Contact Intralox Customer Service for preferred run direction on spiral applications.
- Like other products using metal components, this product may produce minor black specks from use. Contact Intralox Customer Service regarding your application.
- Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to determine exact placement.





	Belt Data										
	Default Rod Material, Diameter	Belt St	rength ^a	Spiral Belt	t Strength ^b		ure Range nuous)	Belt Mass			
Belt Material	0.12 in (3 mm)	lbf/ft	N/m	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²		
Acetal/304 stainless steel	304 stainless steel	_	-	300	1,560	-50 to 220	-46 to 104	2.73	13.33		
^a Not designed for use in straigh	t-running applications										

^b Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.

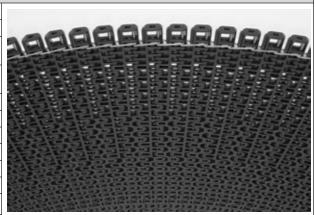
Pitch Minimum Width (See Product Notes.) Maximum Width (See Product Notes.) Width Increments Opening Size (approximate) Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mean before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the freezing and cooling.	afety section i	% en je; unheaded	
Minimum Width (See Product Notes.) Maximum Width (See Product Notes.) Width Increments Opening Size (approximate) Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mean before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	13.5 61.7 0.5 0.52 x 0.39 44 26 0p 0ccluded edg 0ccluded edg	343 1567 12.7 13 x 10 % % en e; unheaded	
Notes.) Maximum Width (See Product Notes.) Width Increments Opening Size (approximate) Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mean before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	61.7 0.5 0.52 x 0.39 44 26 Op 0ccluded edg 0ccluded edg	1567 12.7 13 x 10 % en e; unheaded	
Notes.) Width Increments Opening Size (approximate) Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mean before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	0.5 0.52 x 0.39 44 26 0p 0ccluded edg 0ccluded edg	12.7 13 x 10 % % en e; unheaded	
Opening Size (approximate) Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mea before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	0.52 x 0.39 44 26 0p 0ccluded edg	13 x 10 % % en le; unheaded	
Open Area (fully extended) Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mea before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	44 26 Op Occluded edg otes afety section i	% % en le; unheaded	
Minimum Open Area Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mea before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	26 Op Occluded edg otes afety section i	% en je; unheaded	
Hinge Style Rod Retention; Rod Type Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mea before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	Op Occluded edg otes afety section i	en e; unheaded	
Rod Retention; Rod Type Product No This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i Contact Intralox for precise belt mea before designing equipment or order Belt openings pass straight through the Relatively uniform open area across the	Occluded edg	e; unheaded	
Product No • This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i • Contact Intralox for precise belt mea before designing equipment or order • Belt openings pass straight through the • Relatively uniform open area across the	otes afety section i		
 This belt has pinch points. See the S Conveyor Belting Installation, Main Troubleshooting Manual for more i Contact Intralox for precise belt mea before designing equipment or order Belt openings pass straight through the Relatively uniform open area across the 	afety section i	n the Interla	MAAAA
Conveyor Belting Installation, Main Troubleshooting Manual for more i Contact Intralox for precise belt mea before designing equipment or order Belt openings pass straight through the Relatively uniform open area across the		n tha Interala	
 Robust edge feature adds strength to the Cage-friendly inside edge and frame-friendly inside edge. Each belt material has a default rod material available. Intralox can help identify the combination for your application. Detailed material information is provide Eliminates product contamination from Enables simple, quick repairs and chane Designed for friction drive, capstan drive minimum turn radius of 1.6 times the beinside edge). Contact Intralox Customer Service for propherations. Minimum sprocket indent from the inside outside belt edge can vary. Contact Intralox 	ing a belt. belt to simplify width of the be e outside edge endly outside e terial. Other roc best belt and ro d in Product Lir metal-wear del geovers. e spiral applica elt width (meas referred run dir le belt edge and	cleaning. elt aids product of the belt. dge I materials are d material ne. oris. tions with a ured from the ection on spiral d from the	+ 1.5 in _ + 1.5 in _ + 1.5 in _ + 0.295 in _ + (7.5 mm)
determine exact placement.		Belt D	

			20	it butu					
	Default Rod Material, Diameter 0.24 in	Strength		Spiral Belt Strength ^a		Temperature Range (continuous)		Belt Mass	
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.78	8.69
SELM	Acetal	500	7,300	375	1,670	-50 to 200	-46 to 93	1.46	7.13
^a Intralox engineers a	re available to provide an accur	ate comparis	on of spiral b	elt strengths	. Contact Intra	alox Customer Sei	rvice for more info	ormation.	

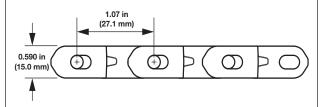
	•						
	in	mm					
Pitch	1.500 38.1						
Minimum Width (See <i>Product Notes</i> .)	13.5	343					
Maximum Width (See <i>Product Notes</i> .)	61.7	1,567					
Width Increments	0.5	12.7					
Opening Size (approximate)	0.52 x 0.39	13 x 10					
Open Area (fully extended)	44	1%					
Minimum Open Area	26	6%					
Hinge Style	Ор	en					
Rod Retention; Rod Type	Occluded edg	ge; unheaded					
Produc	t Notae						

Product Notes

- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- · Belt openings pass straight through the belt to simplify cleaning.
- Relatively uniform open area across the belt width to aid product freezing and cooling
- Stainless steel links (SSL) are integrated into the belt design to manage high loads associated with temperature variations.
- Robust edge feature adds strength to the outside belt edge
- Cage-friendly inside edge and frame-friendly outside edge
- Enhanced beam stiffness
- Enables simple, quick repairs and changeovers
- Detailed material information is provided in Product Line.
- Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 1.6 times the belt width (measured from the inside edge).
- Contact Intralox Customer Service for preferred run direction on spiral applications.
- Like other products using metal components, this product may produce minor black specks from use. Contact Intralox Customer Service regarding your application.
- Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to determine exact placement.







	Belt Data											
	Default Rod Material, Diameter	Belt St	rength ^a	Spiral Belt	Strength ^b		ure Range nuous)	Belt	Mass			
Belt Material	0.12 in (3 mm)	lbf/ft	N/m	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal/304 stainless steel	304 stainless steel	-	-	300	1,560	-50 to 220	-46 to 104	2.73	13.33			
^a Not designed for use in straigh	t-running applications											

^b Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.

Notes.) Maximum Width (See Product Notes.) Width Increments 0.5 Width Increments 0.52 x 0.39 13 x 10 Open Area (fully extended) 44% Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Notes * This belt has pinch points. See the Safety section in the Intralox Conveyor Betting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Belt openings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Robust edge feature adds strength to the outside edge of the belt. • Cage-friendly inside edge and frame-friendly outside edge. • Enhanced beam stiffness. • Each belt material has a default rod material. Other rod materials are available. Intralox can bel identify the best belt and rod material combination for your applications. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • Contact Intralox Customer Service for preferred run direction on spiral applications.	
Notes.) Maximum Width (See Product Maximum Width (See Product Notes.) Width Increments 0.5 Dpening Size (approximate) 0.52 x 0.39 13 x 10 Open Area (fully extended) 44% Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes Product Notes * This belt has pinch points. See the Safety section in the Intralox Conveyor Beiting Installation, Maintenance & Troubleshooting Manual for more information. Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Belt openings pass straight through the belt to simplify cleaning. Relatively uniform open area across the width of the belt aids product freezing and cooling. Robust edge feature adds strength to the outside edge of the belt. Cage-friendly inside edge and frame-friendly outside edge. Enhanced beam stiffness. Each belt material has a default rod material. Other rod materials are available. Intralox can belp identify the best belt and rod material combination for your applications. Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). Conta	
Notes.) 0.5 12.7 Qpening Size (approximate) 0.52 x 0.39 13 x 10 Open Area (fully extended) 44% Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes • This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before despining equipment or ordering a belt. • Each belt measurements and stock status before despining equipment or ordering a belt. • Belt openings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Robust edge feature adds strength to the outside edge. • Enhanced beam stiffness. • Each belt material has a default rod material. Other rod material combination for your application. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • • • • • • • • • • • • • • • • • • •	
Opening Size (approximate) 0.52 x 0.39 13 x 10 Open Area (fully extended) 44% Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information. Contact Intralox for more information. Contact Intralox for more information. Relatively uniform open area across the width of the belt aids product freezing and cooling. Robust edge feature adds strength to the outside edge of the belt. Cage-friendly inside edge and frame-friendly outside edge. Enhanced beam stiffness. Each belt material nas a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Eliminates product contamination from metal-wear debris. Enables simple, quick repairs and changeovers. Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside delt edge can vary. Contact Intralox Customer Service to preferr	
Dera Area (tilly extended) 44% Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes • This belt has pinch points. See the Safety section in the Intralox Conveyor Beiting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Elitopenings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Detailed material information. • Cage-friendly inside edge and frame-friendly outside edge. • Enhanced beam stiffness. • Each belt material information is provided in Product Line. • Eliminates product contamination from metal-wear debris. • Enables simple, quick repairs and changeovers. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • Contact Intralox Customer Service for preferred run direction on spiral applications. • Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to • Image 1.5 m	·至至至我把最高者相与我的。
Minimum Open Area 26% Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes • This belt has pinch points. See the Safety section in the Intralox Conveyor Beiting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Belt openings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Robust edge feature adds strength to the outside edge of the belt. • Cage-friendly inside edge and frame-friendly outside edge. • Enhanced beam stiffness. • Each belt material information. • Detailed material information is provided in Product Line. • Eliminates product contamination from metal-wear debris. • Enables simple, quick repairs and changeovers. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • Contact Intralox Customer Service for preferred run direction on spiral applications. • Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to	*************
Hinge Style Open Rod Retention; Rod Type Occluded edge; unheaded Product Notes • This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Belt openings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Robust edge feature adds strength to the outside edge of the belt. • Cage-friendly inside edge and frame-friendly outside edge. • Enhanced beam stiffness. • Each belt material has a default rod material. Other rod material combination for your application. • Detailed material information is provided in Product Line. • Eliminates product contamination from metal-wear debris. • Enables simple, quick repairs and changeovers. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • Onnact Intralox Customer Service for preferred run direction on spiral applications. • Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to	
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Rod Retention; Rod Type Occluded edge; unheaded Product Notes • This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information. • Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. • Belt openings pass straight through the belt to simplify cleaning. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Relatively uniform open area across the width of the belt aids product freezing and cooling. • Robust edge feature adds strength to the outside edge. • Enhanced beam stiffness. • Each belt material has a default rod material. Other rod material combination for your application. • Detailed material information is provided in Product Line. • Eliminates product contamination from metal-wear debris. • Enables simple, quick repairs and changeovers. • Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). • Ontract Intralox Customer Service to • Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary.	
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 Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information. Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt. Belt openings pass straight through the belt to simplify cleaning. Relatively uniform open area across the width of the belt aids product freezing and cooling. Robust edge feature adds strength to the outside edge of the belt. Cage-friendly inside edge and frame-friendly outside edge. Enhanced beam stiffness. Each belt material has a default rod material. Other rod materials are available. Intralox can help identify the best belt and rod material combination for your application. Detailed material information is provided in Product Line. Eliminates product contamination from metal-wear debris. Enables simple, quick repairs and changeovers. Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge). Contact Intralox Customer Service for preferred run direction on spiral applications. Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to 	
Belt Data	
Default Rod Material. Straight Belt Temperature Rang	re Range

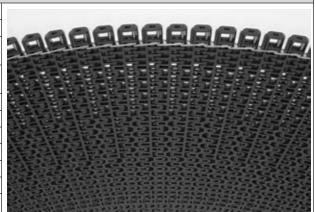
	Beit Data									
	Default Rod Material, Diameter 0.24 in	Straight Belt Strength		Spiral Belt	t Strength ^a	-	ure Range 1uous)	Belt I	Mass	
Belt Material	(6.1 mm)	lbf/ft	lbf/ft N/m		N	°F	°C	lb/ft ²	kg/m²	
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.78	8.69	
SELM	LM Acetal 500 7,300 375 1,670 -50 to 200 -46 to 93 1.46 7.1								7.13	
^a Intralox engineers ar	e available to provide an accur	ate comparis	on of spiral b	oelt strengths	. Contact Intra	alox Customer Sei	vice for more info	ormation.		

Spiral 2.2 Stainless Steel Link (SSL)

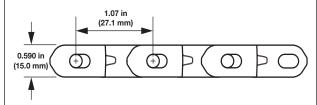
	•	
	in	mm
Pitch	1.500	38.1
Minimum Width (See Product Notes.)	13.5	343
Maximum Width (See <i>Product Notes</i> .)	61.7	1,567
Width Increments	0.5	12.7
Opening Size (approximate)	0.52 x 0.39	13 x 10
Open Area (fully extended)	44	%
Minimum Open Area	26	6%
Hinge Style	Ор	en
Rod Retention; Rod Type	Occluded edç	ge; unheaded
Product	t Notes	

Product Notes

- This belt has pinch points. See the Safety section in the Intralox • Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status ٠ before designing equipment or ordering a belt.
- Belt openings pass straight through the belt to simplify cleaning. •
- Relatively uniform open area across the belt width to aid product • freezing and cooling
- Stainless steel links (SSL) are integrated into the belt design to • manage high loads associated with temperature variations.
- · Robust edge feature adds strength to the outside belt edge
- · Cage-friendly inside edge and frame-friendly outside edge
- · Enhanced beam stiffness
- · Enables simple, quick repairs and changeovers
- Detailed material information is provided in Product Line.
- Designed for friction drive, capstan drive spiral applications with a minimum turn radius of 2.2 times the belt width (measured from the inside edge).
- · Contact Intralox Customer Service for preferred run direction on spiral applications.
- Like other products using metal components, this product may ٠ produce minor black specks from use. Contact Intralox Customer Service regarding your application.
- Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to determine exact placement.







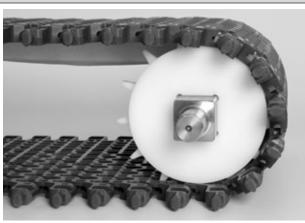
	Belt Data											
	Default Rod Material, Diameter	Belt St	r ength ^a	Spiral Belt	Strength ^b		ure Range nuous)	Belt	Mass			
Belt Material	0.12 in (3 mm)	lbf/ft	N/m	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal/304 stainless steel	304 stainless steel	-	-	300	1,560	-50 to 220	-46 to 104	2.73	13.33			
^a Not designed for use in straigh	t-running applications											

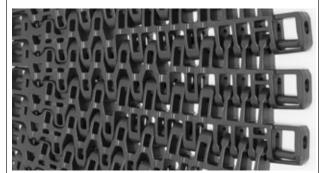
^b Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.

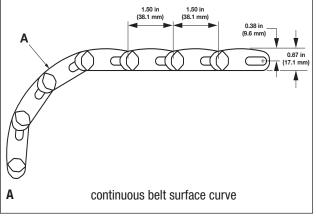
		Curved	Тор
	in	mm	
Pitch	1.5	38.1	1.48
Minimum Width	13.5	342.9	
Maximum Width	61.7	1,567	
Width Increments	1.0	25.4	
Opening Size (approx.)	0.52 x 0.39	16.7 x 13.5	
Open Area	44	1%	
Minimum Open Area	26	3%	
Hinge Style	Clo	sed	14
Rod Retention; Rod Type	Occluded edg	ge; unheaded	14

Product Notes

- This belt has pinch points. See the Safety section in the Intralox Conveyor Belting Installation, Maintenance & Troubleshooting Manual for more information.
- Contact Intralox for precise belt measurements and stock status before designing equipment or ordering a belt.
- Width dimension includes tooth protrusion
- Belt openings pass straight through the belt to simplify cleaning.
- Robust edge feature adds strength to the outside belt edge
- Relatively uniform open area across the belt width to aid product freezing and cooling
- The curved top surface is consistent across the belt width except for the sideguard locations at the belt edges.
- Continuous curvature of belt surface when wrapped around sprockets.
- Cooling channels across the belt width aid in product conditioning and fluid drainage.
- Detailed material information is provided in Product Line.
- Detailed conveyor design guidelines are available. Contact Intralox Customer Service for more information.
- Contact Intralox Customer Service for preferred run direction on spiral applications.
- Minimum sprocket indent from the inside belt edge and from the outside belt edge can vary. Contact Intralox Customer Service to determine exact placement.







	Belt Data											
	Default Rod Material, Diameter	Belt St	rength ^a	Spiral Belt	t Strength ^b	Temperati (contin	ure Range 1uous)	Belt	Mass			
Belt Material	0.12 in (3 mm)	lbf/ft	N/m	lbf/ft	N/m	°F	°C	lb/ft ²	kg/m²			
Acetal	Acetal	1,600	23,400	475	2,110	-50 to 200	-46 to 93	1.92	9.35			
^a Not designed for use in strai	ght-running applications											

^b Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.

							Ac	etal Spr	ockets	
Number of Teeth		Pitch neter		Outer neter	-	. Hub dth	A	Available Bore Sizes		
(Chordal							Round	-		Square
Action)	in	mm	in	mm	in	mm	in	in	mm	mm
13 (2.97%)	6.2	157	6.4	163	1.2	30.5	1-7/16, 2	1.5, 2.5		40, 60

Support Wheel											
Pitch Diame	eter ^a		Available	Bore Sizes							
in	mm	Dound in	Squara in	Round mm	Square						
	mm		-								
6.2	157	1-7/16, 2	1.5, 2.5		40, 60						
6.3	160		1.5, 2.5		40, 60						

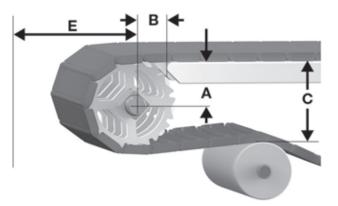
^aIntralox can help identify the best pitch diameter for your application.

		Overlapping Sid	leguards
Availab	le Height		
in	mm	Available Materials	
0.50	12.7	Acetal, Detectable MX	9.2012 4. 3. 40124 3. 40124 10
1.00	25.4	Acetal, Detectable MX	234,34,234,34,34,234,234
 Maximizes particular the belt, with 		apacity. Sideguards fit to the very edge of	
	es not require fin ot compromised.	ger cuts on the modules, so the belt beam	
 Makes the out 	uter edge of the b	elt more snag-resistant.	and a start and
• Keeps small	products from fal	ling through belt gaps.	10000000000000000000000000000000000000
 Turn ratio for 	⁻ 0.50 in (12.7 mr	n) overlapping sideguards 1.6.	

	Lane Dividers									
Availabl	e Height									
in	mm	Available Materials								
0.75	19	Acetal, Detectable MX, SELM								

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- A vertical distance between shaft centerline and carryway top, \pm 0.03 in (1 mm)
- ${\bm B}$ horizontal distance between shaft centerline and beginning of carryway, \pm 0.125 in (3 mm)
- ${\boldsymbol{\mathsf{C}}}$ vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 93: A, B, C, and E drive dimensions

	S2900 Conveyor Frame Dimensions									
Sprocket Description A B C E						1				
Pitch Di	iameter	Number	Range (Bott	om to Top) ^a						
in	mm	of Teeth	in	in mm		mm	in	mm	in	mm
	Spiral I	DirectDrive,	Spiral DirectDriv	e SSL, Spiral 1.6,	Spiral 1.6 S	SSL, Spiral 2	2.2, Spiral 2	.2 SSL, Curv	/ed Top	
6.2	157	13	2.75-2.84	70-72	2.51	64	6.27	159	3.49	89
^a For genera	^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.									

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S2900 Dead Plate Gap							
Sprocket Description Minimum Gap							
Pitch D	iameter						
in	mm	Number of Teeth	in	mm			
6.2	157	13	0.091	2.3			

HOLD DOWN RAILS AND WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications.

- For information about Intralox hold down wearstrips, see Custom Wearstrips.
- For information about conveyor design for hold down wearstrips, see Hold Down Wearstrips in the Design Guidelines chapter.

BELT SELECTION INSTRUCTIONS

NOTE: For assistance with radius belt and low-tension capstan drive spiral selections, contact Intralox Customer Service. Run the Engineering Program to ensure that the belt is strong enough for the radius application in question. See Engineering Program Analysis for Spiral and Radius for more information.

DESIGN GUIDE SUMMARY

For typical layout configurations, see Radius Conveyors in the Design Guidelines chapter.

- The minimum turn radius for the S2900 standard edge is 1.6 times the belt width, measured from the inside edge.
- The minimum required straight run between turns of opposing direction is 2.0 times the belt width. Shorter straight sections lead to high wear on the edge guide rail and high pull stresses in the belt.
- There is no minimum straight run required between turns that are in the same direction.
- The minimum final straight run leading to the drive shaft is a minimum of 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths, down to 1.5 times the belt width, require a gravity take-up to avoid sprocket wear and tracking problems. For more information, see Take-Ups.
- The minimum length of the first straight run immediately after the idle shaft is 1.5 times the belt width. When shorter lengths are required, down to 1.0 × the width, an idle roller can be used in place of sprockets.

	Dire	ectDrive	[™] Stacker
	in	mm	
Pitch	1.5	38.1	
Minimum Width	12	304.8	
Width Increments	1.0	25.4	
Opening Size (approximate)	0.52 x 0.39	13 x 10	
Open Area (fully extended)	44	%	
Minimum Open Area	26	%	
Hinge Style	Op	en	
Rod Retention; Rod Type	Occluded edg	e; unheaded	
Product	Notes		SHOP AND STORES SHOP AND
 Troubleshooting Manual for mo Contact Intralox for precise bet n before designing equipment or on Lightweight, strong belt with smoot release. Belt openings pass straight through Relatively uniform open area across freezing and cooling. Each belt material has a default rod available. Intralox can help identify combination for your application. Detailed material information is pro 	neasurements and rdering a belt. h surface grid for go the belt to simplify the width of the be material. Other rod the best belt and ro vided in Product Lin	ood product cleaning. elt to aid product I materials are d material ie.	ف ف ف ف ف
 Sideplates are permanently installe Designed for stacker applications u technology. Tier spacing: available in 60 mm, 8 mm. Contact Intralox Customer Service f applications. 	sing patented Direc 0 mm, 100 mm, 12	0.590 in (14.985 mm) (7.493 mm) (7.493 mm)	
			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

	Belt Data								
Default Rod Material, Diameter 0.24 in Straight Belt Strength Temperature Range (continuous) ^b				Spiral Belt Strength ^a		Belt Mass			
Belt Material	(6.1 mm)	lbf/ft	N/m	lbf	N	°F	°C	lb/ft ²	kg/m²
Acetal	Acetal 1,600 23,400 475 2,110 -50 to 200 -46 to 93 2.18 10.64								
^a Intralox engineers are available to provide an accurate comparison of spiral belt strengths. Contact Intralox Customer Service for more information.									

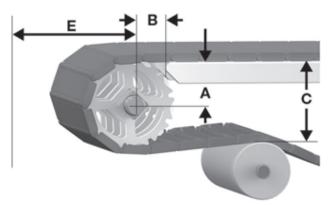
 b Sideflexing applications must not exceed 180°F (82°C).

							Ac	etal Spr	ockets	
Number of Teeth		Pitch neter	Nom. Outer Nom. Hub Diameter Width		A	vailable E	Bore Size	es		
(Chordal Action)	in	mm	in	mm	in	mm	Round in	Square in	Round mm	Square mm
13 (2.97%)	6.2	157	6.4	163	1.2	30.5	1-7/16, 2	1.5, 2.5		40, 60

				9	ieel	
Pitch E	Diameter	Available Bore Sizes				
					Square	
in	mm	Round in	Square in	Round mm	mm	
6.2	157	1-7/16, 2	1.5, 2.5		40, 60	

CONVEYOR FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. These dimensions are provided in the following table. For complete descriptions of these dimensions, see Frame Dimensions in the Design Guidelines chapter.



- **A** vertical distance between shaft centerline and carryway top, ± 0.03 in (1 mm)
- **B** horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm)
- **C** vertical distance between carryway top and returnway support top
- E minimum horizontal distance between shaft centerline and other components

Figure 94: A, B, C, and E drive dimensions

	S2950 Conveyor Frame Dimensions									
Sprocket Description A B C E							E			
Pitch D	iameter	Number	Range (Bottom to Top) ^a							
in	mm	of Teeth	in	mm	in	mm	in	mm	in	mm
	DirectDrive Stacker, DirectDrive Stacker SSL									
6.2	157	13	2.71-2.81	69-71	2.47	63	6.20	157	3.46	88
^a For genera	^a For general applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.									

applications and applications where end transfer of tip-sensitive product is not critical, use the bottom of the range.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. Minimum gap dimensions are provided in the following table. For more information, see Dead Plate Gap in the Design Guidelines chapter.

S2950 Dead Plate Gap							
Sprocket Description Minimum Gap							
Pitch D	iameter						
in	mm	Number of Teeth	in	mm			
6.2	157	13	0.092	2.3			

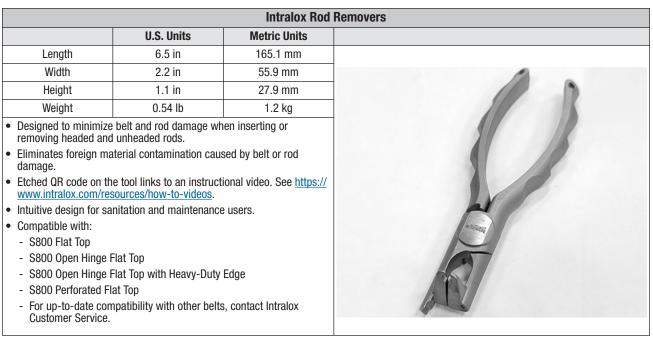
BELT SUPPORT TOOLS

INTRALOX BELT PULLER SET

		Intralox Belt		
Single Belt Puller	U.S. Units	Metric Units		
Length	14.4 in	365.8 mm		
Width	4.2 in	106.7 mm		
Height	0.5 in	12.7 mm		
Weight	2 lb	0.9 kg		
Belt	Puller Set	•		
Weight	6 lb	2.7 kg		
• Can be used in carryways and compatible belts.	returnways to instal	l, close, or open		
Use one set of belt pullers for e	very 24 in (610 mm) of belt width.		
Improves worker safety.				
Reduces the number of people inclined belts.	required to install o	r remove large or		
 Reduces the risk of belt damage that can lead to foreign material contamination. 				
Set includes two belt pullers ar	d one Intralox ratch	et strap.		
Solid metal construction with d belt puller.	edicated metal rod t	that locks into the		

- Etched QR code on the tool links to an instructional video. See https://www.intralox.com/resources/how-to-videos.
- Compatible with S800, S888, and S1800 belts. For up-to-date compatibility information, contact Intralox Customer Service.

INTRALOX ROD REMOVERS



INTRALOX BELT REPLACEMENT RULER

			ent Ruler	
		Metric Sizes		
	U.S. Sizes (in)	(mm)	Available Materials	
Length	16.5	419	Green plastic or stainless steel	
Width	2.5	63	dicen plastic of stainless steel	
Designed to	quickly measure	e belt elongation		
Compatible	with all belts exc	ept S2100		
• A QR code e	tched on the too	l links to an inst	ructional video. See <u>https://</u>	

SQUARE SHAFTS

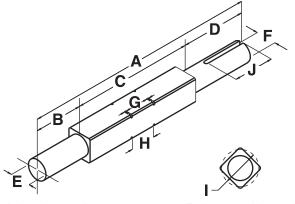
www.intralox.com/resources/how-to-videos.

MACHINED TO CUSTOMER SPECIFICATIONS

After the stock is cut to length, the raw shaft is precision straightened. The bearing journals are turned, then the retainer ring grooves^{*}, keyways, and chamfers are cut. The final step is a thorough, quality control inspection before shipping. For help with specifying shaft dimensions, contact Intralox Customer Service.

*If the shaft is to operate under high belt loads, retainer ring grooves are not recommended. Self-set or split heavy-duty retainer type rings are recommended in these cases. For retainer ring recommendations, contact Intralox Customer Service.

NOTE: If using the shaft in a hollow gearbox, contact Intralox Customer Service.



A length: overall

- ${\bf B}\,$ length: bearing-end journal
- ${\boldsymbol{\mathsf{C}}}$ length: square section
- **D** length: drive-end journal and keyway dimensions

E diameter: bearing journal

Figure 95: Shaft dimensions required

	-		
F	diameter.	drive-end	iournal

- **G** width: retainer ring groove
- **H** width: sprocket hub
- I diameter: ring groove
- J length of keyway

	Square Shafts Available from Intralox USA ^a								
Size	C1018 Carbon Steel C1045 Carbon Steel 303/304 Stainless Steel 316 Stainless Ste								
0.625 in	+0.000 in to -0.003 in		+0.000 in to -0.004 in	+0.000 in to -0.004 in					
1 in	+0.000 in to -0.003 in		+0.000 in to -0.004 in	+0.000 in to -0.004 in					
1.5 in	+0.000 in to -0.003 in		+0.000 in to -0.006 in	+0.000 in to -0.006 in					
40 mm		contact Intralox	+0.000 mm to -0.160 mm						
60 mm		contact Intralox	+0.000 mm to -0.180 mm						
2.5 in	+0.000 in to -0.004 in		+0.000 in to -0.008 in	+0.000 in to -0.008 in					

Square Shafts Available from Intralox USA ^a							
Size C1018 Carbon Steel C1045 Carbon Steel 303/304 Stainless Steel 316 Stainle							
3.5 in ^b +0.000 in to -0.005 in +0.000 in to -0.005 in N/A							
30			•				

^a Consult Intralox for shafts longer than 12 ft (3.7 m).

^b 3.5 in carbon steel shafts can be nickel plated for corrosion resistance.

Square Shafts Available from Intralox Europe ^a							
Size	303/304 Stainless Steel						
25 mm	+0.000 mm to -0.130 mm	+0.000 mm to -0.130 mm					
40 mm	+0.000 mm to -0.160 mm	+0.000 mm to -0.160 mm					
60 mm	+0.000 mm to -0.180 mm	+0.000 mm to -0.180 mm					
65 mm	+0.000 mm to -0.180 mm	+0.000 mm to -0.180 mm					
90 mm	+0.000 mm to -0.220 mm	+0.000 mm to -0.220 mm					

^a Consult Intralox for shafts longer than 2 m.

Tolerances (unless otherwise specified)					
Overall length	< 48 in: ±0.061 in (< 1200 ±0.8 mm)				
Overall length	> 48 in: ±0.125 in (> 1200 ±1.2 mm)				
Journal diameter	-0.0005 in/ -0.003 in (Øh7 vlgs. NEN-ISO 286-2)				
Keyway widths + 0.003 in/- 0.000 in (+ 0.05/- 0.00 mm)					

Surface Finishes						
Journal 63 microinches (1.6 micrometers)						
Other machined surfaces	Other machined surfaces 125 microinches (3.25 micrometers)					
Keyways						
U.S. sizes Unless otherwise specified — U.S. keyways are for parallel square keys (ANSI B17.1 - 1967, R1973).						
Metric sizes Metric keyways are for flat, inlaid keys with round ends (DIN 6885-A).						

Metric keyways are for flat, inlaid keys with round ends (DIN 6885-A).

RETAINER RINGS AND CENTER SPROCKET OFFSET

SELECTING RECOMMENDED RETAINER RINGS

Intralox recommends the use of retainer rings to fix the location of one sprocket on each shaft. The fixed sprocket limits transverse movement of the belt during operation. In many applications, spring-type rings are used with success; however these rings require cutting small grooves into the corners of the shafts. In some applications where belt loads are higher and stresses in the shaft are greater, the presence of ring grooves is undesirable, as they create places where stresses are concentrated. In these cases, Intralox recommends using alternative retainer rings that require no grooves, such as the Self-Set or Split Collar rings.

Use Table 5: Belt Pull Limits Vs. Shaft Span for Retainer Ring Grooves to identify recommended limits of belt pull versus shaft span between bearings, then determine if retainer ring grooves can be used. For a given shaft size and span, if the belt pull (BP), exceeds the values shown, select a ring that requires no grooves in the shaft.

STANDARD RETAINER RINGS

Intralox provides standard retainer rings in plastic and stainless steel.

- For information about plastic retainer rings, see Standard Plastic Retainer Rings.
- For information about stainless steel retainer rings, see Standard Stainless Steel Retainer Rings.

STANDARD PLASTIC RETAINER RINGS

- Plastic retainer rings are available in sizes to fit 1.5 in and 2.5 in square shafts.
- Plastic retainer rings are made from polysulfone.

- The temperature range of polysulfone is -125°F to 300°F (-98°C to 149°C).
- Plastic retainer rings require grooves identical to the grooves used for stainless steel retainer rings on 1.5 in and 2.5 in shafts. See Retainer Ring Groove and Chamfer Dimensions.
- Plastic retainer rings are not compatible with all sprockets. See Stainless Steel Retainer Ring Restrictions.

PLASTIC RETAINER RING RESTRICTIONS

Standard retainer rings do NOT work with the following sprockets:

		Pitch D	iameter	Bore Size			
Retainer Ring Size	Series	in	mm	in	mm		
1.5 in	400	4.0	102	1.5	40		
1.5 11	1600	3.2	81	1.5	40		
2.5 in	400	5.2	132	2.5	40		
2.5 11	1100	3.1	79	2.5	40		

STANDARD STAINLESS STEEL RETAINER RINGS

- Stainless steel retainer rings are available to fit 5/8 in, 1.0 in, 1.5 in, 2.5 in, 3.5 in, 25 mm, 40 mm, 60 mm, 65 mm, and 90-mm square shafts.
- Stainless steel retainer rings are not compatible with all sprockets. See Stainless Steel Retainer Ring Restrictions.

The following ANSI Type 3AMI rings, conforming to MIL SPEC R-2124B are available:

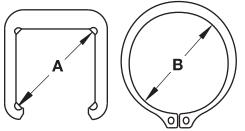
STAINLESS STEEL RETAINER RING RESTRICTIONS

Stainless steel retainer rings do not work with the following sprockets:

		Pitch Diameter ^a	
Retainer ring size	Series	in	mm
1.219 in	900	2.1	53
1.219111	1100	2.3	58

^a To lock down the S900 2.1 in (53 mm) and (58 mm) pitch diameter sprockets, a setscrew is required. Place the setscrew on each side of the sprocket. Contact Intralox Customer Service for more information.

RETAINER RING GROOVE AND CHAMFER DIMENSIONS



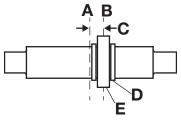
A ring groove diameter for plastic retainer rings
B ring groove diameter for stainless steel retainer rings
Figure 96: Retainer ring groove diameters

	Retainer Ring Groove and Chamfer Dimensions ^a							
Shaft Size	Groove Diameter	Width	Chamfer ^b					
5/8 in	0.762 ± 0.003 in	0.046 + 0.003/- 0.000 in	0.822 ± 0.010 in					
1 in	1.219 ± 0.005 in	0.056 + 0.004/- 0.000 in	1.314 ± 0.010 in					
1.5 in	1.913 ± 0.005 in	0.086 + 0.004/- 0.000 in	2.022 ± 0.010 in					
2.5 in	3.287 ± 0.005 in	0.120 + 0.004/- 0.000 in	3.436 ± 0.010 in					
3.5 in	4.702 ± 0.005 in	0.120 + 0.004/- 0.000 in	4.773 ± 0.010 in					
25 mm	30 ± 0.1 mm	2.0 + 0.15/- 0.00 mm	$33 \pm 0.25 \text{ mm}$					
40 mm	51 ± 0.1 mm	2.5 + 0.15/- 0.00 mm	$54 \pm 0.25 \text{ mm}$					
60 mm	80 ± 0.1 mm	3.5 + 0.15/- 0.00 mm	82 ± 0.25 mm					
65 mm	85 ± 0.1 mm	3.5 + 0.15/- 0.00 mm	$89 \pm 0.25 \text{ mm}$					
90 mm	120 ± 0.1 mm	4.5 + 0.15/- 0.00 mm	124 ± 0.25 mm					

^a In some instances, the retainer ring grooves are offset from the shaft center. See Sprocket Retention.

^b For S200, S400, and S800 molded sprockets, shafts must be chamfered to fit.

LOCKED SPROCKET POSITION ON SHAFT



A shaft centerline

D retainer ringE sprocket

B sprocket centerlineC center sprocket offset

Figure 97: Locked sprocket position

Use the following table to determine the proper center sprocket offset.

To prevent incorrect placement of machined retainer ring grooves, consider using Self-Set Retainer Rings or Split Collar Retainer Rings, which allow easy adjustment of the center sprocket placement and do not require machined groves on the shaft.

Center sprocket placement can change when belt styles are combined. Contact Intralox Customer Service for more information.

Center Sprocket Offset									
	Number of	Off	iset	Max. Sproo	cket Spacing				
Series	Links	in	mm	in	mm	Notes			
100	even	0	0	6	152				
100	odd	0.12	3	6	152				
200	even, odd	0	0	7.5	191				
200 Raised Rib	even, odd	0.09	2.3	7.5	191				
400	even	0	0	6	152				
400	odd	0.16	4	6	152				
400 Roller Top, Angled Roller, Transverse Roller Top			Se	e Center Spr	ocket Offset fo	or Roller Belts.			
560	even	0.5	12.7	6	152				
560	odd	0	0	6	152				
800	even, odd	0	0	6	152				

			Cent	ter Sprocke	t Offset	
	Number of	Of	fset	Max. Sproo	ket Spacing	
Series	Links	in	mm	in	mm	Notes
800 Angled EZ Clean sprockets	even, odd	0.16	4	6	152	Ensure 6-, 10-, and 16-tooth sprockets are placed on belt centerline.
800 Raised Rib	even	3	76	6	152	
OUU RAISEU RID	odd	0	0	6	152	
850	even, odd	0	0	6	152	
888		See Series	s 888 in the	Installation In	structions or	contact Intralox Customer Service.
900	even	0	0	4	102	
900	odd	0.16	4	4	102	
900 Open Flush Grid	For offset and	d number of	links, see Se	eries 900 in th	ne Installation	Instructions or contact Intralox Customer Service.
1000	even	0	0	6	152	
1000	odd	0.25	6.44	6	152	
1000 Insert Roller,	even	1.5	38.1	6	152	
High Density Insert Roller	odd	0	0	6	152	
1000 High Density	even	1.67	42.5	6	152	
Insert Roller 85 mm	odd	0	0	6	152	
	even (whole)	0	0	4	102	The 8- and 12-tooth steel sprockets can be placed
	odd (whole)	0.5	12.7	4	102	on belt centerline.
1100	even, odd	0.25	6.35	4	102	Even or odd number of links in increments of 0.5 in (12.7 mm). The 8- and 12-tooth steel sprockets can be placed on belt centerline.
	even (whole)	0.19	4.8	4	102	
1100 EZ Track	odd (whole)	0.31	7.9	4	102	
sprockets	even, odd	0.06	1.52	4	102	Even or odd number of links in increments of 0.5 in (12.7 mm)
1200				6	152	For offset and number of links, see Series 1200 in the Installation Instructions or contact Intralox Customer Service.
1400	even	0	0	6	152	
1400	odd	0.5	12.7	6	152	
1400 FG				6	152	For offset and number of links, see Series 1400 in the Installation Instructions or contact Intralox Customer Service.
1500				6	152	For offset and number of links, see Series 1500 in the Installation Instructions or contact Intralox Customer Service.
1600	even, odd	0	0	4	102	
1650	even, odd	0.25	6.4	4	102	The 20-tooth sprocket has zero offset.
1700	even	0.5	12.7	4	102	
1700	odd	0	0	4	102	
1750	even	0	0	- 4	102	When determining number of links, drop the 0.5 link.
1750	odd	0.5	12.7	4	102	
1800	even, odd	0	0	6	152	
1900				3	76	For offset and number of links, see Series 1900 in the Installation Instructions or contact Intralox Customer Service.
2100	even, odd	1.97	50	3.94	100	

Center Sprocket Offset									
	Number of	Off	iset	Max. Sproc	ket Spacing				
Series	Links	in	mm	in	mm	Notes			
2200	even	0.25	6.4	4	102	When determining number of links, drop the 0.5 link. Offset to left of shaft centerline looking in the direction of the preferred belt run direction.			
2200	odd	0.25	6.4	4	102	When determining number of links, drop the 0.5 link. Offset to right of shaft centerline looking in the direction of the preferred belt run direction.			
2200	even	0	0	6	152				
2300	odd	1.5	38	6	152				
2400	even	0.125	3.2	6	152	When determining number of links, drop the 0.5 link. Offset to left of shaft centerline looking in the direction of the preferred belt run direction.			
2400	odd	0.125	3.2	6	152	When determining number of links, drop the 0.5 link. Offset to right of shaft centerline looking in the direction of the preferred belt run direction.			
2600	even, odd	0	0	8	203				
2700	even, odd	0	0	8	203				
2800	even	0	0	6	152				
2000	odd	0.5	12.7	6	152				
4400	even, odd	0.5	12.7	9	229				
4500	even	0.5	12.7	6	152				
4300	odd	0	0	6	152				
4500 dual tooth	even	0	0	6	152				
sprockets	odd	0.5	12.7	6	152				
9000	even	0.5	12.7	4	102				
9000	odd	0	0	4	102				
10000 hinge drive	even	0.25	6.3	5.91	150	Offset to left of shaft centerline looking in the direction of the preferred belt run direction.			
(preferred)	odd	0.25	6.3	5.91	150	Offset to right of shaft centerline looking in the direction of the preferred belt run direction.			
10000 center drive	even	0.25	6.3	5.91	150	Offset to right of shaft centerline looking in the direction of the preferred belt run direction.			
	odd	0.25	6.3	5.91	150	Offset to left of shaft centerline looking in the direction of the preferred belt run direction.			
	Number of Rollers Per Row								
400 Roller Top,	even	0	0	6	152				
Angled Roller, Transverse Roller Top	odd	1	25.4	6	152				

CENTER SPROCKET OFFSET FOR ROLLER BELTS

Center Sprocket Offset for Roller Belts								
		Offs	et	Max. Sproc	ket Spacing			
Series	Number of Rollers	in	mm	in	mm	Notes		
400	even	0	0	6	152			
400	odd	1	25.4	6	152			
4500	even	0	0	6	152			
4000	odd	1	25.4	6	152			
4550	even	0	0	6	152			
4000	odd	1	25.4	6	152			

Center Sprocket Offset for Roller Belts							
		Offset Max. Sprocket Spacing					
Series	Number of Rollers	in	mm	in	mm	Notes	
7000	Divisible by 4	1	25.4	6	152	Number of rollers = belt width in inches	
7000	Not divisible by 4	0	0	6	152	- 1 (belt width in mm/25.4 - 1)	
7050	Divisible by 8	1	25.4	6	152		
7050	Not divisible by 8	0	0	6	152		

SELF-SET RETAINER RINGS

Self-set retainer rings are available to fit 1.0 in, 1.5 in, 2.5 in, 3.5 in, 40 mm, 60 mm, and 65 mm shafts.

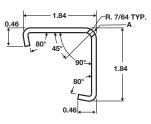


Figure 98: Self-set retainer rings

- Retainer rings are made from non-corrosive 316 stainless steel.
- There is no need for machined grooves on the shaft and the shaft does not need to be removed to install these retainer rings.
- Self-set retainer rings are USDA-FSIS accepted.
- Self-set retainer rings snap into place on the square shaft and are fixed in position with a unique setscrew that cannot fall out of the retainer ring during operation.
- The shaft must have chamfered edges for the retainer ring to work properly.
- Self-set retainer rings are not recommended in applications where high lateral forces are to be expected.
- Self-set retainer rings have the following restrictions:

Self-Set Retainer Ring Restrictions					
	Self-set retainer rings do NOT work with the following sprockets:				
Retainer Ring	Pitch Diameter				
Size	Series	in	mm		
	100	2.0	51		
1.0 in	900	2.1	53		
	1100	2.3	58		

Self-Set Retainer Ring Restrictions					
	Self-set retainer rings do NOT work with the following sprockets:				
Retainer Ring	Pitch Diameter				
Size	Series	in	mm		
	900	3.1	79		
40 mm	1000	3.1	79		
	1100	3.1	79		
	1600	3.2	81		
65 mm	400	5.2	132		



A Custom setscrew, fully inserted, head first, from this side **Figure 99:** Self-set retainer ring dimensions

ROUND SHAFT RETAINER RINGS



Figure 100: Round shaft retainer ring

- Round shaft retainer rings are available to fit 0.75 in, 1.0 in, and 25 mm round shafts.
- Made of stainless steel.
- Do not require a groove for placement, because friction holds the retainer rings in place. **NOTE:** Avoid grooves on round shafts. Grooves cause fatigue and shaft failure.

SPLIT COLLAR RETAINER RINGS



Figure 101: Split collar retainer rings

Split Collar Retainer Ring Shaft Compatibility				
Square Shafts	Round Shafts			
1.5 in	3/4 in			
2.5 in	1 in			
40 mm	1-3/16 in			
60 mm	1-1/4 in			
	1-3/8 in			
	1-7/16 in			
	1-1/2 in			
	2 in			

- The retainer rings are made from 304 stainless steel.
- For use in applications with high lateral loads on the sprockets.
- These retainer rings do not require the shaft to be chamfered and do not require shaft removal, simplifying installation.
- Split collar retainer rings have the following restrictions:

	Split Collar Retainer Ring Restrictions						
Split Collar Retainer Rings are not con	Split Collar Retainer Rings are not compatible with 3.0 in (76.2 mm) pitch diameter or smaller sprockets or with the following sprockets.						
		Pitch [Diameter				
Retainer Ring Size	Series	in	mm				
	400	4.0	102				
	900	3.1	79				
	900	3.5	89				
1.5 in and 40 mm	1000	3.1	79				
	1100	3.1	79				
	1100	3.5	89				
	1600	3.2	81				
	400	5.2	132				
	1000	4.6	117				
	1100	4.6	117				
2.5 in and 60 mm	1400	4.9	124				
	2600	5.2	132				
	2700	5.2	132				

RETURNWAY RINGS

	ctual Inner Diameter	Ring	Width	
Blamotor				Available
in mm in mm i	in mm	in	mm	Materials
4 102 1.9 48.3 1	.89 48.0	1	25	
2.5 63.5 2	.49 63.3	0.75	19	
1.97 50 1	.95 49.5			Black
6 152.4 2.36 60 2	.35 59.6	2 50.8	50.0	rubber
2.5 63.5 2	.45 62.2			
2.5 63.5 2	.49 63.1			

• Rings are designed to press fit onto rollers. If the roller has a smaller actual diameter than nominal diameter, the ring may slip in service.

- An evaporating lubricant such as dish soap with water can be used on the ring to ease installation. Never use oil-based lubricants such as WD-40 on the rings or rollers.
- 4 in (102 mm) rings are not available with text indicating bore diameter.
- Solid rubber material dampens sound.

SPROCKET SPACERS

Use of sprocket spacers and retainer rings in the recommended locations prevents problems associated with sprocket migration and belt drift. Intralox can provide a recommended drive configuration, including sprockets, spacers, and retainer rings for your application and detailed guidelines for designing conveyors for use with Intralox[™] FoodSafe[®] modular plastic belts. Contact Intralox Customer Service for more information.



Figure 102: Sprocket spacers on square shaft with sprockets and retainer rings

			Available	Bore Sizes	
Nom. Sprocke	t Spacer Width	U.	S.	Me	tric
in	mm	Round in	Square in	Round mm	Square mm
1.0	25		1.5		40
1.5	38		1.5		40
2.0	51		1.5		40
3.0	76		1.5		40
3.5	89		1.5		40
4.0	102		1.5		40
5.0	127		1.5		40

ROUND BORE ADAPTERS

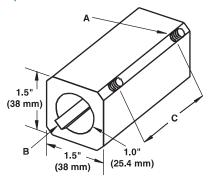
Sprocket inserts are available to adapt 1.5 in square bore sprockets to use 1 in diameter shafts. These inserts are only recommended for lightly loaded belts or for narrow belts up to 18 in (460 mm) wide.

Adapters are made of glass-filled polypropylene for strength and chemical resistance and are available in 2.5 in (64 mm) and 3.5 in (89 mm) lengths. The 2.5 in (64 mm) adapter has a torque limit of 875 in-lbf (99 N-m). The 3.5 in (89 mm) adapter is limited to 1200 in-lbf (135 N-m). The operating temperature limits are between 45°F and 120°F (7°C and 50°C).

Setscrews are provided to retain the sprockets on the adapters and to lock the center sprocket to the shaft. The 3.5 in (89 mm) adapter has a third tapped hole to accommodate a range of hub widths. To determine which adapter to use with a given sprocket hub width, see the following table.

For certain sprocket and adapter combinations, more than one sprocket can be placed on each adapter. See the sprockets per adapter column in the following table for more information.

NOTE: Round bore adapters are not recommended for use with split sprockets or abrasion resistant sprockets.



A 1/4 in - 20 \times 5/8 in setscrews (UNC threads)

B keyway - 0.25 in \times 0.125 in (6 mm \times 3 mm)

C gap between setscrews:2.5 in (64 mm) adapter1.5 in (38 mm) gap3.5 in (89 mm) adapter2.5 in (64 mm) gap **Figure 103:** Round bore adapter

	Round Bore Adapter Selection Table ^a							
Locked Center Sprocket				ocket	Floating Sprockets			
Sprocket I	lub Widths	Adapte	r Sizes Sprockets per		Adapter Sizes Sprockets		Sprockets per	
in	mm	in	mm	Adapter	in	mm	Adapter	
0.75	19	2.5	64	2	2.5	64	1	
1.00	25	2.5	64	1	3.5	89	1	
1.25	32	3.5	89	2	3.5	89	1	
1.50	38	2.5	64	1	3.5	89	1	
2.50	64	3.5	89	1	3.5	89	1	
^a Spacers can be re	Spacers can be required to lock down center sprockets on adapters.							

SCROLL IDLERS

A scroll idler can be used in applications where excessive debris can hamper sprocket performance or damage the belt or where the drive shaft and sprockets must be kept clean. The curved, flighted surface of the scroll directs debris away from the belt center, toward the edges, where it can fall away from the belt and conveyor components.

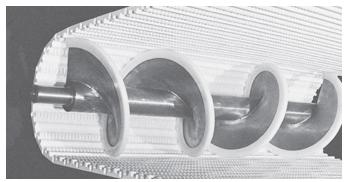


Figure 104: Scroll idler

Intralox offers scrolls in two nominal diameters: 6 in (152 mm) and 9 in (229 mm). Flight pitch, the axial distance for the flight to sweep through a full circle, is also 6 in (152 mm) and 9 in (229 mm), respectively. Since the scroll idler also serves as the idle shaft, each scroll idler has a minimum scroll length to ensure proper belt support. For narrow belts, or for extra support, a double-flighted scroll is available.

Scroll Dimensions							
Diameter Minimum Scroll Length (exclusive of journals)							
Non	ninal	Actual		Single-Flighted		Double-Flighted	
in	mm	in	mm	in	mm	in	mm
6	152	6.7	170	12.5	318	6.5	165
9	229	9.7	246	18.5	470	9.5	241

Intralox scrolls are offered in carbon steel and stainless steel with a thick section of UHMW-PE wearstrip attached to the flight edges. Carbon steel scrolls are treated and painted for protection. Stainless steel scrolls with a polished weld bead are available for USDA-FSIS applications.

	Flight Material					
Scroll Features	Carbon Steel	Stainless Steel	Stainless Steel USDA-FSIS			
6 in (152 mm) scroll diameter	٠	•	•			
9 in (229 mm) scroll diameter	٠	•	•			
Intermittent welds	٠	•				
Continuous, polished welds			•			
UHMW-PE flight edging	٠	•	•			
Primer grey paint	٠					

- All scrolls are mounted on a 2.5 in (63.5 mm) diameter round shaft.
- The maximum journal diameter is 2.5 in (63.5 mm) and minimum journal length is 2 in (50.8 mm).
- Position the scroll idler assembly in the conveyor frame so the V-shape at the center of the scroll (where the left and right flights meet) points in the direction of belt travel. Adjust the shaft take-up, if there is one, to have even tension on both sides.
- Intralox scrolls have no built-in tracking ability. It can be necessary to use side-mounted wearstrips on the infeed end.
- Scroll idlers are not compatible with the Clean Release variation of the S800 Open Hinge Flat Top with Heavy-Duty Edge belt.

WEARSTRIPS

FLAT WEARSTRIPS

Standard flat wearstrips are available in UHMW-PE and Nylatron[®] (a molybdenum-filled nylon). UHMW-PE wearstrips measure 0.25 in (6 mm) thick \times 1.25 in (32 mm) wide \times 120 in (3048 mm). Nylatron wearstrips measure 0.125 in (3 mm) thick \times 1.25 in (32 mm) wide \times 48 in (1219 mm). UHMW wearstrips are FDA and USDA-FSIS compliant for direct food contact. Nylatron wearstrips are not FDA or USDA-FSIS accepted for food applications.

Flat finger-joint wearstrips have a notched end design which provides overlapping sections for continuous support. UHMW-PE wearstrips are available in 24 in (610 mm) and 60 in (1524 mm) lengths. Fasteners are supplied.

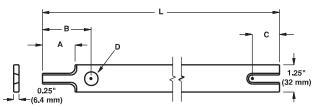


Figure 105: Flat finger-joint wearstrips

L	A	В	C
24 in (610 mm)	1.125 in (28.6 mm)	1.75 in (44.5 mm)	0.75 in (19.1 mm)
60 in (1524 mm)	1.875 in (47.6 mm)	2.25 in (57.2 mm)	1.50 in (38.1 mm)

ANGLE AND CLIP-ON WEARSTRIPS

Intralox also offers various angle and clip-on wearstrips. All clip-on wearstrips styles come in 120 in (3048 mm) lengths. These wearstrips are designed to attach directly to the conveyor frame without fasteners.

- For new applications, use flat wearstrips with wide surface area for carryways and returnways.
- Use clip-on wearstrips only for lightly loaded retrofit applications or to prove concepts. Clip-on wearstrips are not recommended for normal production operation.
- Contact Intralox Customer Service for application-specific information.

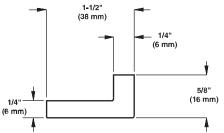


Figure 106: Standard angle UHMW wearstrips (B6XX21IXXWMV)

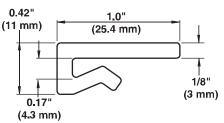
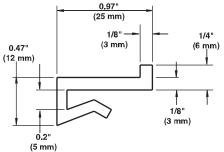
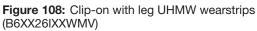
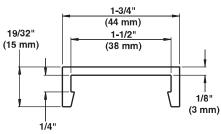


Figure 107: Clip-on UHMW wearstrips (B6XX25IXXWMV)

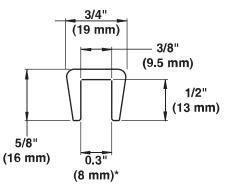


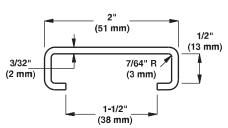


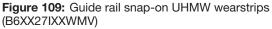


(6 mm)

Figure 110: Barbed clip-on UHMW wearstrips (B6XX23IXXWMV)







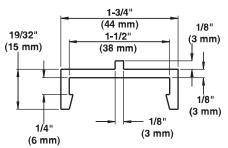


Figure 111: Barbed clip-on with leg UHMW wearstrips (B6XX24IXXWMV)

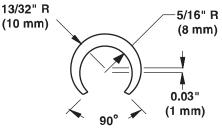
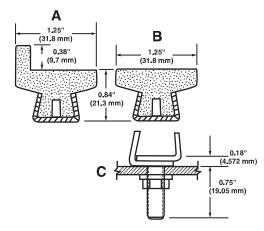


Figure 113: Full round snap-on UHMW wearstrips (B6XX29IXXWMV)

Figure 112: Standard bar snap-on UHMW wearstrips (B6XX28IXXWMV)

STAINLESS STEEL-BACKED UHMW-PE WEARSTRIP

- Stainless steel-backed UHMW-PE wearstrip can be used to create a rigid belt carryway surface on any frame with cross members.
- Stainless steel-backed UHMW-PE wearstrip is mounted to cross members with a self-tightening stainless steel clip with nut (self-tightening stainless steel clip with nut sold separately).
- Can be installed in parallel, chevron, or other configurations.
- Recommended for temperatures up to 160°F (71°C).
- Available in two profiles: flat (T) wearstrip and flanged (L) wearstrip.
- Available in 120 in (3048 mm) lengths.
- Allow for thermal expansion and contraction when installing wearstrips.
- Always chamfer or bend down the leading edges of any wearstrip.



A 120 in stainless steel back clip-on with leg I UHMW-PE wearstrip (B6XX43IXXWMV-00)

B 120 in stainless steel back t clip-on UHMW-PE wearstrip (B6XX42IXXWMV-00)

C stainless steel self-tightening wearstrip clip and nut, 5/16-18 UNC (C9AX1XXXXXX-01)

Figure 114: Stainless steel backed UHMW-PE wearstrips

UHMW-PE PRESSURE SENSITIVE TAPE

Intralox offers UHMW-PE self-adhering wearstrip tape in rolls of 54 ft. (16.5 m). This tape can be used for quick and easy conversion of steel wearstrips to a lower friction UHMW-PE wearstrip. The 1 in (25.4 mm) wide and 2 in (50.8 mm) wide tape is available in thicknesses of 0.010 in (0.25 mm) and 0.030 in (0.76 mm).

NOTE: UHMW-PE pressure sensitive tape is only to be used in light-duty applications and temporary solutions.

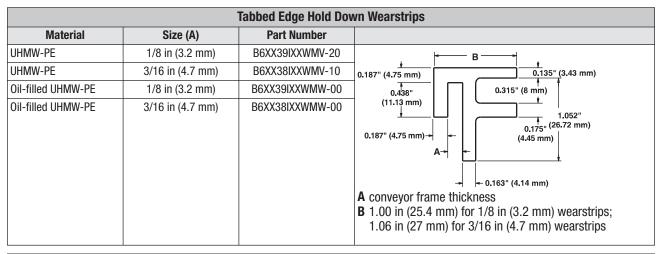
CUSTOM WEARSTRIPS

RADIUS BELT WEARSTRIPS

All radius belt wearstrips are available in natural UHMW-PE and self-lubricating, grey, oil-filled UHMW-PE. The angle and center rail wearstrips use the EZ Clean design. All wearstrips are available in either 1/8 in (3.2 mm) or 3/16 in (4.7 mm) sizes. S2400 is available in UHMW-PE only.

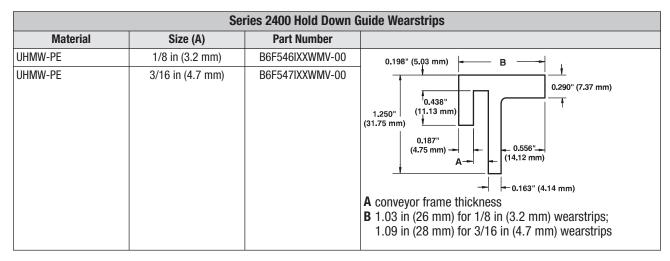
Standard Edge Hold Down Wearstrips						
Material	Size (A)	Part Number				
UHMW-PE	1/8 in (3.2 mm)	B6XX33IXXWMV-00	► B → 0.25"			
UHMW-PE	3/16 in (4.7 mm)	B6XX32IXXWMV-00	(6 mm)			
Oil-filled UHMW-PE	1/8 in (3.2 mm)	B6XX33IXXWMW-00				
Oil-filled UHMW-PE	3/16 in (4.7 mm)	B6XX32IXXWMW-00	1.68" (43 mm) 1.48" (43 mm) 1.48" (20 mm) (25 mm) (25 mm) (25 mm) (25 mm) (6 mm) 0.22" (6 mm) 0.22" (6 mm) 0.25" (13 mm) A			

See the following figures for wearstrip dimensions and part numbers.



Angled Hold Down Wearstrips						
Material	Size (A)	Part Number				
UHMW-PE	1/8 in (3.2 mm)	B6XX37IXXWMV-00	0.525"			
UHMW-PE	3/16 in (4.7 mm)	B6XX36IXXWMV-00	(13.34 mm) 0.187" (4.75 mm) ⊨ B → = 0.150" (3.81 mm)			
Oil-filled UHMW-PE	1/8 in (3.2 mm)	B6XX37IXXWMW-00	0.187" (4.75 mm)			
Oil-filled UHMW-PE	3/16 in (4.7 mm)	B6XX36IXXWMW-00	0.438" † (11.13 mm) 0.187" (4.75 mm) + A + (36.73 mm) A + (36.73 mm) A + (36.73 mm) A + (36.73 mm) A + (36.73 mm) A + (36.73 mm) A + (36.73 mm) (36.73 mm) (37.73 mm)			

Center Rail Hold Down Wearstrips						
Material	Size (A)	Part Number				
UHMW-PE	1/8 in (3.2 mm)	B6XX41IXXWMV-00	0.525" 0.525"			
UHMW-PE	3/16 in (4.7 mm)	B6XX40IXXWMV-00	- (13.34 mm) (13.34 mm)			
Oil-filled UHMW-PE	1/8 in (3.2 mm)	B6XX41IXXWMW-00	0.187" (4.75 mm)			
Oil-filled UHMW-PE	3/16 in (4.7 mm)	B6XX40IXXWMW-00	0.438" (11.13 mm) 0.163" (4.14 mm) 0.163" (4.14 mm) 0.163" (4.14 mm) A A A Conveyor frame thickness B 1.56 in (40 mm) for both 1/8 in (3.2 mm) and 3/16 in (4.7 mm) wearstrips			



PUSHER BARS

Accumulation tables are most often used in the beverage industry, allowing upstream production machinery to operate continuously and economically when downstream machinery interrupts product flow. These tables act as a buffer to absorb the product overflow until the downstream problem is rectified. The principal function of a pusher bar is to move the last few product rows off the accumulation table, past the dead plate area, and onto the primary conveyor lines. Pusher bars rest on the accumulation table, which must use a Raised Rib style belt (S100, S400, and S900).

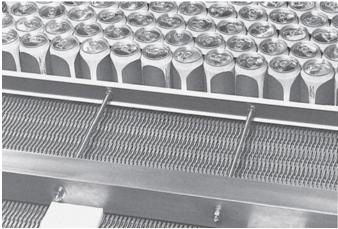


Figure 115: Pusher bar side view

The bar is a 2.5 in (63.5 mm) square stainless or carbon steel shaft which rides in several slotted UHMW guide shoes. The shoes are slotted on the bottom to mesh with the ribs of the belt and keep the bar aligned, perpendicular to the direction of belt travel. The shoes bear the entire weight of the pusher bar, so it is recommended that wearstrips be placed to support the belt directly under the shoes.

The blade of the pusher bar actually does the pushing. Blades are available in 24 in to 120 in (610 mm to 3048 mm) lengths and consists of a rigid steel bar capped with UHMW-PE wearstrips, to avoid marking or damaging products. The blade is set off from the weighted shaft by threaded steel rods, making the amount of offset adjustable to individual needs.

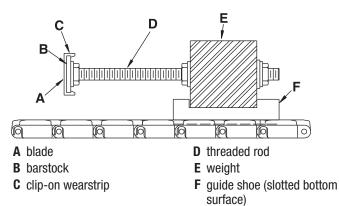
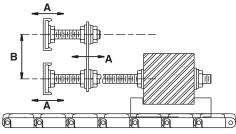


Figure 116: Pusher bar assembly

A dual blade pusher bar is also available for tall or contoured products. The upper blade of this configuration is adjustable up and down and can be extended past or retracted further back from the lower blade.

Adjustment of the pusher bar is dependent upon: 1) placement of the device which limits forward travel of the pusher bar, and 2) dimensions of the product being conveyed. Standard offset is approximately equal to the length of the finger plate to be used:

- S100: 5.75 in (146 mm)
- S400: 7.5 in (191 mm)
- S900: 6.5 in (165 mm)

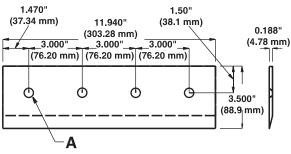


A adjustable

B adjustable from 2–4 in (51–102 mm) **Figure 117:** Dual blade pusher bar assembly

TRANSFER PLATES

Intralox offers UHMW-PE transfer plates with operating temperature limits of -100°F to 180°F (-73°C to 82°C).



A holes for 0.25 in (6 mm) bolts Figure 118: Transfer plates

EZ CLEAN[™] IN PLACE (CIP) SYSTEM

Compatible with most conveyors, the EZ CIP system cleans belts quickly, effectively, and consistently while minimizing water usage.

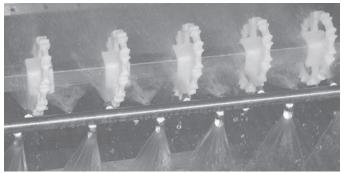


Figure 119: EZ Clean In Place (CIP) System

The CIP system features a spray bar optimally located to increase and expedite debris removal and a custom-engineered spray pattern. The spray pattern is designed to provide thorough cleaning of the belt underside, sprockets, and shaft. The system mounts within the conveyor frame behind the conveyor shaft and sprays the belt at three separate locations. Fan nozzles spray through the open belt hinges below and above the shaft as the belt travels around the sprockets. High-impact nozzles spray the belt underside along the belt drive bars to maximize the debris channeling effect built into EZ Clean belts. Cleaning is further optimized when used along with Angled EZ Clean sprockets.

This system can be installed on the drive end or idle end, but the drive end is preferred. The system is made of 303/304 stainless steel, with highly polished surfaces. The minimum water pressure recommended at the system intake is 150 PSI (10 bar).



Figure 120: Spray pattern designed to clean of belt underside, sprockets, and shaft

HOLD DOWN ROLLERS

Hold down roller assemblies can be used in place of hold down shoes or rails on wide elevating conveyors. On typical elevating conveyors, flights have a notch in the center of the belt so that a hold down rail or shoe can be used to keep the belt on the conveyor frame. Product loss or damage from these shoes is an inevitable side effect.

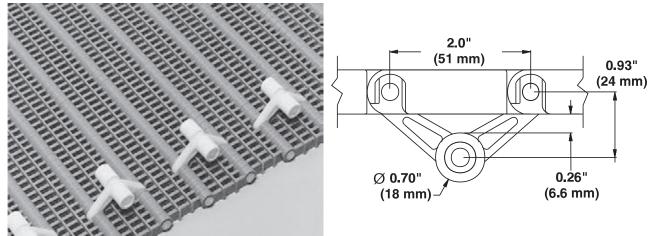


Figure 121: Hold down rollers

Figure 122: Hold down rollers, side view

Standard roller assemblies have a bracket made of acetal, with polypropylene rollers and rods, and are available for the following belt styles:

	Style						
Series	Flat Top	Flush Grid	Open Grid	Open Hinge	Mesh Top	Perforated Flat Top	
S200	•	•	•	•		•	
S400	•	•		•			
S800	•	•			•	•	

Hold down roller assemblies are built securely into the underside of the belt, held in place by the belt hinge rods. The rollers ride in tracks that anchor the belt in position as it enters the incline of the conveyor. These assemblies can also be used in place of traditional hold down rails or shoes on the side of the conveyor.

Hold down rollers can be placed as frequently as every other belt row, a minimum of 4 in (102 mm) apart to a recommended maximum of 24 in (610 mm) apart. Normally, 8 in (203 mm) spacing, every fourth row is sufficient. Sprocket size is limited by the rollers protruding from the bottom surface of the belt. To keep rollers from coming into contact with the shaft, when using a 1.5 in or 40-mm square shaft, the minimum allowable sprocket pitch diameter is 6.4 in (163 mm). When using a 2.5 in or 60-mm shaft, the minimum sprocket pitch diameter allowable is 7.7 in (196 mm). See Design Guidelines for more information.

ABRASION RESISTANCE SYSTEM

Excessive rod and sprocket wear in abrasive applications can cause various undesirable conditions. Aside from the obvious effect of reduced belt life, there can be added difficulties in making repairs. A badly worn rod cannot be removed easily. Often, belt modules are damaged in the process. Worn rods also cause belt pitch to increase, which decreases sprocket engagement and, in turn, increases the wear rate on sprocket teeth. The belt may not run as smoothly as it should under these circumstances.

Intralox has developed stainless steel split sprockets and Abrasion Resistant (AR) hinge rods which enhance the performance of Intralox belts in abrasive or gritty environments. Rigorous testing shows that these AR components significantly outlast standard components and increase belt module life. Abrasive particles are less likely to become embedded in the harder AR material. Thus, the components themselves do not become abrasive surfaces wearing on the belt.

SPLIT SPROCKETS

Intralox split sprockets are an alternative to molded plastic sprockets. Split sprockets are constructed from FDA-compliant materials, but are not USDA-FSIS accepted. See the individual shaft and sprocket data pages for detailed information.

The old style—all stainless steel abrasion-resistant sprockets—are still available as special order items. Contact Intralox Customer Service for more information.

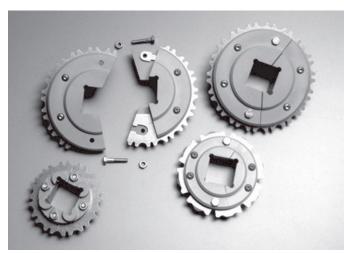


Figure 123: Split sprockets

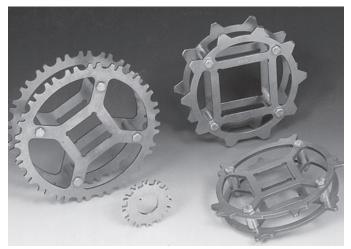


Figure 124: Abrasion resistant (all steel) sprockets

ABRASION RESISTANCE HINGE RODS

Abrasion resistant (AR) rods are stiffer than standard rods, so belt pull capabilities are not sacrificed. AR rods are lighter, less expensive and are more flexible than steel rods. They also provide good chemical resistance, low friction, a wide operating temperature range and are FDA-compliant for direct food contact.

In all belt styles which employ the Intralox snap-lock rod retention system, AR rods are held in place with rodlets installed on both edges of the belt. Rodlets are short, headed rods that are also made of abrasion resistant material.



Figure 125: AR rods and rodlets

Belts that utilize an unheaded rod retention system or belts with Slidelox do not require a head of any type.

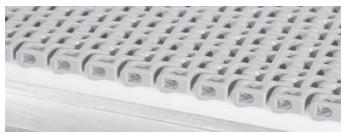


Figure 126: Unheaded rod retention



Figure 127: Slidelox rod retention

The Slidelox rod retention system is an unheaded rod retention method. This system uses a Shuttleplug to retain the rods during operation. The Slidelox plug can be easily moved to the side when work on the belt is required.

To remove a rod after a belt has been in service for some time, apply a soapy solution or other lubricant to the belt hinge. This approach helps loosen any grit that has become trapped between the rod and the module.

AR rods can absorb water and expand in length and diameter when used in continuously wet, elevatedtemperature environments. If an application requires an AR rod in these conditions, contact Intralox Customer Service to determine the approximate expansion due to water absorption.

EZ MOUNT FLEX TIP SCRAPER

Availabl	e Height	Available Length			
in	mm	in	mm	Available Materials	
2.75	70	72	1830	Rigid PVC base with flexible polyurethane tip	
Available	e in only one	e size.			
Only cut	to length u	pon receipt.			
Designe	d for wet or	greasy prod	duct applica	tions.	
• Not for u	ise with dry	products or	r applicatior	1S.	
FDA con	npliant.				

Every conveyor design has unique objectives and limitations. Rather than provide a step-by-step guide for every design, Intralox provides design guidelines that can be applied to most conveyors. For any conveyor design:

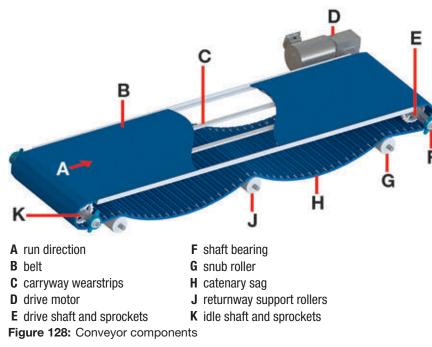
- Apply good machine design principles.
- Ensure the performance characteristics of the selected belt and components are suitable for the application.
- Use the provided design resources.

ADDITIONAL RESOURCES

- Intralox provides CalcLab[™] to help calculate and evaluate many aspects of conveyor design. CalcLab is an always up-to-date replacement for legacy engineering programs that runs in the browser and can be accessed from any internet-connected computer. To use CalcLab, go to <u>calclab.intralox.com</u>.
- In addition to these general design guidelines, Intralox provides more specific guidelines for certain belts and applications. Contact Intralox Customer Service for more information.
- Engineering assistance, design reviews, CAD files, and other services and resources are available. For more information, see Intralox Resources.

CONVEYOR DESIGN

The following figure identifies the main components of a flat, straight-running, end-drive conveyor. Incline, decline, spiral, and radius conveyors have different components and design requirements. For more information about these designs, see Other Conveyor Designs. For information about other drive locations, see Drive Location.



NOTE: Figures in this publication are simplified to improve legibility and not intended for use as mechanical drawings.

CRITICAL CONSIDERATIONS

Apply the guidelines provided in this chapter when designing carryways, returnways, drive systems, product containment, and transfers.

- Always identify a belt and accessories before designing the conveyor frame. For belt selection guidelines, see Belt Selection Process.
- Consider the effects of chordal action when selecting a belt and sprockets. See Chordal Action.
- If the operating temperature differs from the ambient temperature, consider thermal expansion and contraction when designing the conveyor. See Dimension Changes.
- Consider the effects of speed and adapt the conveyor design as needed for high-speed applications. See Belt Speed.
- For abrasive applications, use the recommended guidelines to minimize wear to belts, sprockets, and other components. See Abrasion.
- In high-impact applications, protect the belt and wearstrips from deflection and damage. See High-Impact Applications.
- Consider the expected exposure to cleaning, sanitation, or other chemicals when selecting materials. See Chemical Damage.

CONVEYOR FRAMES

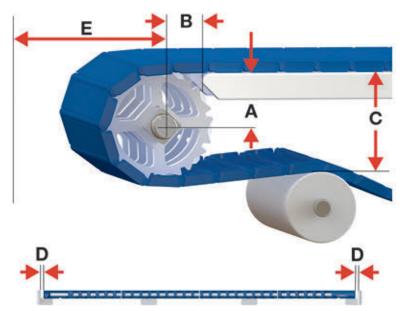
Use the following guidelines when designing conveyor frames:

- Follow all local, state, and national safety regulations and standards.
- Provide proper machine safeguarding.
- Use the provided conveyor frame dimensions for the selected belt and sprockets. See Frame Dimensions.
- Avoid catchpoints. Provide a chamfer or fillet on conveyor frame components that contact the belt. In particular, protect the belt edges and rod retention system from damage.
- Provide openings in the frame for rod insertion and removal.
- Consider belt installation and maintenance requirements when designing the frame. For installation and belt maintenance information, see the *Intralox Modular Plastic Conveyor Belts Installation, Maintenance & Troubleshooting Manual* at <u>www.intralox.com</u>.
- Accommodate cleaning and sanitation requirements. Consider openings to provide access for cleaning, tool-free assembly methods, and avoidance of frame assembly methods that can harbor bacteria.

FRAME DIMENSIONS

All conveyors designed for use with Intralox belts have certain dimensional requirements. Carryway and returnway dimensions for each belt and sprocket combination are provided in the Product Line chapter.

Intralox uses the following definitions for conveyor frame dimensions:



A vertical distance between shaft centerline and carryway top, ± 0.03 in (1 mm); see A Drive Dimension

B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm); see B Drive Dimension

C vertical distance between carryway top and returnway support top; see C Drive Dimension

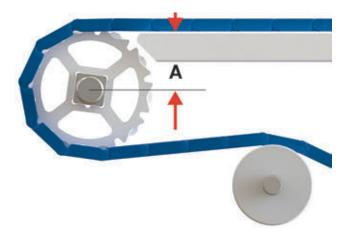
D minimum clearance between belt edge and outer wearstrip: 0.25 in (6 mm). See D Drive Dimension

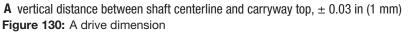
E minimum horizontal distance between shaft centerline and other components; see E Drive Dimension

Figure 129: A, B, C, D, and E drive dimensions

A DRIVE DIMENSION

The A drive dimension is the vertical distance (A) between the shaft centerline and the top of the carryway. This distance combines with chordal action of the belt to affect belt-to-sprocket engagement and end-on or end-off product transfers. For more information about chordal action, see Chordal Action.

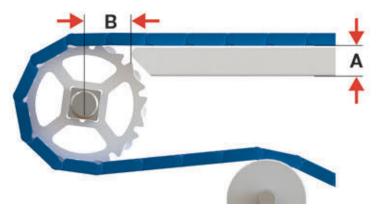




B DRIVE DIMENSION

The B drive dimension is the horizontal distance (B) between the shaft centerline and the beginning of the carryway. Using this recommended distance is critical to avoiding sprocket interference.

- The B drive dimension assumes a carryway height of 0.5 in (13 mm). If product loads require a thicker carryway to reduce deflection, consider chamfering the carryway ends to avoid sprocket interference. For more information, see Avoiding Sprocket Interference.
- For applications where product stability is a concern, consider extending carryway wearstrips in between the sprockets. For more information, see Anti-Sag Wearstrip Configuration.



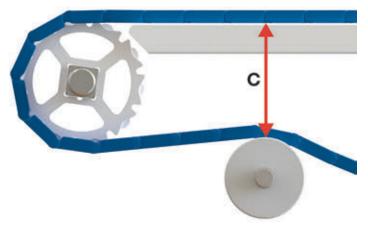
A carryway height

B horizontal distance between shaft centerline and beginning of carryway, ± 0.125 in (3 mm) **Figure 131:** B drive dimension

C DRIVE DIMENSION

The C drive dimension is the vertical distance (C) between the top of the carryway and the top of the returnway supports. Using this recommended distance ensures the belt properly wraps around and engages the sprockets.

Most belts must wrap 180 degrees to 210 degrees around the sprockets. Certain belts have different or more exact requirements. For more information about proper sprocket engagement, see Returnways and Take-Ups.



C vertical distance between carryway top and returnway support top **Figure 132:** C drive dimension

D DRIVE DIMENSION

The D drive dimension is the minimum clearance (D) between the belt edges and the outer wearstrips. Some belt materials require more clearance. This clearance is necessary to accommodate temporary belt expansion due to temperature changes or moisture absorption. For applications that operate above the ambient temperature, additional clearance can be needed.

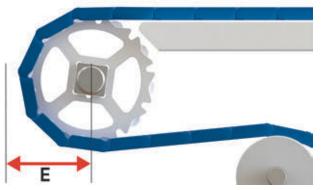
- To calculate expected expansion due to temperature changes, see Accommodating Thermal Expansion and Contraction and Belt Material Growth.
- Provide additional room if the operating temperature is above ambient.



 ${\rm D}\,$ minimum clearance between belt edge and outer wearstrip: 0.25 in (6 mm) Figure 133: D drive dimension

E DRIVE DIMENSION

The E drive dimension is the minimum horizontal distance (E) between the shaft centerline and other components or adjacent equipment. This distance is necessary to prevent interference during operation. Belts with flights, sideguards, or other raised features require additional distance.



E minimum horizontal distance between shaft centerline and adjacent equipment **Figure 134:** E drive dimension

CARRYWAYS

The carryway supports the belt in the load-bearing part of a conveyor. The primary purpose of the carryway is to provide a lower friction surface for the belt to slide against. Carryways are commonly made of low-friction material to reduce wear on the belt and conveyor frame.

Use the following guidelines for flat, straight-running conveyor carryways. For other conveyor types, see Other Conveyor Designs.

- Ensure carryway materials are suitable for the application. See Materials.
- Select an appropriate carryway design. See Solid-Plate Carryways and Wearstrip Carryways.
- For wearstrip carryways:
 - Use a recommended wearstrip. See Wearstrip Types.
 - Select an appropriate wearstrip configuration. See Wearstrip Configuration.
 - Accommodate thermal expansion and contraction. See Accommodating Thermal Expansion and Contraction.

MATERIALS

An appropriate carryway material reduces belt wear and power requirements. Intralox recommends ultrahigh molecular weight polyethylene (UHMW-PE) for most carryways. UHMW-PE has better wear characteristics, impact resistance, and an excellent combination of physical and mechanical properties compared to other materials. UHMW-PE is FDA and USDA-FSIS compliant for direct food contact, and can be used in temperatures up to 160°F (71°C).

Molybdenum-filled nylon (Nylatron[®]) can be used in temperatures up to 250°F (121°C) but is not FDA or USDA-FSIS compliant for direct food contact.

Stainless steel can be used when carryway abrasion or corrosion is a concern, but the steel must be smooth and free of burrs. A 303/304 stainless steel with a 2B, cold-rolled surface finish provides the lowest friction of any stainless steel carryway. Contact Intralox Customer Service for more information about design requirements for stainless steel carryways.

Consider slip-stick effect when selecting carryway materials. In this situation, the belt surges instead of accelerating smoothly at the infeed end of the conveyor, despite the constant rotation speed of the drive sprockets. For more information, see Slip-Stick Effect.

For frictional characteristics of belt and carryway materials, see Friction Factors.

For chemical resistance characteristics of carryway materials, see the Chemical Resistance Guide.

WEARSTRIP CARRYWAYS

A wearstrip carryway is appropriate for most applications. In this carryway design, the belt slides over narrow strips of low-friction material. Wearstrips can be arranged in a chevron or a straight, parallel pattern.

Intralox offers carryway wearstrips in UHMW-PE, HDPE, and Nylatron. For more information about Intralox wearstrips, see Wearstrips in the Product Line chapter.

WEARSTRIP TYPES

Intralox provides standard flat wearstrips, flat finger-joint wearstrips, angled wearstrips, and clip-on wearstrips. For available dimensions, see Flat Wearstrips and Angle and Clip-on Wearstrips in the Product Line chapter.

Angle and clip-on wearstrips are designed for use in applications where belt edge protection is needed or lateral product transfer is required. These strips attach to the frame without the need of fasteners.

Standard flat wearstrips are relatively thick, narrow, flat bars that are attached directly to the conveyor frame with plastic bolts and nuts in slotted holes. The slotted holes allow the wearstrips to freely expand and contract with temperature changes.

Flat finger-joint wearstrips are designed to overlap, providing continuous belt support without sharp edges. Flat finger-joint wearstrips are fastened in short lengths at the leading end only. Small gaps at the overlapping ends provide room for expansion and contraction.



A finger-joint wearstrips

B standard flat wearstrips

Figure 135: Flat wearstrips

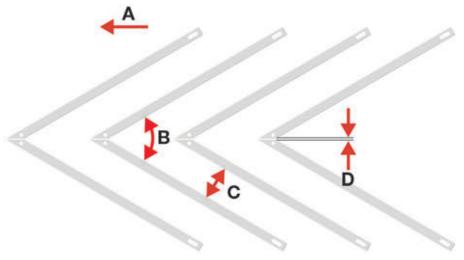
WEARSTRIP CONFIGURATION

- Arrange wearstrips in either a chevron or straight parallel pattern. See Chevron Pattern and Straight Parallel Pattern.
- Allow for thermal expansion and contraction when designing and installing wearstrips. See Accommodating Thermal Expansion and Contraction.
- Consider an anti-sag wearstrip configuration for tip-sensitive products. See Anti-Sag Wearstrip Configuration.
- Ensure the wearstrips do not interfere with the sprockets. See Avoiding Sprocket Interference.

CHEVRON PATTERN

In this configuration, wearstrips are placed in an overlapping chevron pattern. Compared to straight parallel wearstrips, a chevron pattern more evenly distributes wear and more evenly supports the belt. This pattern is a good choice for abrasive or heavily loaded applications. A chevron pattern also helps to remove debris from the belt bottom.

- Use the Sprocket and Support Quantity Reference table for the selected belt to determine the number of wearstrips required.
- Provide a minimum 0.4 in (10 mm) gap between the chevron points to reduce debris buildup.
- Reduce the space between adjacent chevrons to decrease wearstrip load and decrease unsupported belt area.

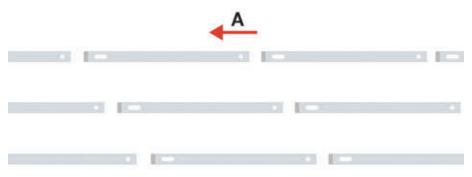


- A run direction
- **B** wearstrip angle: 20 degrees to 60 degrees
- C conventional recommended spacing: 2 in (51 mm), maximum spacing: 5 in (127 mm)
- **D** gap between chevron points: ≥ 0.4 in (10 mm)
- Figure 136: Carryway wearstrips in chevron pattern

STRAIGHT PARALLEL PATTERN

Straight, parallel wearstrips are placed parallel with the belt run direction. This pattern is commonly used, but can wear grooves on the underside of the belt. Straight, parallel wearstrips increase belt stress and deflection because load and wear are not evenly distributed across the belt.

- Attach wearstrips to the frame with plastic bolts and nuts in slotted holes. This approach allows the wearstrips to expand and contract with temperature changes.
- Use the Sprocket and Support Quantity Reference table for the selected belt to determine the number of wearstrips required.

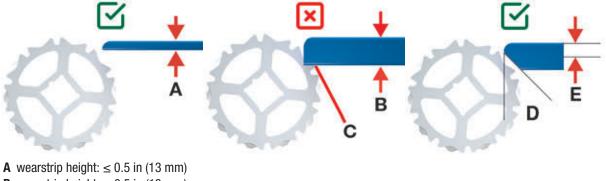


A run direction Figure 137: Straight, parallel wearstrip pattern

AVOIDING SPROCKET INTERFERENCE

The recommended distance between the shaft centerline and the beginning of the carryway assumes the wearstrip height is not greater than 0.5 in (13 mm). Some product loads require a wearstrip height greater than 0.5 in (13 mm) but this additional height can cause sprocket interference.

- When wearstrip height is greater than 0.5 in (13 mm), use the following methods to avoid sprocket interference:
 - Position the wearstrips so the ends extend in between the sprockets. See Anti-Sag Wearstrip Configuration.
 - Chamfer the wearstrip ends. Use a 45-degree angle starting 0.5 in (13 mm) below the wearstrip top.



- **B** wearstrip height: > 0.5 in (13 mm)
- **C** sprocket interference
- **D** angle: 45 degrees
- E 0.5 in (13 mm) below wearstrip top

Figure 138: Chamfer wearstrips to avoid sprocket interference

ACCOMMODATING THERMAL EXPANSION AND CONTRACTION

Wearstrip materials expand and contract due to changes in temperature or moisture. It is important to accommodate these dimension changes when specifying wearstrip design and attachment methods.

For wearstrips supplied by Intralox, use the following guidelines to accommodate thermal expansion and contraction. For other wearstrips, contact your supplier for recommendations.

- At operating temperatures above 100°F (38°C):
 - Determine the clearance gap from thermal expansion calculations. See Thermal Expansion and Contraction for coefficients of expansion.
 - Bevel-cut the opposing wearstrip ends at a 60-degree angle from horizontal.
 - Stagger the wearstrip joining locations to enable smooth belt operation.
- At operating temperatures at or below 100°F (38°C):
 - Provide a clearance gap between wearstrips of 0.3 in (8 mm).
 - Bevel-cut the opposing wearstrip ends at a 30-degree angle from horizontal.



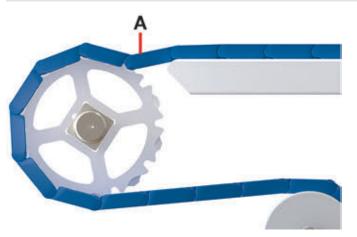
- A clearance gap: 0.3 in (8 mm)
- **B** 30-degree cut angle for operating temperatures $\leq 100^{\circ}$ F (38°C):
- **C** clearance gap determined using thermal expansion calculation
- **D** 60-degree cut angle for operating temperatures > 100°F (38°C)

Figure 139: Wearstrip gaps and cut angles

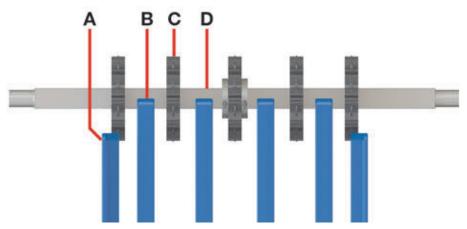
ANTI-SAG WEARSTRIP CONFIGURATION

When belt tension is not sufficient to support product near the conveyor ends, the belt can buckle and tall products can tip. An anti-sag wearstrip configuration can eliminate buckling.

• To prevent product tipping due to belt buckling, extend wearstrips between the sprockets to within 0.5 in (13 mm) of the shaft centerline.



A belts can buckle between wearstrip and sprocket Figure 140: Belts can buckle near conveyor ends



- ${\boldsymbol{\mathsf{A}}}$ wearstrip ends at recommended location
- ${\bf B}\,$ wearstrip extends between the sprockets
- C sprocket
- D shaft

Figure 141: Anti-sag wearstrip configuration

SOLID-PLATE CARRYWAYS

In a solid-plate carryway design, the belt slides over a continuous sheet of metal, UHMW-PE, or HDPE that extends the full belt width and below all impact zones.

- Use a solid-plate carryway in applications with heavy loads or high impacts, to provide continuous belt support.
- Consider adding slots, holes, or similar perforations to allow for drainage or passage of foreign material.

RETURNWAYS AND TAKE-UPS

Returnways on conveyors designed for use with Intralox modular plastic belts are generally exposed to low tension loads, but are important for proper conveyor function. Properly designed returnways will:

- Help create the back tension required to engage the drive sprockets.
- Provide storage to manage belt length changes.

Proper returnway design is critical for ensuring proper belt-to-sprocket engagement and minimizing belt maintenance requirements.

NOTE: On bi-directional and push-pull conveyors where return side tensions are high, special attention must be paid to the returnway design. For information about returnways for bi-directional and push-pull conveyors, contact Intralox Customer Service.

- Accommodate temporary changes in belt length during conveyor operation. See Belt Length Management.
- Provide adequate belt tension to ensure proper belt-to-sprocket engagement. See Back Tension.
- Consider adding a gravity or screw take-up if catenary sag alone does not provide adequate back tension. See Take-Ups.
- Select a returnway design appropriate for the conveyor length and application conditions. See Returnway Design Options.
- Ensure flights, buckets, and raised belt features are supported and protected from damage. See Support for Accessories and Textured Belts.

BELT LENGTH MANAGEMENT

An important function of the returnway is to accommodate belt length changes during conveyor operation. Belt length management is vital to maintain sufficient tension after the belt disengages from the drive sprockets.

Belts expand or contract due to temperature variations, temporary elongation while under load, and permanent elongation due to break-in and wear. A belt which increases in length can disengage from the drive sprockets if the returnway is not properly designed. A belt which contracts due to cold temperatures can cause over-tensioning and excessive shaft loads if the belt is not long enough to accommodate contraction.

TEMPERATURE VARIATIONS

Any significant change above or below the ambient temperature results in expansion or contraction of the belt. The amount of contraction or expansion depends on the belt material, the difference between operating and ambient temperature, and the overall belt length.

- Identify the expected ambient temperature of the application. Intralox assumes an average ambient temperature of about 70°F (21°C).
- To calculate expected thermal expansion and contraction, see Thermal Expansion and Contraction.

ELONGATION

All belts temporarily elongate when tension is applied. The amount of elongation depends upon the belt design, the material, the amount of tension (belt pull) applied, and the operating temperature.

Permanent belt length changes occur over time, as rods and module links rub together and wear. Over time, wear can deform a round hinge rod into a shape that looks like a vehicle camshaft. This camshaft-style hinge rod wear, along with rod hole deformation in the belt run direction, causes the belt length to increase. Significant length changes can result in sprocket disengagement.

Belts have a break-in period during the first several days to weeks of conveyor operation. Depending on the application and environment, break-in growth can range from 0.5% to 1% of total length.

• Frequently measure catenary sag and belt pitch during the break-in period.

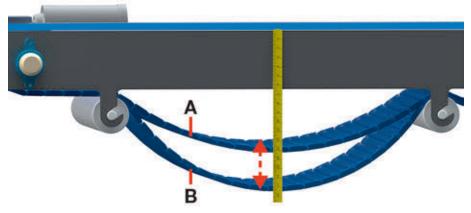
For more information about measuring belt-pitch and adjusting the belt length, contact Intralox Customer Service.

CATENARY SAG

Belts grow longer while a conveyor is running. This elongation is due to product load, temperature variations, and wear. One or more catenary sag sections in the conveyor returnway are required to accommodate these temporary length changes. During operation, these sections provide storage as the belt length increases.

For applications where significant length change is expected, other arrangements can be needed. For more information, see Returnway Design Options.

• Ensure the depth of the first catenary sag section after the snub support does not exceed 1–4 in (25–102 mm). Additional catenary sag decreases belt tension and can lead to sprocket disengagement.



A catenary sag depth decreases when conveyor is not operating

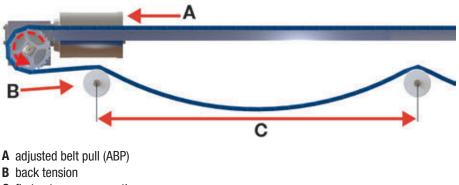
B catenary sag depth increases when conveyor is operating and under load

Figure 142: Use catenary sag to manage temporary belt length changes

BACK TENSION

To ensure proper belt-to-sprocket engagement, adequate belt tension must be provided in the returnway. This tension is commonly referred to as *back tension*. The length and the depth of the first catenary sag section directly after the drive sprockets provide this back tension. Back tension increases as the catenary sag section length increases. Back tension also increases as catenary sag depth decreases.

It can be necessary to identify the length of belt within a catenary sag section, and the tension created by that belt section. Intralox can help calculate these values. Contact Intralox Customer Service for more information.



C first catenary sag section **Figure 143:** Back tension

RETURNWAY DESIGN OPTIONS

End-drive conveyors shorter than 6 ft (1.8 m) usually do not require returnway support. The catenary sag between the shafts is sufficient for good operation if the sag depth is limited to a maximum of 4 in (102 mm).



Figure 144: Short returnway

End drive conveyors longer than 6 ft (1.8 m) must accommodate temporary belt length changes. Catenary sag, or catenary sag combined with a slide bed are commonly used for this purpose. When catenary sag is not sufficient, a take-up can be used.

For most applications, a full catenary returnway provides low-tension control of temporary belt length changes and creates the back tension required to engage the drive sprockets. For more information about this design, see Full Catenary Returnways.



Figure 145: Full catenary returnway

A slide bed returnway can stabilize the belt and minimize resonance that causes catenary vibration on slowspeed conveyors. A slide bed returnway can also protect the belt from contact with objects or debris below the returnway. For more information about this design, see Slide Bed Returnways.

End drive and slide bed conveyors that do not provide sufficient catenary sag can use a take-up to ensure proper belt tension and storage. See Take-Ups.

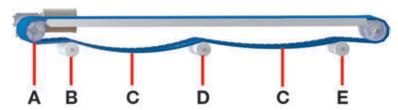


Figure 146: Slide bed returnway

FULL CATENARY RETURNWAYS

On conveyors longer than 6 ft (1.8 m) intermediate returnway supports are needed, but the belt must be unsupported for a significant part of the total length.

- For belts up to 1.07 in (27 mm) pitch, use returnway support rollers with a minimum diameter of 2 in (50 mm). For larger pitch belts, use returnway support rollers with a minimum diameter of 4 in (100 mm).
- Place the returnway supports 36 in to 48 in (900 mm to 1,200 mm) apart. This distance combines with the first catenary sag section depth and the distance from the shaft to the snub support to provide the belt tension required for proper sprocket engagement. Certain belt series require different support spacing. See Alternative Returnway Support Spacing for more information.
- Place the snub support rollers 9 in to 18 in (229 mm to 457 mm) from the drive and idle shafts. Position the snub support roller so the belt wraps between 180 degrees and 210 degrees around the sprockets.
- Ensure the depth of each catenary sag section is between 1 in and 4 in (25 mm and 102 mm).
- Consider slip-stick effect when designing the returnway. For more information, see Slip-Stick Effect.



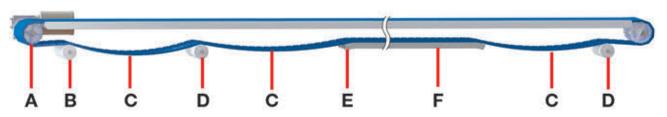
A drive shaft and sprockets

- B snub support roller: 9 in to 18 in (229 mm to 457 mm) from shaft
- C catenary sag section depth: 1 in to 4 in (25 mm to 102 mm)
- D returnway support roller: 36 in to 48 in (900 mm to 1200 mm) apart

Figure 147: Catenary returnways

SLIDE BED RETURNWAYS

- For belts up to 1.07 in (27 mm) pitch, use returnway support rollers with a minimum diameter of 2 in (50 mm). For larger pitch belts, use returnway support rollers with a minimum diameter of 4 in (100 mm).
- Place the returnway supports 36 in to 48 in (900 mm to 1200 mm) apart. This distance combines with the first catenary sag section depth and the distance from the shaft to the snub support to provide the belt tension required for proper sprocket engagement. Certain belt series require different support spacing. See Alternative Returnway Support Spacing for more information.
- Place the snub support rollers 9 in to 18 in (229 mm to 457 mm) from the drive and idle shafts. Position the snub support roller so the belt wraps between 180 degrees and 210 degrees of wrap around the sprocket.
- After the snub roller at the drive end, provide a minimum of two catenary sag sections before the slide bed.
- Provide at least one catenary sag section after the slide bed.
- Ensure the slide bed is not longer than two-thirds of the conveyor length. The remaining one-third provides catenary sag required for belt storage. If the slide bed must be longer than two-thirds of the conveyor length, use a take-up to provide adequate back tension. See Take-Ups.
- Provide a lead-in radius for the slide bed. This radius prevents catchpoints that can cause belt damage. Ensure the radius arc is equal to or greater than the returnway support roller diameter.
- Ensure the depth of each catenary sag section is between 1 in and 4 in (25 mm and 102 mm).



- A drive shaft and sprockets
- B snub support roller: 9 in to 18 in (229 mm to 457 mm) from shaft
- C catenary sag section depth: between 1 in and 4 in (25 mm and 102 mm)
- D returnway support roller: 36 in to 48 in (900 mm to 1200 mm) apart
- **E** slide bed lead-in radius: radius arc \geq returnway support roller diameter
- **F** slide bed: at least 7.5 ft (2.3 m) from drive sprockets; and \leq two-thirds of conveyor length

Figure 148: Slide bed returnways

ALTERNATIVE RETURNWAY SUPPORT SPACING

See the following recommended returnway support spacing for S100 and S400 belts.

Returnway Support Spacing				
Series	Support Spacing			
100	48–60 in (1,219–1,524 mm)			
400	48–60 in (1,219–1,524 mm)			

TAKE-UPS

When using a take-up:

- Ensure the shafts remain aligned. Screw take-ups introduce the risk of misaligned shafts, which can lead to belt tracking issues.
- Avoid belt overtightening. Overtightening reduces belt and sprocket life and increases shaft deflection.

GRAVITY TAKE-UPS

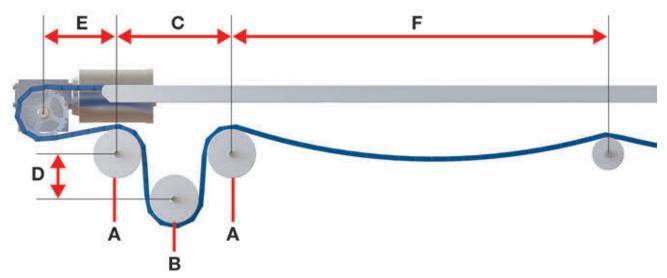
Gravity take-ups usually consist of a weighted (gravity) roller resting on the belt in the returnway. The roller weight creates the belt tension required to maintain proper sprocket engagement. A gravity take-up is most effective when placed near the drive end. Gravity take-ups are recommended for conveyors with any of the following conditions:

- Over 75 ft (23 m) long
- Over 50 ft (15 m) long with belt speeds over 150 ft/min (30 m/min)
- Spatial constraints, such as with overhead conveyors
- Belt speeds over 50 ft/min (15 m/min) with frequent starts under product loads greater than 25 lbf/ft² $(1,197 \text{ N/m}^2)$
- Large temperature variations

Use the following guidelines when designing conveyors with a gravity take-up:

- Use the recommended backbend roller diameter. See the following table for recommendations.
- Provide a gravity take-up roller with a diameter at least as large as the backbend roller diameter.
 - For belt pitches under 1.00 in (25.4 mm), provide a gravity take-up roller with a mass that generates a minimum back tension of 10 lbf/ft (146 N/m) of belt width. For most applications, this back-tension ensures proper sprocket engagement at 100% of allowable belt pull.
 - For belt pitches equal to or greater than 2.00 in (50.8 mm), provide a gravity take-up roller with a mass that generates a minimum back tension of 20 lbf/ft (292 N/m) of belt width. For most applications, this back-tension ensures proper sprocket engagement at 100% of allowable belt pull.
 - Intralox can help calculate back tension for your application. Contact Intralox Customer Service for more information.
- Provide enough distance between the backbend rollers to allow room for the gravity take-up roller.
- Ensure the distance between the gravity take-up roller centerline and backbend roller centerline is no less than three (3) times the belt pitch.

Recommended Backbend Roller Diameters						
Belt Pitch Minimum Roller Diameter						
in	mm	in	mm ^a			
≤0.5	≤12.7	2	50			
0.6 to 1	15.2 to 25.4	4	100			
2	50.8	6	150			
2.5 63.5 8 200						
^a Metric roller diameters are not an exact conversion of U.S. customary units.						



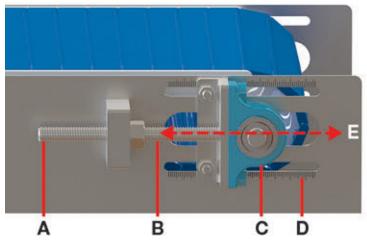
- A load-bearing backbend roller
- B gravity take-up roller (can be retained with a swing arm or vertical slotted hole in conveyor frame)
- **C** distance between backbend rollers
- D centerline distance between the gravity take-up roller and backbend roller
- E centerline distance between drive shaft and backbend roller: 9 in to 18 in (229 mm to 457 mm)
- F centerline distance between backbend roller and returnway support roller: 36 in to 48 in (900 mm to 1200 mm)
- Figure 149: Gravity take-up

SCREW TAKE-UPS

Screw take-ups shift the position of one of the shafts by using adjustable machine screws. With a screw take-up, the shaft bearings are placed in horizontal slots in the conveyor frame. The machine screws are used to move the shaft within the horizontal slots, changing the length of the conveyor. Screw take-ups can be used to make minor adjustments to maintain proper catenary sag depth, but should not be used as primary length control devices.

When using a screw take-up:

- Ensure shafts are aligned after the conveyor length is adjusted.
- Ensure the belt is not overtightened. Overtightening reduces belt and sprocket life and increases shaft deflection. For more information, see Shaft Deflection.



- A adjustable machine screw
- ${\bf B}\,$ horizontal slot
- ${\boldsymbol{\mathsf{C}}}$ shaft bearing
- D adjustment gauge on both sides to verify shaft alignment
- E longitudinal movement adjusts conveyor length

Figure 150: Screw take-up

SUPPORT FOR ACCESSORIES AND TEXTURED BELTS

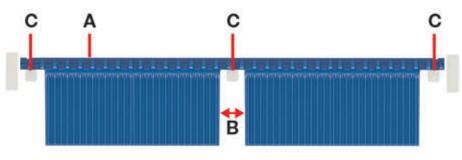
Flights, buckets, sideguards require accommodation in the returnway. Friction Top, Nub Top, and similar belts with textured surfaces designed to enhance or reduce friction require similar accommodations.

- Avoid rubbing contact between returnway components and any flights, buckets, sideguards, or textured belt surfaces.
- Prevent contact with floors or any components below the returnway.
- Use straight, parallel wearstrips at the belt edges to support belts with flights, buckets, or sideguards.
- For design requirements for inclining and declining conveyors, see Incline and Decline Conveyors.
- For more information about product containment belts and accessories, see Flights, Buckets, and Sideguards and Textured-Surface Belts.



A flight
B sideguard
C belt support wearstrips
Figure 151: Straight, parallel wearstrip at the belt edges

- Provide a center notch and an additional support wearstrip between flights and buckets when:
 - The belt pitch is less than or equal to 1.07 in (27.2 mm) and the belt width is greater than 18 in (457 mm).
 - The belt pitch is greater than 1.07 in (27.2 mm) and the belt width is greater than 24 in (610 mm).
 - If belt accessories cannot be notched due to the application requirements, contact Intralox Customer Service for design assistance.



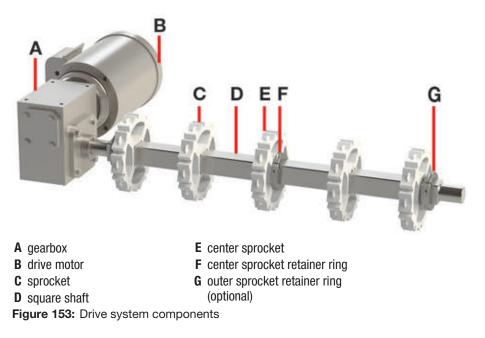
A flighted belt
B center notch between flights
C belt support wearstrips
Figure 152: Center notch for wide belts

DRIVE SYSTEM

Drive systems for Intralox belts use plastic sprockets mounted on a square shaft, operated under low tension to positively drive the belt.

• Use <u>CalcLab</u> to identify and validate belt strength and selection of drive system components. For more information about CalcLab, see Additional Resources.

A typical drive system consists of the drive motor, gearbox, and the shaft and sprocket assembly on the conveyor drive end. Each component is important for proper conveyor function.



Use the following guidelines when designing drive systems:

- Whenever possible, use an end-drive design. See Drive Location.
- Ensure the selected shaft is large enough to absorb the expected deflection and torque load. See Shafts.
- Use the recommended size and quantity of sprockets. See Sprockets.
- Ensure the center sprockets are properly retained, and all other sprockets can move laterally along the shaft. See Sprocket Retention.
- Consider mechanical efficiency losses when determining power requirements. See Power Requirements.
- Use a soft-start electric motor, variable-frequency drive (VFD), or wet or dry fluid couplings. See Soft-Start Motors and Fluid Couplings.

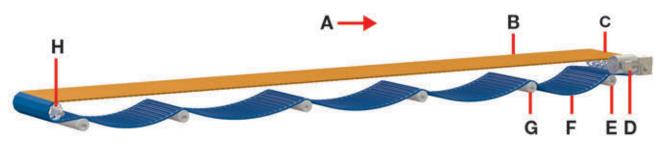
DRIVE LOCATION

For most applications, Intralox recommends an end-drive design, which uses a drive shaft located at the outfeed end. Center-drive designs can be used if an end-drive design is not possible, or if the conveyor must be bi-directional.

END DRIVE

On end-drive conveyors, the drive shaft is located at the outfeed end and a freely spinning shaft with rollers or sprockets is placed at the infeed end. The drive shaft pulls the belt through the carryway. Since the belt load typically peaks as the belt reaches the drive sprockets, about half of the belt is under tension during each belt revolution. Compared to center-drive conveyor belts, end-drive conveyor belts are exposed to less tension because the belt experiences less articulation under load. Less tension results in longer belt life.

• Use an end-drive design whenever possible to maximize belt life and minimize maintenance requirements.



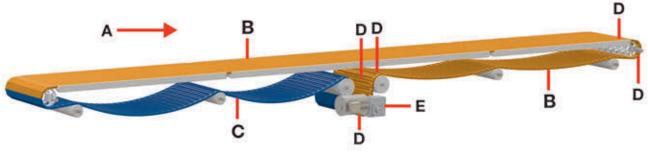
- A run direction
- **B** portion of belt under tension (shown in orange)
- **C** one (1) high-tension articulation point
- D drive motor
- E snub support
- **F** portion of belt not under tension (shown in blue)
- G returnway support
- H idle shaft and sprockets

Figure 154: Belt tension on end-drive conveyors

CENTER DRIVE

When it is not possible to locate the drive system at the outfeed end, or if the conveyor must be bidirectional, a center-drive design can be used. In a center-drive design, the drive is mounted in the returnway and freely spinning rollers or sprockets are placed at the infeed and outfeed ends. With a centerdrive design, the belt load typically peaks as the belt reaches the drive sprockets. Because the drive sprockets are in the returnway, the belt is under tension through more than half of each belt revolution. As a result, center-drive designs have the following characteristics compared to end-drive designs:

- There is an increased need for proper catenary sag to achieve adequate back-tension and maintain sprocket engagement.
- The outfeed shafts on a center-drive conveyor are under twice the load compared to an end-drive conveyor. The increased load requires larger shafts and results in increased wear on the bearings. On a bi-directional conveyor, both end shafts are considered outfeed shafts.
- The belt is under tension through a portion of the returnway, between the conveyor outfeed and the drive motor.
- There is increased articulation under load, since the belt remains under tension through the conveyor outfeed, into the returnway, and onto the drive sprockets. The increased articulation accelerates wear of rods, belt hinges, and all returnway components.



A run direction

D five (5) high-tension articulation

- **B** portion of belt under tension (shown in orange)
- E drive motor

points

C portion of belt not under tension (shown in blue)

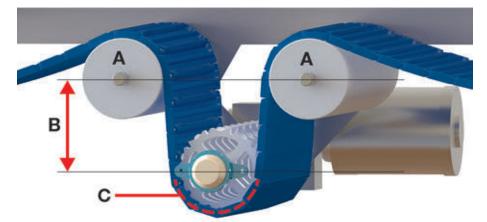
Figure 155: Belt tension on center-drive conveyors

Load-Bearing Backbend Rollers

The load on backbend rollers begins as a horizontal load then changes to a vertical load. The result is a vector load that is higher than the belt tension. To accommodate this vector load:

- Use the recommended roller diameters provided in the following table. Smaller rollers wear faster, leading to roller distortion and belt misalignment.
- Provide bearings for all load-bearing backbend rollers.
- Ensure shafts are properly sized.
- Ensure the distance between the drive shaft centerline and the backbend roller centerline is a minimum of three times the belt pitch.
- Place the backbend rollers so the belt wraps 180 degrees around the sprockets.

Recommended Backbend Roller Diameters											
Be	t Pitch	Minimum Roller Diameter									
in	mm	in	mm ^b								
≤0.5	≤12.7	2	50								
0.6 to 1	15.2 to 25.4	4	100								
2	50.8	6	150								
2.5	63.5	8	200								
^b Metric roller diameters are not an ex	act conversion of U.S. customary units.										



- A backbend roller (see preceding table for diameter recommendations)
- **B** minimum of $3 \times$ belt pitch
- **C** belt wraps 180 degrees around sprockets

Figure 156: Load-bearing backbend roller configuration

SHAFTS

Shaft design and the relationship between shaft design and belt pull are critical aspects of conveyor design. Use the following guidelines to design shafts:

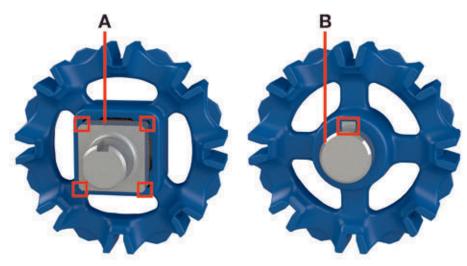
- Use square shafts whenever possible. See Shaft Selection.
- Use <u>CalcLab</u> to determine the proper shaft size and material for your application.
- Ensure shaft deflection and torque are within acceptable limits. See Shaft Deflection and Torque Load.

SHAFT SELECTION

Intralox can supply square shafts machined to your specification. For more information, see Square Shafts in the Product Line chapter.

Square shafts provide maximum efficiency in driving the belt. Square shafts have many benefits:

- Positive transmission of torque without the need for keys and keyways.
- Four contact points to transmit torque.
- Smooth lateral sprocket movement along the shaft, as the belt expands or contracts due to temperature changes.
- Accommodation of the different lateral expansion characteristics of the belt and shaft materials.



A square shaft

B round shaft

Figure 157: Square shafts have four contact points to transmit torque

Alternatives to square shafts include round shafts, rollers, and scroll idlers.

Round shafts are recommended on the infeed end for conveyors with two belts running side-by-side on one shaft.

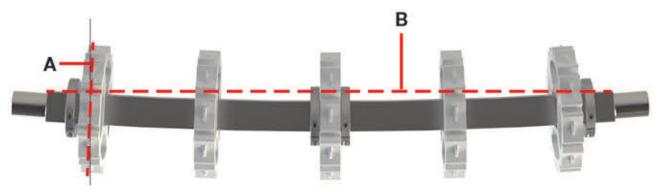
- In applications with multiple belts on one shaft, use a round idle shaft with sprockets keyed on the shaft for only one belt.
- Leave the remaining sprockets unkeyed, to freely spin around the round shaft. This approach mitigates the risk of belt-to-sprocket disengagement if the belts elongate at different rates.

For more information about including round shafts, rollers, and scroll idlers in your design, contact Intralox Customer Service.

SHAFT DEFLECTION

Shafts act as beams supported by bearings. Shafts are subjected to stress by belt tension transmitted through the sprockets. If shafts are not properly designed, this stress can result in excessive shaft deflection or shaft failure. Excess shaft deflection causes sprocket misalignment and improper belt-to-sprocket engagement.

- Use <u>CalcLab</u> to calculate deflection, or contact Intralox Customer Service for assistance.
- Ensure deflection of both the drive shaft and idle shaft is within acceptable limits:
- For end-drive conveyor drive and idle shafts, ensure deflection is less than or equal to 0.10 in (2.5 mm)
- For all center-drive conveyor shafts, ensure deflection is less than or equal to 0.22 in (5.6 mm). The greater deflection is acceptable for center-drive conveyors because the tension load on the sprockets is greater and more uniformly distributed.



A sprocket misalignment

B shaft deflection

Figure 158: Excessive shaft deflection (top view)

Intermediate Bearings to Reduce Deflection

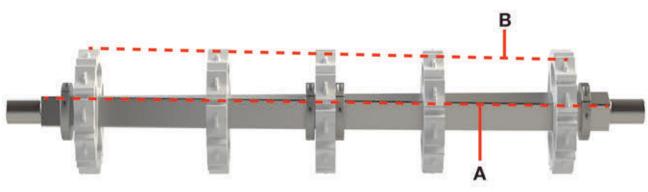
For applications with wide belts or heavy loads, one or more additional bearings can be used to reduce deflection to acceptable levels.

- Use <u>CalcLab</u> to calculate deflection when using more than two bearings.
- When using intermediate bearings, select sprockets with the largest practical diameter. Larger sprockets create space for the bearings to fit.
- For low speed, non-abrasive applications, a static shoe support can be used instead of an intermediate bearing.

TORQUE LOAD

Drive shafts must be large enough to absorb the expected torque load. Belt pull, acting through the sprockets, causes torsional or twisting load on the drive shaft. If shafts are not properly designed, twisting can lead to shaft failure. Shaft twisting can cause many issues, including:

- Uneven belt pull across the sprockets
- Sprocket disengagement
- Belt and sprocket damage
- Increased risk of foreign material contamination



A shaft twistingB misaligned sprocketsFigure 159: Shaft twisting

- Use <u>CalcLab</u> to calculate the shaft strength needed to transmit the required torque, or contact Intralox Customer Service for assistance.
- Ensure the selected shaft is large enough to absorb the expected torque load. See Table 4: Maximum Recommended Torque on Drive Shaft in the Formulas and Tables chapter.
- If a particular shaft size is desired but the calculated torque exceeds the recommendation for that shaft, recalculate the torque using a smaller diameter sprocket if the application allows.
 - Sprocket size directly affects the relationship between belt pull and drive shaft torque. Larger sprockets apply more torque to the shaft and motor when compared to smaller sprockets at the same belt pull.

SPROCKETS

Sprockets come in different styles, materials, and sizes. Consider all aspects of a sprocket when designing a conveyor drive system.

Belt speed pulsates as belt modules engage with sprockets. The variation in speed is inversely proportional to the number of teeth on the sprocket. For example, a belt driven by a six-tooth sprocket has a pulsating speed variation of 13.4%, while a belt driven by a 19-tooth sprocket has a variation of only 1.36%. Belt speed pulsation is caused by chordal action, which is the vertical movement of a belt as it wraps around sprockets. For more information, see Chordal Action.

The required sprocket quantity depends on belt width and other factors. A recommended minimum number of sprockets for each series is provided in the Product Line chapter. These recommendations are minimums and do not include application product loads. Greater product loads often require more sprockets.

- In applications where product tipping is a concern, or where smooth, even speed is critical, select sprockets with the maximum number of teeth available.
- Ensure the sprocket quantity is appropriate for the application. Use <u>CalcLab</u> or contact Intralox Customer Service for assistance.
- Use an odd number of sprockets whenever possible. This approach ensures an easily identifiable center sprocket for consistent locking and proper belt tracking.

SPROCKET RETENTION

It is necessary to laterally retain one sprocket on both the drive and idle shafts. The locked sprockets provide the positive tracking necessary to keep the belt properly positioned within the conveyor frame. All other sprockets must be allowed to move laterally, to accommodate thermal expansion differences between the belt and other components.

Some applications require hold down wearstrips to maintain belt position. Sprocket retention is not needed when hold down wearstrips are used, since the wearstrips maintain lateral belt position.

- Use the recommended location for the locked sprocket. See Locked Sprocket Position on Shaft.
- In general, lock the sprocket on or next to the belt centerline. When only two sprockets are used, lock the sprocket closest to the drive journal.
 - Retaining components are available for various shaft sizes, belt loads, and hygienic needs. For product information, see Retainer Rings and Center Sprocket Offset and Sprocket Spacers in the Product Line chapter.
- Ensure the locked sprockets on the idle and drive shaft are aligned with each other.
- Optionally, place retainer rings on the outer side of the outer sprockets to prevent unwanted sprocket migration past the belt edges.

POWER REQUIREMENTS

For formulas to determine the power required to drive the belt, see Belt Selection Instructions in the Product Line chapter. Calculated belt power does not include the power required to overcome mechanical or other inefficiencies in the system. Use the following table to identify mechanical efficiency losses in your design.

	Average Mechanical Efficiency Losses														
				Gear Reducers											
Ordinary		Spi	ır And Helical Ge	ars	Worn	1 Gears									
Sleeve	Ball	Single	Double	Triple	riple Single Double		1		Hydraulic Power						
Bearings	Bearings	Reduction	Reduction	Reduction	Reduction	Reduction	Roller Chains	V Belts	Systems						
2% to 5%	1%	2%	4%	5%	5%	10% to 20%	3% to 5%	2% to 4%	Consult the manufacturer.						

Use the following formula to determine the required motor power:

$$HP = \frac{A}{100 - B} \times 100$$

where:

HP = required motor horsepower

A = belt drive power

B = total of all average mechanical efficiency losses

SOFT-START MOTORS AND FLUID COUPLINGS

Rapid starts of high-speed or loaded conveyors shortens belt and sprocket life. Rapid starts also have negative effects on the entire drive train. The use of soft-start electric motors, VFDs, or fluid couplings greatly reduces these negative effects.

• When the motor power exceeds 1/4 horsepower per foot of belt width (612 watts per meter), always use a soft-start electric motor, VFD, or wet or dry fluid couplings.

IDLE END

In many applications, pipe rollers supported by stub shafts can be used instead of an idle shaft and sprockets. These pipe rollers can be considerably stiffer than a solid square shaft of the same length. For example:

- A 4 in (102 mm) schedule 40 pipe has more than twice the stiffness of a 2.5 in (64 mm) square steel shaft.
- A 6 in (152 mm) schedule 40 pipe has more than twice the stiffness of a 3.5 in (89 mm) square steel shaft.

In heavily loaded applications with wide belts, the use of rollers instead of an idle shaft and sprockets can eliminate the need for intermediate bearings to reduce shaft deflection. Flanging or spooling on the rollers ends can be used to retain the belt laterally.

Scroll idlers can also be used in place of idle sprockets. Scroll idlers help remove debris from the returnway. For more information, see Scroll Idlers in the Product Line chapter.

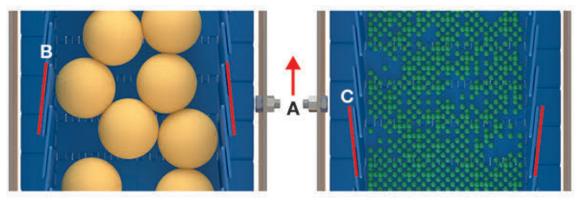
- Use an idle shaft and sprockets whenever possible. Sprockets promote belt tracking.
- If sprockets are not used, provide edge containment.

PRODUCT CONTAINMENT

Flights, sideguards, and similar product containment accessories must be accommodated throughout the conveyor, and particularly in the returnway. Friction Top, Nub Top, and similar belts with textured surfaces designed to enhance or reduce friction also require accommodation and are not compatible with all conveyor designs.

FLIGHTS, BUCKETS, AND SIDEGUARDS

- Provide a backbend radius of 12 in to 18 in (305 mm to 457 mm). If considering a smaller backbend radius, contact Intralox Customer Service.
- Ensure flight spacing is compatible with the backbend radius.
- Provide proper returnway belt support. See Support for Accessories and Textured Belts.
- Ensure the entire belt path is free of catchpoints that can damage flights, buckets, and sideguards.
- Ensure there is enough clearance between static sidewalls and flights.
- For sideguards, consider whether product-friendly or conveyor-friendly orientation is needed.
 - Product-friendly orientation is standard. This approach prevents product loss but can create catchpoints that can damage sideguards.
 - Conveyor-friendly orientation avoids catchpoints but can increase product loss.



- A run direction
- **B** conveyor-friendly orientation: leading edge of sideguard is inward, toward product
- **C** product-friendly orientation: leading edge of sideguard is outward, toward conveyor frame

Figure 160: Sideguard orientation

TEXTURED-SURFACE BELTS

Friction Top, Nub Top, and similar belts with textured surfaces designed to enhance or reduce friction have an increased risk of accelerated belt wear and product damage during transfer on and off the belt. Use the following guidelines to minimize these risks:

- Avoid using textured-surface belts in applications where product accumulates. Friction between the
 product and a textured-surface belt is deliberately high, resulting in high flow pressure and increased belt
 pull.
- Avoid sliding side transfers when using textured-surface belts with sensitive products that are easily damaged. Use end-to-end transfers at both the infeed and outfeed ends.
- Design the returnway to avoid rubbing contact with textured-surface belts. Avoid using a slide bed returnway design. For more information, see Support for Accessories and Textured Belts.

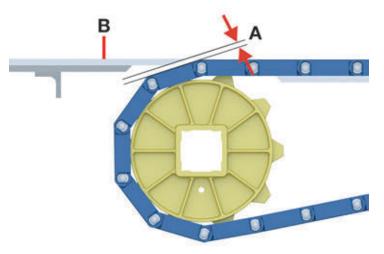
TRANSFERS

All conveyor designs require careful attention to ensure successful product transfer on and off the belt. Applications with tight-transfer requirements, or 90-degree transfers have additional design requirements.

DEAD PLATE GAP

Most conveyors require a gap at each transfer point to accommodate chordal action. For more information about chordal action, see Chordal Action.

- For belts without finger transfer plates, provide a gap at the transfer point onto the dead plate. Gap dimensions are provided in the dead plate gap table for the selected belt series in the Product Line chapter.
- At the infeed end, position the dead plate 0.03 in (1 mm) above the belt surface.
- At the outfeed end, position the dead plate 0.03 in (1 mm) below the belt surface.
- If the application requires continual contact between the tip of the dead plate and the belt, use a hinged mounting bracket to attach the dead plate. This approach allows the dead plate to move, but does result in slight oscillation which can cause products to tip.



A dead plate gapB dead plateFigure 161: Dead plate gap

FINGER TRANSFER PLATES

Intralox Raised Rib belts and matching finger transfer plates are a highly efficient, low-maintenance transfer system currently used in many container handling applications.

Proper configuration of finger transfer plates is essential for trouble-free service and long belt life. Installation is particularly important in applications where belts are subjected to high temperature variations and significant thermal expansion.

- In applications with wide belts and large temperature variations, ensure expansion and contraction are with limits. See Temperature Effects on Finger Transfer Plates for more information.
- Drill and tap the metal plate support angle used to secure the finger transfer plates to the conveyor frame for 1/4–20 (metric size M6) screws. Accurate drilling and tapping are important.
- For an odd number of finger transfer plates, straddle the centerline. For an even number of plates, position the plates from the belt centerline.
- Ensure the finger transfer plate is level with the belt +0.03 in (1 mm) -0.00 with the hinge rod at top dead center.
- For series-specific dimensional requirements, see *Dimensional Requirements for Finger Transfer Plate Installation* for the selected series.

TEMPERATURE EFFECTS ON FINGER TRANSFER PLATES

As temperature varies, belt widths change in proportion to the magnitude of the temperature change. To ensure proper finger transfer plate operation, perform the following check:

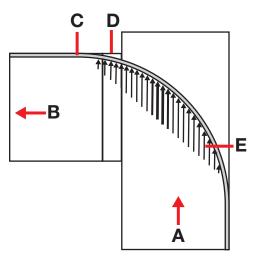
- 1. Determine the maximum expected change in temperature from ambient.
- 2. Multiply the maximum temperature change by the belt width.

3. If the calculated value is greater than the value provided for the selected belt series, contact Intralox Customer Service for guidance.

NOTE: For temperature effect values for the selected belt, see the selected belt in the Product Line chapter.

90-DEGREE CONTAINER TRANSFERS

For 90-degree transfer of beverage containers from one conveyor to another, full-radius guide rails with dead plates are commonly used. A dead plate spans the space between the two conveyors. With this rail shape, containers exert high pressure on the rail and on each other, often resulting in container damage.



- A delivery conveyor run direction **D** dead plate

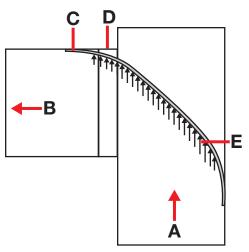
C continuous guide rail

B receiving conveyor run direction **E** high-pressure forces on guide rail (longer, thicker arrow = increased pressure)

Figure 162: Conventional full-radius guide rail contour with excessive container pressure force buildup

PARABOLIC GUIDE RAILS

Compared to a full-radius guide rail, a parabolic guide rail provides better distribution of container pressure forces. The following figure shows the forces are more evenly distributed. This approach results in significantly less potential for container damage along the outer rail. However, an excessively large dead area, which can strand containers, arises along the inner parabolic guide rail contour.



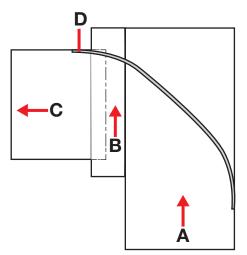
- A delivery conveyor run direction D dead plate
- ${\bf B}\,$ receiving conveyor run direction $\,{\bf E}\,$ high-pressure forces on guide
- ${\bm C}\,$ parabolic guide rail

high-pressure forces on guide rail (longer, thicker arrow = increased pressure)

Figure 163: Parabolic guide rail contours

ONEPIECE LIVE TRANSFER BELTS

ONEPIECE Live Transfer belts provide a solution to the dead area problem. ONEPIECE Live Transfer belts run in the same direction as the delivery conveyor. This approach replaces the dead plate, enabling continuous container movement and eliminating stranded containers.



- A delivery conveyor run direction
- **B** ONEPIECE Live Transfer belt
- **C** receiving conveyor run direction
- **D** continuous guide rail

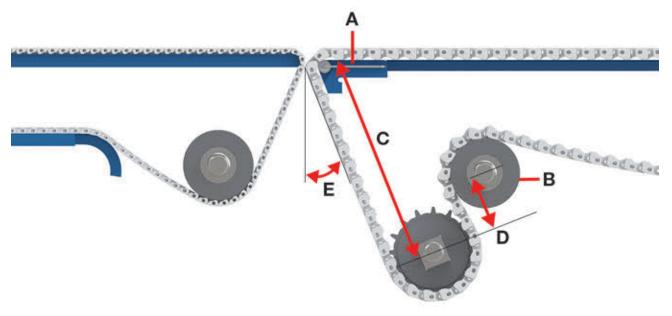
Figure 164: Parabolic guide rail with ONEPIECE Live Transfer belt

For information on ONEPIECE Live Transfer belts, see the selected series in the Product Line chapter or contact Intralox Customer Service.

TIGHT-TRANSFER METHODS

Dynamic nose-rollers and static nosebars are often used in tight-transfer applications. Increased belt hinge movement and increased tension as a belt moves around a nose-roller or nosebar can lead to accelerated wear on the belt and rods. This increased tension is a function of the friction between the belt and nosebar and the angle of wrap between the belt and the nosebar. Use the following guidelines to minimize these impacts:

- Select an acetal belt and abrasion resistant nylon rods if the application allows. Intralox can recommend an appropriate material for your application. Contact Intralox Customer Service for more information.
- Use a nose-roller rather than a nosebar whenever possible. Always use a nose-roller for high-pressure or high-speed applications.
 - Intralox offers a Dynamic Nose-Roller for certain belts. See Dynamic Nose-Rollers or contact Intralox Customer Service for more information.
 - When designing a nose-roller, consult your bearing supplier to identify bearings that are appropriate for the expected RPM and applied forces.
- If using a nosebar, select a material that provides the lowest possible sliding friction between the belt and nosebar. Lower friction reduces belt tension. A nosebar is often exposed to a combination of high contact pressure and high belt speed. The nosebar material must withstand this combination of pressure and speed.
 - Use a wear-resistant material such as oil-filled nylon.
 - Consult with your material supplier to ensure the pressure-velocity (PV) value of the selected material is appropriate for your application.
- Use the recommended conveyor frame dimensions. See Frame Dimensions.
- Minimize the amount of belt wrap around the nose-roller or nosebar. Place the shaft so the belt approaches or leaves the nosebar or nose-roller at the recommended angle. Larger angles increase wear on rods and rod holes. See the following table for return angle recommendations.
- Position the load-bearing roller to provide exactly 180 degrees of belt wrap around the drive sprockets.
- Use the recommended dimensions and distances in the following table.
 - Detailed conveyor design guidelines are available for certain belts. Contact Intralox Customer Service for more information.
 - For series not listed in the table, contact Intralox Customer Service.



- A Dynamic Nose-Roller
- **B** load-bearing roller
- C distance between nose-roller top surface and shaft centerline
- **D** distance between shaft centerline and load-bearing roller centerline
- E return angle

Figure 165: Typical tight-transfer infeed and outfeed configuration

Recommended Dimensions for Conveyors with Dynamic Nose-Rollers or Static Nosebars													
	Nose-R Nosebar (A Diam) Minimum	(B) Mi	ring Roller nimum neter	(C) Betwe Roller To	n Distance een Nose- p Surface Centerline	Minimum Distance (I Shaft ar	Return Angle (E) ^b					
Series	in	mm	in	mm	in	mm	in	mm	degrees				
S560	0.236	6	2	51	12	304	4	100	20–25 ^c				
S570	0.236	6	2	51	12	304	4	100	20-25 ^d				
S1000	0.75 ^e	19 ^e	3	76	12	304	4	100	20				
S1100	0.875	22	3	76	12	304	4	100	20–25				
S1500	0.5	12.7	3	51	12	304	4	100	20–25				
S2300	0.75 ^e	19 ^e	4	102	12	304	4	100	20				
S2400 without hold down guides	1.375	34.9	4	102	12	304	4	100	20				
S2400 with hold down guides	1.5	38.1	4	102	12	304	4	100	20				

^a For belts not listed, use the smallest sprocket diameter for the nosebar diameter.

^b Contact Intralox for application-specific recommendations.

^c 20 degrees is ideal.

^d 20 degrees is ideal.

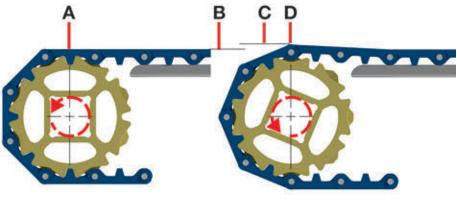
^eUse an Intralox Dynamic Nose-Roller with S1000 and S2300 belts.

ADDITIONAL DESIGN CONSIDERATIONS

- Always identify a belt and accessories before designing the conveyor frame. For belt selection guidelines, see Belt Selection Process.
- Consider the effects of chordal action when selecting a belt and sprockets. See Chordal Action.
- If the operating temperature differs from the ambient temperature, consider thermal expansion and contraction when designing the conveyor. See Dimension Changes.
- Consider the effects of speed and adapt the conveyor design as needed for high-speed applications. See Belt Speed.
- For abrasive applications, use the recommended guidelines to minimize wear to belts, sprockets, and other components. See Abrasion.
- In high-impact applications, protect the belt and wearstrips from deflection and damage. See High-Impact Applications.
- Consider the expected exposure to cleaning, sanitation, or other chemicals when selecting materials. See Chemical Damage.

CHORDAL ACTION

Chordal action is the vertical movement of a belt as it wraps around the sprockets on an end-drive conveyor. As each belt row engages the sprockets, the row rises when the center of the belt hinge is at the top of the sprockets (D). The belt row returns to horizontal when the center of a module is at the sprocket center (A), then drops below horizontal as the module center passes the sprocket center.



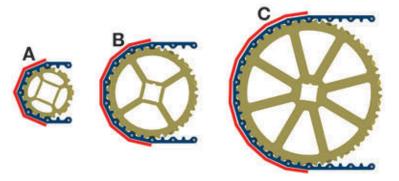
A module center at sprocket center

- B belt at horizontal
- C belt above horizontal

D belt hinge center at sprocket center

Figure 166: Chordal action

Chordal action is greatest when a large pitch belt is combined with small pitch diameter sprocket, as shown in the following figure. On a small sprocket, a belt articulates (bends) more and the chordal action is greatest. The same belt articulates (bends) less when combined with a larger sprocket.



A large pitch belt with small pitch sprocket = most articulation
B large pitch belt with medium pitch sprocket = less articulation
C large pitch belt with large pitch sprocket = least articulation

Figure 167: Impact of sprocket size

Chordal action contributes to belt vibration, increases the potential for product tipping, and increases articulation wear on belt hinges and rods. Use the following guidelines to minimize chordal action on end-drive conveyors:

- To reduce chordal action, select the sprocket with the largest pitch diameter. Use <u>CalcLab</u> to calculate expected torque for the selected sprocket. For more information about torque, see Torque Load.
- Consider an anti-sag wearstrip configuration for better support at transitions. See Anti-Sag Wearstrip Configuration.

DIMENSION CHANGES

The following guidelines provide general information about thermal expansion and contraction. For information about changes in dimension from other causes, see Belt Material Growth. For specific material properties, see the belt and sprocket material information at the beginning of the Product Line chapter.

THERMAL EXPANSION AND CONTRACTION

With few exceptions, the dimensions of all substances increase as temperature increases and contract as temperature decreases. Since plastics expand and contract rather significantly, thermal expansion and contraction must be considered in a conveyor design whenever operating temperatures differ from ambient temperature.

Proper conveyor design can help accommodate thermal expansion and contraction. Conveyors that do not accommodate these dimension changes have increased risk of shortened belt life, increased risk of belt wear, and increased need for belt maintenance.

- To calculate expected dimension changes due to thermal expansion or contraction, use <u>CalcLab</u> or see Thermal Expansion and Contraction in the Product line chapter.
- Ensure the catenary sag in the returnway is sufficient to absorb the increase in belt length. See Returnways and Take-Ups.
- Provide side clearance, particularly on wide belts, to prevent interference with the side structure. See D Drive Dimension.
- In low temperature applications, ensure the conveyor frame fully supports the belt while cold, but does not
 interfere at ambient temperatures.

BELT SPEED

Faster belts speeds increase belt and sprocket wear and increase belt vibration. Vibration, especially in the returnway, can lead to sprocket disengagement. Certain belts, conveyor designs, and components, such as nose-rollers, nosebars, and hold down guides, can require slower speeds.

For all conveyor designs, increased belt speed leads to:

- Increased product loss or damage, depending on product characteristics
- Increased risk that the belt snags on catchpoints
- Increased belt movement in the returnway
- Unwanted conveyor movement
- Increased noise during conveyor operation
- Unwanted changes to activated or passive roller function

Radius belts have specific speed recommendations. Intralox can help determine the best speed for your radius application. Contact Intralox Customer Service for more information.

- For belt speeds of 150 fpm (46 mpm) or greater, use edge bearings or edge bearing belts.
- Consider pressure velocity (PV) analysis and limits when selecting wearstrip materials.
- When using hold down guides with belt speeds over 80 fpm (24 mpm), contact Intralox Customer Service.

SLIP-STICK EFFECT

A condition known as slip-stick can cause surging on long conveyors. In this situation, the belt acts like a large spring or rubber band. The belt makes relatively short, pulsed movements throughout the length of the conveyor. In some cases, the idle end of the belt does not move until there is enough belt tension to overcome the friction forces between the belt and the carryway. Instead of accelerating smoothly, the belt surges ahead. The surging causes a brief drop in belt tension, allowing friction to slow the belt. In some instances, the belt stops for a moment until tension develops again, then the process repeats. The idle end of the conveyor surges despite the constant speed of rotation of the sprockets at the drive end.

Carryway friction, belt stiffness, belt weight, and belt length play a large role in determining the severity of surging in a conveyor. Belt stiffness is a reflection of how far a belt stretches under a given tension. A stiffer belt develops belt tension with less elongation. A lighter weight belt does not have as much friction force to overcome.

Other factors that can affect surging are chordal action, belt speed, drive system pulsation, return roller diameter, and return roller spacing. Chordal action and drive system pulsation can initiate surging but return roller diameter and spacing are more critical. Return rollers influence the way the belt oscillates in the returnway. Oscillation in the returnway can be transmitted to the carryway-side of the belt, causing surging. For more information on roller spacing and diameter, see Returnways and Take-Ups. For chordal action information, see Chordal Action and Sprocket Selection.

ABRASION

Abrasive materials embed in softer materials and wear harder materials. Use the following guidelines to accommodate and minimize wear in abrasive environments:

- Ensure the selected belt material is suitable for abrasive applications. See Special Application Belt Materials.
- Select abrasion resistant sprockets, EZ Clean sprockets, or sprockets made of another durable material. See Sprocket Material Availability.
- Consider using a chevron pattern for carryway wearstrips. See Chevron Pattern.
- Use a scroll idler to help remove abrasive debris. See Scroll Idlers.
- Consider an EZ Clean in Place (CIP) System to increase debris removal. See EZ Clean[™] in Place (CIP) System.
- Plan regular cleaning according to Intralox recommendations for wet or dry environments. Contact Intralox Customer Service for more information.
- Plan regular preventive maintenance inspections to identify and replace worn components. For more information, see the *Intralox Modular Plastic Conveyor Belts Installation, Maintenance & Troubleshooting Manual* at www.intralox.com.

HIGH-IMPACT APPLICATIONS

In applications with high impacts or concentrated (point) loads, belts supported by carryway wearstrips are susceptible to increased deflection and damage in the unsupported areas between the wearstrips. Use the following guidelines to avoid deflection and increase belt life.

- Consider using a solid-plate carryway or add impact plates to impact zones.
- In applications where product drops from a chute or hopper onto the carryway:
 - Use a lower belt speed and reduce the chute or hopper load as much as possible to prevent belt damage.
 - Avoid using flighted belts.
 - For high impacts or heavy loads concentrated in a small area, contact Intralox Customer Service.

CHEMICAL DAMAGE

Over time, continued chemical exposure degrades plastics. Factors affecting the degree of degradation are dwell time, temperature, and chemical concentration. To minimize belt damage, use the chemical supplier recommendations for effective dwell times, temperatures, and concentrations.

Chemical resistance information for common belt materials is provided in the Chemical Resistance Guide.

OTHER CONVEYOR DESIGNS

- Incline or decline conveyors are similar to horizontal designs, but have certain additional design requirement for good operation. See Incline and Decline Conveyors.
- Vacuum conveyors introduce additional belt pull and require attention to airflow through the belt. See Vacuum Conveyors.
- Radius conveyors require specific dimensions for turning and straight sections, and often include nose-rollers or take-ups. See Radius Conveyors.
- Spiral conveyors can be structure-supported or belt-supported and have additional drive method options. See Spiral Conveyors.

Intralox engineers and technical experts are available to provide engineering assistance and design reviews for any conveyor design. Detailed design guidelines are available for certain belts and applications. Contact Intralox Customer Service for more information.

INCLINE AND DECLINE CONVEYORS

Straight incline or decline conveyors are fully inclined. These conveyors require careful attention to angle, motor placement, and the amount of back tension on drive sprockets. Intralox can help determine the best design for your conveyor. Contact Intralox Customer Service for more information.

Two-part incline or decline conveyors include a horizontal section either before or after the incline. Threepart incline or decline conveyors include horizontal sections before and after the incline section. For more information about these designs, see, Two-Part and Three-Part Incline/Decline Conveyors.

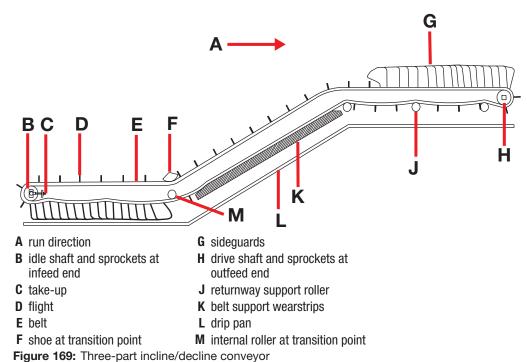


A straight incline or decline

- B two-part incline or decline with horizontal section after incline
- C two-part incline or decline with horizontal section before incline
- **D** three-part incline
- Figure 168: Incline and decline conveyor types
- Avoid attempting to push product up an incline.
- For proper sprocket engagement, prevent belt sag between the drive sprockets and the first roller or shoe. A snub roller can be required if the infeed straight is larger than 4 ft (1.2 m).
- Provide an active or dynamic take-up on the idle shaft to ensure proper catenary sag. As the angle of incline increases, the effectiveness of catenary sag as a belt length control method decreases.
- Ensure belts and accessories move freely through the returnway and do not contact drip pans or other components below the conveyor. See Support for Accessories and Textured Belts.
- On two- and three-part incline or decline conveyors:
 - Provide a hold down shoe at the intermediate point in the lower part of the carryway. Ensure the shoe radius is as large as the application allows. The minimum radius is 6 in (152 mm). See Two-Part and Three-Part Incline/Decline Conveyors.
 - Provide an internal roller or shoe at the transition point in the lower part of the returnway. The minimum diameter is 3 in (76 mm).
- Consider a drum or scroll on the idle shaft if product or debris is expected to fall between the belt and the sprockets.

TWO-PART AND THREE-PART INCLINE/DECLINE CONVEYORS

The following figure shows design features and options commonly used on elevating conveyors.

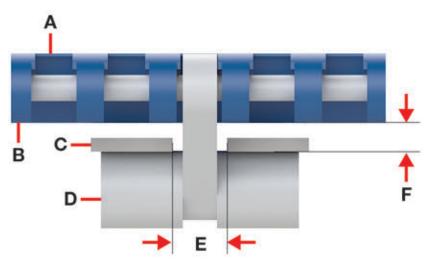


HOLD DOWN ROLLER ACCESSORIES

Two- and three-part elevating conveyors must be guided through elevation transitions. Guidance can be provided with hold down shoes or rollers above the belt, or by using hold down roller accessories available for certain belts. These accessories are built into the underside of the belt and held in place by the belt hinge rods. The rollers ride in steel rails below the belt and anchor the belt in position as it enters a transition. For information about compatible belts and accessory placement on the belt, see Hold Down Rollers in the Product Line chapter.

Use the following guidelines for conveyors with hold down rollers.

- Select sprockets large enough to prevent hold down rollers from contacting the shafts.
 - When using a 1.5 in or 40-mm square shaft, the minimum allowable sprocket pitch diameter is 6.4 in (163 mm).
 - When using a 2.5 in or 60-mm shaft, the minimum allowable sprocket pitch diameter is 7.7 in (196 mm).
- Provide steel rails in the carryway and the returnway.
 - Provide a minimum rail width of 0.75 in (19 mm).
 - Provide a minimum rail height of 0.125 in (3 mm). A thicker rail requires a larger rail bend radius.
 - Ensure the rail bend radius is a minimum of 12 in (305 mm). To minimize wear, provide a bend radius as large as the application allows.
 - In applications where large temperature variations are expected, rails must be placed carefully to accommodate the thermal expansion of the belt. The transverse movement of the roller assemblies can be calculated by using the coefficients of thermal expansion. See Thermal Expansion and Contraction. Use the distance of the hold down roller assembly to the belt centerline to calculate the movement.



- A belt top surface
- **B** belt bottom surface
- **C** steel rail, minimum height: 0.125 in (3 mm), minimum width: 0.75 in (19 mm)
- D hold down roller
- E distance between steel rails: 0.5 in (13 mm)
- **F** clearance above hold down rollers: 0.26 in (7 mm)

Figure 170: Hold down roller

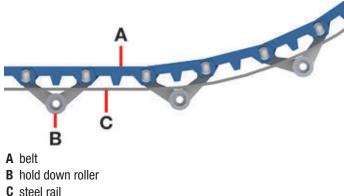


Figure 171: Hold down roller

VACUUM CONVEYORS

In vacuum applications, differential pressure holds products to the belt and holds the belt to the carryway. This pressure introduces additional belt pull. If only a small area of the belt area is under vacuum with a low differential pressure, the added belt pull can be insignificant. For larger belt areas with high differential pressure, the additional pull is higher. Intralox can help calculate the expected belt pull for your application. Contact Intralox Customer Service for more information.

When designing a vacuum conveyor, it can be useful to determine expected airflow through the belt at various differential pressures. Airflow through the belt depends on several factors:

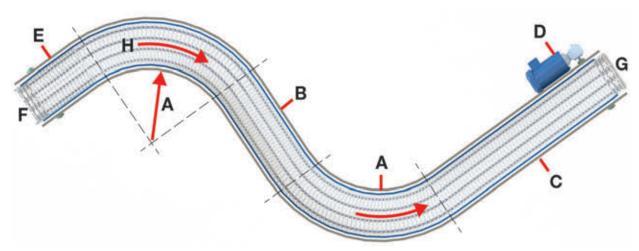
- The amount of open area in the selected belt
- The differential pressure
- Product spacing on the belt
- Air leakage around the belt edges

For airflow rates on belts commonly used in vacuum applications, see Table 6: Airflow Rate Through Belt, per Square Foot of Belt Area.

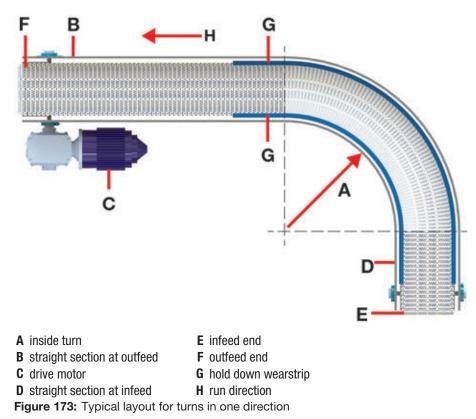
RADIUS CONVEYORS

Use the following guidelines when designing radius conveyors:

- Use the recommended radius for inside turns (A). Each belt has unique inside turn radius requirements. See the product information for the selected belt or contact Intralox Customer Service for more information.
- Ensure the straight section between turns of opposing direction (B) is a minimum of 2.0 × the belt width. Using less than the recommended minimum length increases the risk of higher wear, higher belt tensions, and increased belt vibration.
- There is no minimum straight section required between turns that are in the same direction.
- Ensure the length of the final straight section at the outfeed end (C) is at least 5 ft (1.5 m). If 5 ft (1.5 m) is not feasible, shorter lengths (down to 1.5 × the belt width) can be used. Shorter lengths require a gravity take-up to ensure the belt properly engages the drive sprockets. For more information, see Gravity Take-Ups.
- Ensure the first straight section at the infeed end (E) is a minimum 1.5 × the belt width. This length can be shortened to 1 × the belt width if using a nose-roller, idle roller, or disks rather than sprockets on the idle shaft.
- For infeed and outfeed configuration on tight-transfer conveyors, see Tight-Transfer Methods.



- A inside turn
- **B** straight section between turns of opposing direction
- C straight section at outfeed
- **D** drive motor
- E straight section at infeed
- F infeed end
- G outfeed end
- H run direction
- Figure 172: Typical layout for turns in both directions



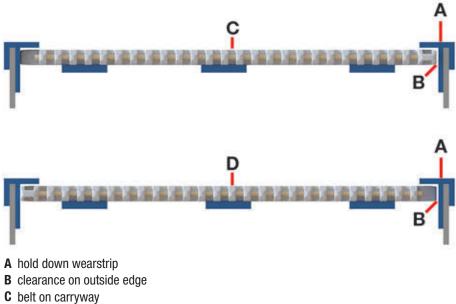
HOLD DOWN WEARSTRIPS

The use of hold down wearstrips along both belt edges over the full carryway is recommended, except in heavily loaded or high-speed applications. For applications that require the full belt width for product transport, belts with integrated hold down guides can be used with hold down guide wearstrips placed below the belt.

For information about hold down wearstrips and hold down guide wearstrips, see Custom Wearstrips.

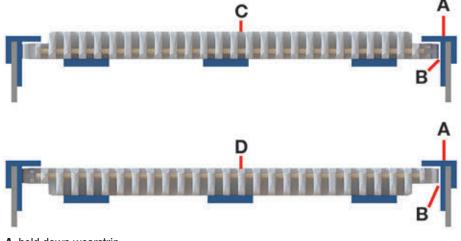
NOTE: In heavily loaded or high-speed applications, do not use hold down guides to guide the belt through a turn. Rapid wear to the hold down guides and wearstrips occurs in applications with high loads or speeds. Do not use hold down guides to hold the belt down through a negative transition. Intralox can provide a belt pull analysis for your application. Contact Intralox Customer Service for more information.

- Provide continuous hold down guides through an entire turn, in both the carryway and the returnway.
 - Start the hold down guides before the turn, at a distance of 1 \times the belt width.
 - End the hold down guides after the turn, at a distance of $1 \times$ the belt width.
 - Ensure hold down guide wearstrips provide adequate hold down at the outside edge.
 - Provide enough clearance between the belt and the hold down wearstrips to prevent binding at the outside edge. Factors include belt width, wearstrip design, curve radius, molding tolerances, and application temperatures and conditions. Intralox can help determine the proper clearance for your application.



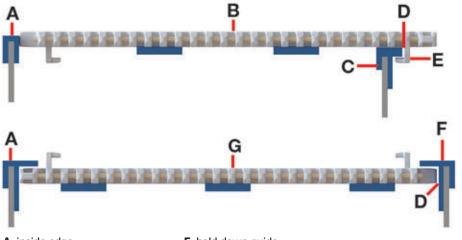
D belt on returnway

Figure 174: Hold down wearstrips for standard belts



- A hold down wearstrip
- ${\bf B}\,$ clearance on outside edge
- $\boldsymbol{C}\xspace$ belt on carryway
- D belt on returnway

Figure 175: Hold down wearstrips for High Deck and Raised Rib flush edge belts



- A inside edge
- E hold down guideF hold down wearstrip

G belt on returnway

- B belt on carrywayC hold down quide wearstrip

D clearance on outside edge

Figure 176: Hold down guide wearstrips for belts with hold down guides

SPIRAL CONVEYORS

Intralox can provide an engineering analysis for your spiral conveyor design and recommend an appropriate belt for your application. For more information, see Engineering Analysis for Spiral and Radius Belts or contact Intralox Customer Service.

DIRECTDRIVE

DirectDrive belts use positive engagement to drive the inside edge of the belt using a drum with drive bars. This technology significantly reduces belt tension and total system stress. DirectDrive structure-supported spirals ensure better system performance, reduced downtime, and substantially longer belt life.



Figure 177: DirectDrive structure-supported spiral conveyor

DIRECTDRIVE STACKER

The DirectDrive Stacker belt supports its weight on the inner and outer edges, removing the need for a traditional carryway. This approach allows for twice the amount of belt within the same vertical space as a structure-supported spiral conveyor.

DirectDrive is a licensed technology. Contact Intralox Customer Service for more information.



Figure 178: DirectDrive Stacker spiral conveyor

FRICTION DRIVE SYSTEMS

Friction-driven spiral conveyors use two VFDs and two motors connected through a control panel. The take up motor determines the line speed. The drum rotation is used to control belt tension.

Overdrive refers to the relative motion between the drum and the belt. Overdrive is the difference between the drum speed and the linear belt speed. Adjusting the overdrive allows control of belt tension and improves product orientation.

SIDE DRIVE

Side Drive belts are driven by sprockets at multiple locations along the belt with a drive motor at each sprocket. In turning sections, sprockets are placed at the outside edge. In straight sections, sprockets are placed on both belt edges. Some Side Drive conveyors use additional drive motors on the infeed or outfeed shafts. This conveyor design accommodates long belts, minimizes transfer points, and provides a simple, fully washdown-capable conveyor. Side Drive is a licensed technology. Contact Intralox Customer Service for more information.

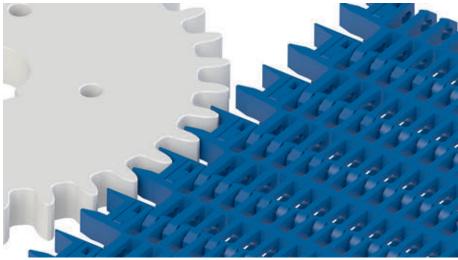
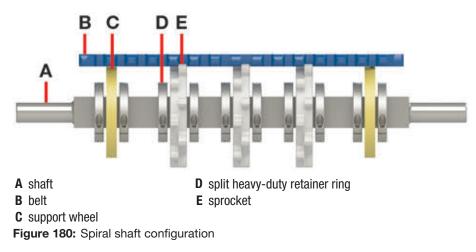


Figure 179: Side Drive belt and sprocket

• For sprocket placement, see the Intralox Modular Plastic Conveyor Belts Installation, Maintenance & Troubleshooting Manual at <u>www.intralox.com</u>.

SPIRAL SHAFT CONFIGURATION

The following figure shows the typical shaft configuration for a spiral conveyor. Each belt has different configuration requirements. Contact Intralox Customer Service for more information.



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Intralox technical experts can help apply this information to your conveyor design. Contact Intralox Customer Service for more information.

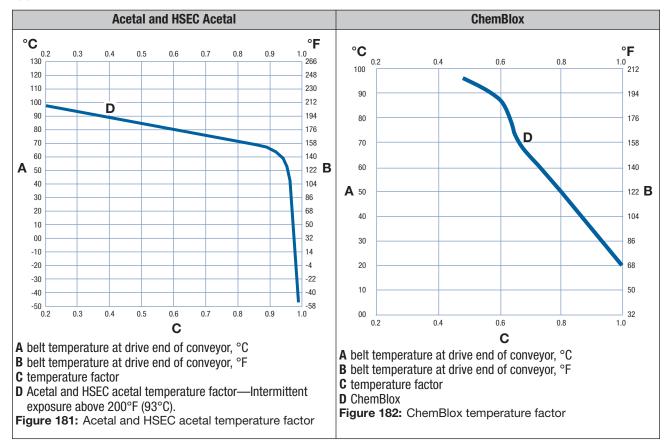
TABLE 1: SERVICE FACTORS

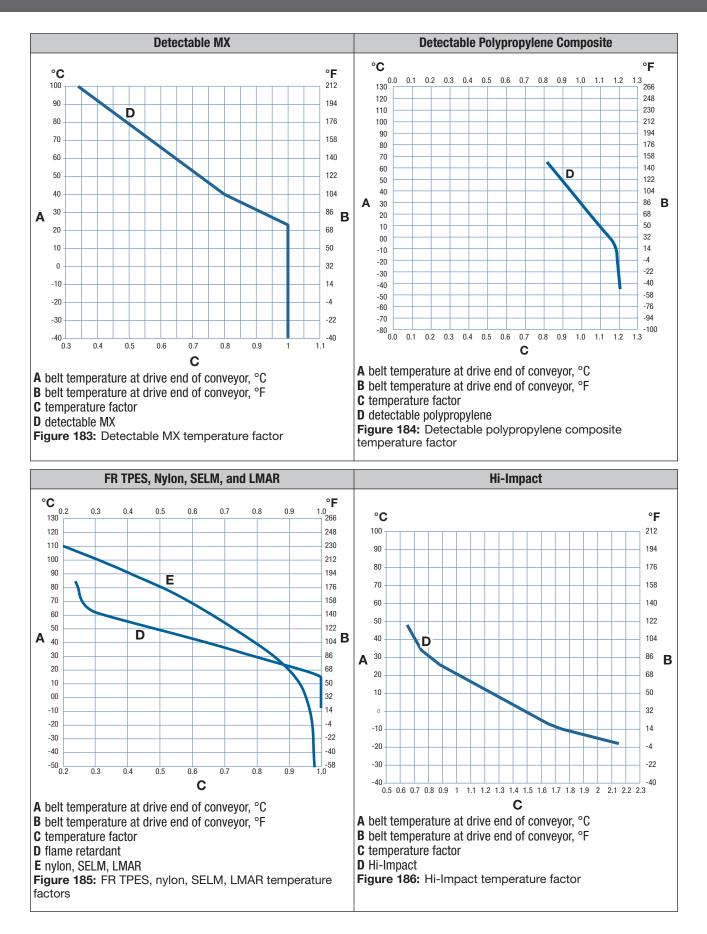
Operating Conditions	Add
Starts under no load, with load applied gradually	1.0
Frequent starts under load (more than once per hour)	0.2
Operation at speeds greater than 100 fpm (30 m/min)	0.2
Elevating conveyor	0.4
Pusher conveyor	0.2
Service factor (SF)	total

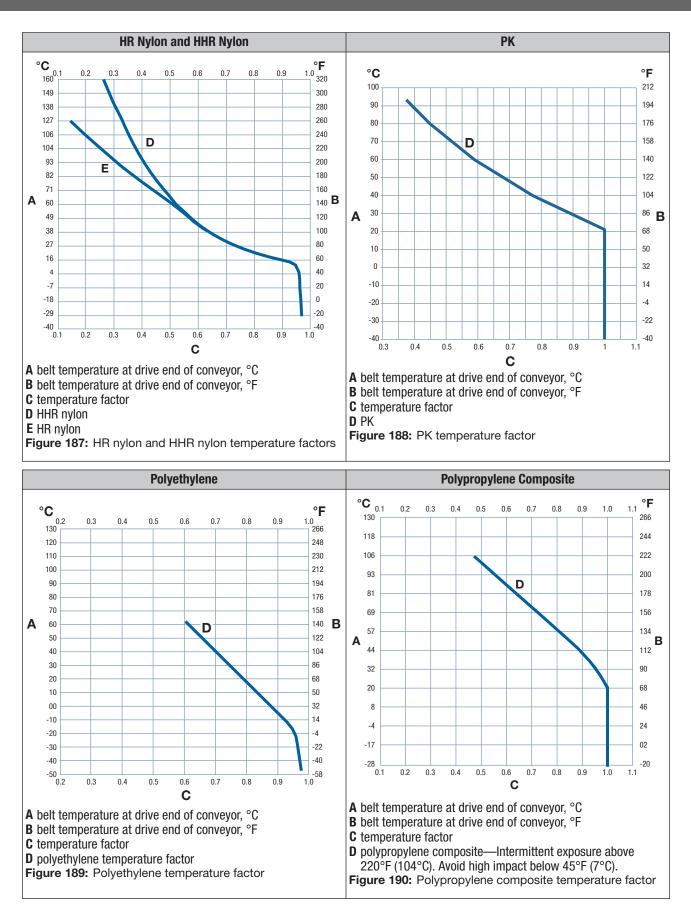
NOTE: At speeds greater than 50 fpm (15 m/min) on conveyors that are started with product accumulation, consider soft-start motors.

TABLE 2: TEMPERATURE FACTORS

NOTE: These graphs can be used to manually calculate a conveyor belt analysis. The *Intralox Engineering Program* calculates the temperature factor automatically, based on the operating temperature of the application.







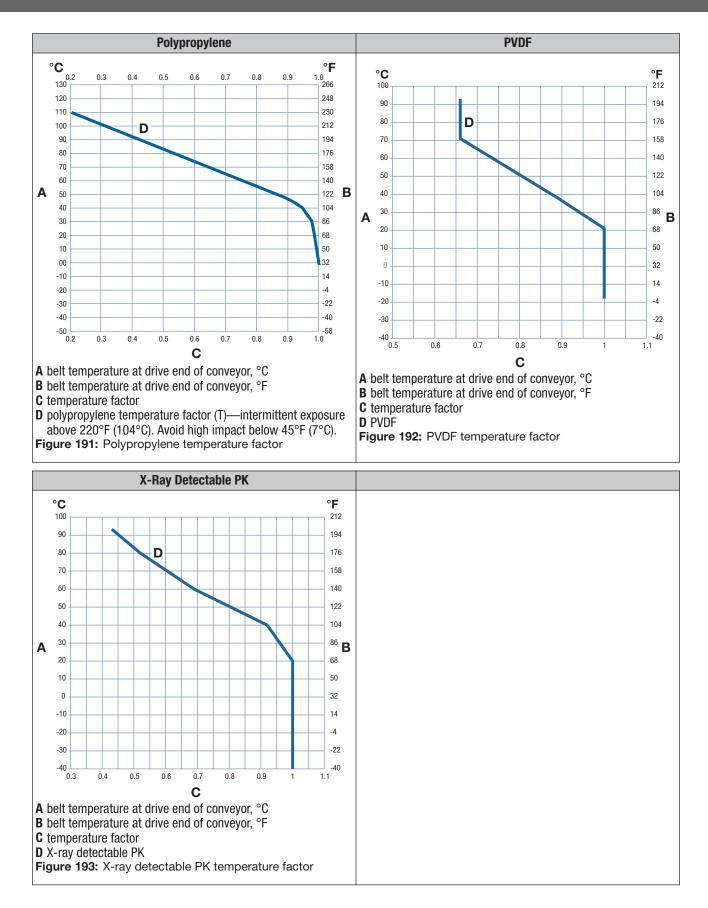


TABLE 3: SHAFT DATA

	Shaft Weight		
Shaft Size	Carbon Steel	Stainless Steel	Moment of Inertia (I), in ⁴ (mm ⁴)
5/8 in square	1.33 ^a	1.33ª	0.013
1 in square	3.40 ^a	3.40 ^a	0.083
1.5 in square	7.65 ^a	7.65 ^a	0.42
2.5 in square	21.25 ^a	21.25ª	3.25
3.5 in square	41.60 ^a	41.60	12.50
25 mm square	(48) ^b	(4.920) ^b	(32,550)
40 mm square	(123) ^b	(12.55) ^b	(213,300)
60 mm square	(285) ^b	(29.11) ^b	(1,080,000)
65 mm square	(335) ^b	(34.16) ^b	(1,487,600)
Modulus of elasticity (E) lb/ln ² (kg/mm ²)	30,000,000 (21,100)	28,000,000 (19,700)	

^a Intralox USA can supply square shafts machined to specifications in these sizes in carbon steel (C-1018), stainless steel (303/304 and 316), and aluminum (6061-T6).

^b Intralox Europe offers square shafting in these sizes in carbon steel (KG-37) and stainless steel (304).

TABLE 4: MAXIMUM RECOMMENDED TORQUE ON DRIVESHAFT

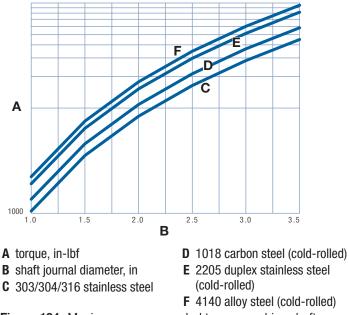
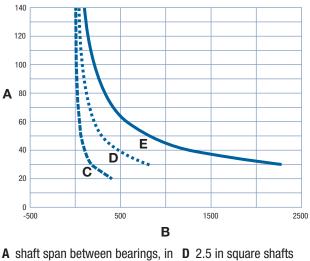


Figure 194: Maximum recommended torque on drive shaft

TABLE 5: BELT PULL LIMITS VS. SHAFT SPAN FOR RETAINER RING GROOVES



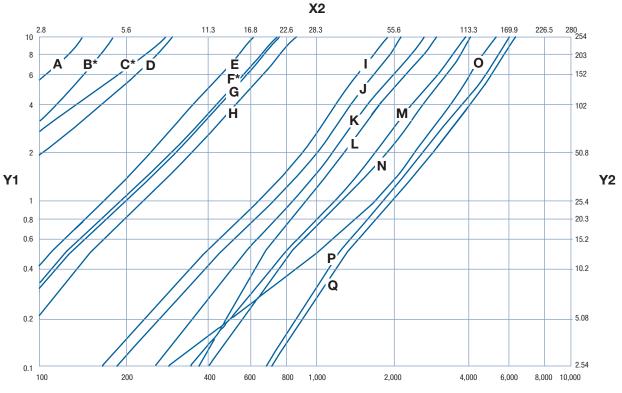
B maximum recommended belt **E** 3.5 in square shafts

pull, lb/ft

C 1.5 in square shafts

Figure 195: Belt pull limits vs. shaft span for retainer ring grooves

TABLE 6: AIRFLOW RATE THROUGH BELT, PER SQUARE FOOT OF BELT AREA

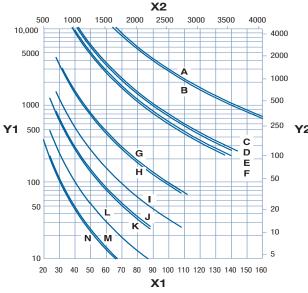


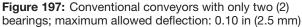
X1

- Y1 Pressure drop, inches of water
- Y2 Pressure drop, millimeters of water
- X1 Airflow Rate, feet³/minute
- **X2** Airflow rate, meters³/minute
- A S400 Flat Top
- B* S1100 Edge Loss
- **C*** S1100 Flat Top
- D S900 Flat Top
- E S900 Perforated Flat Top 1/8 in
- F* S1100 Perforated Flat Top Ø 5/32 in
- **G** S900 Perforated Flat Top Ø 5/32 in
- H S900 Perforated Flat Top Ø 3/16 in
- I S400 Flush Grid
- J S800 PFT, S800 PFT Ø 5/32 in, S2000
- K S100 Flush Grid
- L S100 and S400 Raised Rib
- M S200 Flush Grid, S200 Open Hinge
- N S1100 Flush Grid
- 0 S900 Flush Grid and Raised Rib
- **P** S200 Open Hinge
- **Q** S2200

Figure 196: Airflow rate through belt, per square foot of belt area

TABLE 7: MAXIMUM DRIVE SHAFT SPAN LENGTH





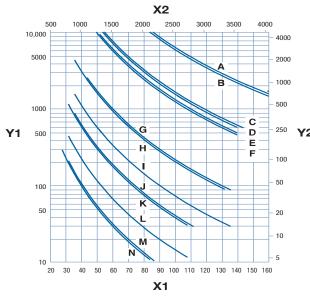


Figure 199: Bi-directional and pusher conveyors with only two (2) bearings; maximum allowed deflection: 0.22 in (5.6 mm)

- Y1 total shaft load, lb
- Y2 total shaft load, kg
- X1 max. shaft span length, in
- X2 max. shaft span length, mm
- ${\bf A}~$ 3.5 in and 90-mm square carbon steel
- **B** 3.5 in and 90-mm square stainless steel
- **C** 2.5 in and 65-mm square carbon steel
- D 2.5 in and 65-mm square stainless steel
- **E** 60-mm square carbon steel
- **F** F 60-mm square stainless steel
- **G** 1.5 in and 40-mm square carbon steel

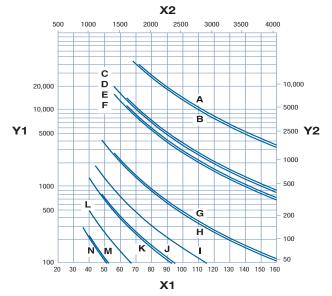


Figure 198: Conventional conveyors with three (3) or more equally spaced bearings; maximum allowed deflection: 0.10 in (2.5 mm)

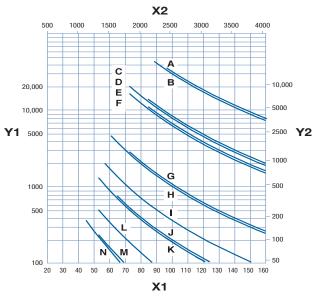


Figure 200: Bi-directional and pusher conveyors with three (3) or more equally spaced bearings; maximum allowed deflection: 0.22 in (5.6 mm)

- H 1.5 in and 40-mm square stainless steel
- I 1.5 in square aluminum
- J 1.0 in and 25.4-mm square carbon steel
- K 1.0 in and 25.4-mm square stainless steel
- L 1.0 in square aluminum
- M 5/8 in square carbon steel
- N 5/8 in square stainless steel

CHEMICAL RESISTANCE GUIDE

The following chemical resistance data is based on information from polymer manufacturers and Intralox field experience. The data is indicative only for the conditions under which it was collected and is a recommendation only, not a guarantee. This data pertains to chemical resistance only, and the temperatures listed are generally the chemical application temperatures. Other design and personal safety concerns were not considered in making recommendations. Always test materials and products under exact intended service conditions to determine their suitability for a particular purpose.

Chemicals listed without a concentration are for the undiluted chemical. Chemicals listed with a concentration are in solution with water. Descriptions in parentheses are the active ingredient. In general, as the chemical application temperature, chemical concentration, and exposure time rise, the chemical resistance of a material decreases. For more information about chemicals and materials of construction contact Intralox Customer Service.

Thermoplastics elastomers (TPE) are a growing class of polymers that offer a unique combination of plastic and elastomeric properties. The most obvious of these properties is the ability to be injection molded onto a substrate for achieving a performance criteria. The fact that a rubber (elastomeric) component is present means that exposure to various chemicals in the application must be considered. Sources of chemicals include the product to be conveyed, materials used to clean and maintain the equipment and belt, and any other potential sources in the area. Intralox suggests doing appropriate testing and consulting with our staff of experts early on to establish fitness for use in a particular application. In general, TPEs are compatible with both weak acids, most alkalis, and alcohols. Contact with strong acids poses a problem. Due to a rubber component, oils and fats will have a swelling effect over time. Organic solvents and various hydrocarbons are also expected to cause problems. Generally speaking, fuels of any type will cause problems over time. In food handling applications, ensure that the ingredients present in the food are considered. Also, in food handling, the higher the applied chemical temperature, chemical concentration, and exposure time, the more rapid the reaction between the chemical and the TPE will be.

	General Application Belt Materials								Special Application Belt Materials												
												Heat Resistant				rdant					
		pylene		· · · ·	Acetal		PK		EC Acetal		Nylon			SELM	Material		Hi-Impact				
	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)		70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)	70°F (21°C)	140°F (60°C)			
Chemical Name	<u> </u>			Suitabi													n	. ,			
Acetic acid–5%	R	R	R	R	R	—	R	R	R	—	LR	—	LR	NR	R	_	R	—			
Acetic acid-10%	R	R	R	R	R	—	—	—	R	—	LR	NR	—	—	R	—	-	—			
Acetic acid–50%	R	R	R	R	NR	NR	—	—	NR	NR	NR	NR	—	—	—	—	—	—			
Acetone	R	R	R	R	R	R	LR	LR	R	R	R	—	R	R	NR	NR	NR	NR			
Alcohol, all types	R	R	R	R	—	—	—	—	_	_	R	R	R	R	R	R	NR	—			
Alum, all types	R	R	R	R	_	—	—	—	—	—	LR	—	—	—	—	—	—	—			
Almond oil	R	R	-	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Aluminum alum	R	R	R	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Aluminum compounds	R	R	R	R	-	_	_	-	_	_	LR	R	R	R	R	R	LR	-			
Aluminum chloride	R	R	R	R	LR	NR	_	—	LR	NR	R	_	_	—	R	_	R	R			
Aluminum fluoride	R	R	R	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Aluminum hydroxide	R	R	R	R	R	R	_	_	R	R	R	_	_	_	R	—	R	_			
Aluminum nitrate	R	R	—	—	LR	NR	—	—	LR	NR	LR	LR	—	—	R	—	R	—			
Aluminum phosphate	R	R	R	R	_	_	_	_	_	_	LR	LR	_	_	_	_	_	_			
Aluminum sulfate	R	R	R	R	LR	NR	—	—	LR	NR	LR	LR	R	R	R	—	R	—			
Ammonia	R	R	R	R	R	R	—	-	R	R	LR	LR	R	R	R	NR	R				
Ammonium compounds	R	R	R	R	_	_		_	R	_	LR	R	R	R	R	R	LR	—			

	Ge	eneral A	pplicati	on Belt	Materia	als	Special Application Belt Materials												
							Heat Flame Resistant Retarda												
	Polypropylene Polyethylene		hylene	Ace	etal	Р	ĸ	EC A	cetal		stant Ion	Nylon SELM		Material		Hi-In	npact		
	70°F	140°F	70°F	, 140°F		140°F		140°F		140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	
	(21°C)									(60°C)								(60°C)	
Chemical Name		Ν	/laterial	Suitabi	lity Cod	es: R =	Resista	nt, NR :	= Not re	sistant,	LR = L	imited r	esistan	ce, — =	No inf	ormatio	n	1	
Ammonium acetate	R	_	R	R	R	—	_	_	R	_	_	_	R	R	_	_	R	_	
Ammonium carbonate	R	R	R	R	R	R	_	_	R	R	_	_	R	R	_	—	R	—	
Ammonium chloride	R	R	R	R	R	LR	R	R	R	LR	R	LR	R	R	R	_	R	_	
Ammonium fluoride	R	R	R	R	—	—	—	_	—	—	—	—	—	—	—	—	—	—	
Ammonium hydroxide	R	R	_	—	R	R	R	LR	R	R	—	_	_	_	LR	NR	LR	-	
Ammonium nitrate	R	R	R	R	R	LR	—	—	R	LR	R	LR	R	R	R	—	R	-	
Ammonium phosphate	R	R	R	R	R	_	_	_	R	_	R	LR	R	R	_	—	_	_	
Ammonium salts	-	—	R	—	R	—	—	—	R	—	R	LR	—	—	—	—	_	—	
Ammonium sulfate	R	R	R	R	R	LR	R	—	R	LR	R	LR	R	R	R	—	R	—	
Amyl acetate	NR	NR	R	R	R	_	_	—	R	_	R	NR	NR	NR	R	NR	NR	NR	
Amyl chloride	NR	NR	LR	NR	—	—	—	—	—	—	—	—	—	—	_	—	NR	NR	
Aniline	R	LR	R	R	_	LR	NR	NR	—	LR	LR	—	—	—	LR	—	NR	NR	
Antifreeze	R	R	R	Т	—	—	R	R	—	—	_	—	R	R	R	R		—	
Aqua regia	LR	NR	NR	NR	LR	—	—	—	LR	—	NR	NR	NR	NR	NR	NR	NR	NR	
Apple juice	R	R	—	—	—	—	—	—	—	—	—	—	R	R	_	—	_	—	
Arsenic acid	R	R	R	R		—	_			—	—		—	—	—	—	R	—	
Asphalt	-	—	R	LR	—	—	—	_		—	_		R	R	_	_	_	—	
Barium compounds	R	R	R	R	—	—	—	—	_	—	R	R	R	R	R	R	—	—	
Barium carbonate	R	R	R	R	—	—	—	_		—	_		—	_	_	_	R	—	
Barium chloride	R	R	R	R	R	—	—		R		LR		—	_	R	_	—	—	
Barium hydroxide	R	R	R	R		—	R			—	—		—	—	—	—	R	—	
Barium soap grease	R	LR	_	—	—	_	—			_	_			_	_	—		—	
Barium sulfate	R	R	R	R	R	—	_	—	R	—	LR	—	—	—	R	—		—	
Battery acid	R	R	R	R	—	—	—	—	—	—	_	—	—	—	_	—	_	—	
Beer	R	R	R	R		—	R	R		—	—		R	R	_	—	R	—	
Benzene	LR	NR	LR	NR	R	R	_		R	R	R	R	R	R	R	NR	NR	NR	
Benzenesulfonic acid	R	R	R	R	_	_	_	_	_	_	_	_	_	_	_	—	NR	NR	
Benzoic acid	R	R	R	R	LR	—	—	—	LR	—	LR	LR	—		R	—	NR	NR	
Benzyl alcohol	—	—	R	R	R		—	—	R	—	LR	LR	—	_	_	—	NR	NR	
Bone oil	R	R	R	R	_	—	_	—		—			R	R		—	_	-	
Borax	R	R	R	R	—		—									_	_		
Boric acid	R	R	R	R	LR	_		—	LR	—	LR	—	R	R	R	—	R	_	
Brake fluid	R	R	R	R	R	R	R	R	R	R	R		R	R	R	LR	LR		
Brine acid	R	R	_	—	_		_							_				—	
Brine saturated	R	R	R	R	_	—	_	_	_		_	_		_				—	
Brine water	R	_	_	—	_	_	_	_	_	_	_	_		_	_	_	_	-	
Bromic acid	NR	NR	NR	NR	_					-				_	_	-	_		
Bromine, liquid or fumes	NR	NR	NR	NR	_	_	_	_	_	_	NR	NR	NR	NR	NR	NR	_	_	
Bromine water	NR	NR	R	—	LR				LR		NR	NR	NR	NR	NR	NR			
Butter	R	R	R	R	R		_		R	—	LR	—	R	R	R	—			

	Ge	eneral A	pplicati	ion Belt	Materia	Materials Special Application Belt Materials Heat Flame												
												eat stant				me rdant		
	Polypro	opylene	Polyet	hylene	Ace	etal	P	ĸ	EC A	cetal	Ny		Nylon	SELM		erial	Hi-In	npact
	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F
Obernie al Norme	(21°C)			(60°C)				(60°C)		(60°C)					. ,		. ,	(60°C)
Chemical Name Butyl acetate	NR	NR	R	LR	πτγ σοα	es: K =	R	R R	= NOT re	sistant,	R	imitea r	R	ce, — = R	R	ormatio R	NR	NR
Butyl acrylate	NR	NR	R	LR		_	n	n			R		n	n	LR	LR		
Butyl glycol			R	R	R	LR	_		R	LR	R				R	R		
Butyric acid	R	R	R	LR			_	_			LR				R		NR	NR
Calcium	R	R	R	R	_	_	_	_	_	_	LR				R	R	R	_
compounds Calcium carbonate	R	R	R	R	R				R								R	
Calcium chloride	R	R	R	R	R		R	LR	R		R	LR	R	LR	R		R	
Calcium hydroxide	R	R	R	R	R	_	R		R		R				R		NR	NR
Calcium	R	R	R	R	NR	_	_		NR	_	NR	NR	_	_	LR	_	R	_
hypochlorite Calcium nitrate	R	R	R	R	R	_	_		R		_		R	R	_		R	
Calcium phosphate	R	R	R	R	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Calcium soap grease	R	LR	_	_	—	_	_	—	_	_	_	_	_	_	_	—	_	—
Calcium sulfate	R	R	R	R	R	—	—	—	R	—	—	—	—	—	—	—	R	—
Calgonite-0.3%	R	R	—	—	R	R	—	—	R	R	—	—	_	—	_	—	R	—
Carbon dioxide	R	R	R	R	R	R	_		R	R		_	_	_	R	R	R	
Carbon disulfide	LR	NR	LR	NR	R	—			R		R	NR	R		R	—	NR	NR
Carbon tetrachloride	LR	NR	NR	NR	R	LR	R	R	R	LR	R	R	R	R	R	LR	LR	_
Castor oil	R	R	R	R	R	—	—		R			—	_	—		—	R	—
Cellosolve [™]	R	R	R	R	—	—	—	—	—	—	—	—	—	—	—	—	NR	NR
Chloroacetic acid 0–10%	R	R	R	R	NR	NR	_	_	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chlorine, gas	NR	NR	—	—	NR	NR	_		NR	NR	NR	NR	NR	NR	NR	NR	LR	—
Chlorine, liquid	NR	NR	R	R	NR	NR	_		NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chlorine water– 0.4% Cl	R	LR	R	LR	NR	NR	—	_	NR	NR	—	NR	NR	NR	_	_	NR	—
Chlorobenzene	NR	NR	LR	NR	R	R	—	—	R	R	R	R	LR	LR	NR	NR	NR	NR
Chloroform	NR	NR	NR	NR	LR	NR	NR	NR	LR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chlorosulfonic acid	NR	NR	NR	NR	NR	NR	_	_	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chromic acid– 10%	R	R	LR	LR	NR	NR	—	_	NR	NR	NR	NR	NR	—	LR	_	NR	NR
Citric acid	R	R	R	R		—	_		_		_	R	R	—	R	R	R	—
Citric acid–10%	R	LR	R	R	LR	NR	_	-	LR	NR	LR	—	R	—	R	LR	R	-
Citrus juices	R	R	R	R	R	—	_		R		_		_		R	—	_	
Clorox®	R	R		—	_	—					_	NR	NR	NR		—	NR	_
Coconut oil	R	R	R	R		_							R	R			R	
Coffee	R	R	R	R	_	—			_		_	_	R	R	_		_	
Copper compounds	R	R	R	R	_	—	_	_	_	_	LR	—	LR	_	R	R	R	_
Copper chloride	R	R	R	R	R	—	R		R		LR	_	_		R	—	R	
Copper fluoride	R	R	R	R	_	—		—	_		_		_			—		
Copper nitrate	R	R	R	R	R	—			R		LR		_		R	—	R	_
Copper salts	R	R	R R	R	R				R						R		R	-
Copper sulfate Corn oil	R R	R R	к R	R LR	R	R			R	R	LR		R R		R R		R	—
	n	n	n										n		n			

	Ge	eneral A	pplicati	on Belt	Materia	als	Special Application Belt Materials Heat Flame													
		Polypropylene Polye			_						Resi	stant			Reta	rdant				
			-	-		etal		K		cetal		lon	-	SELM		erial		npact		
		140°F (60°C)		140°F (60°C)		140°F (60°C)	70°F	140°F		140°F (60°C)	70°F	140°F	70°F	140°F	70°F	140°F (60°C)	70°F	140°F		
Chemical Name	(21 0)				• •	· ·	· ·	nt, NR :										(00 0)		
Cottonseed oil	R	R	R	R	_	_	_		_			_	_		R	_	R	_		
Cresol	R	R	R	LR	_			_			NR	NR	NR	NR			NR	NR		
Crude oil	_	_	R	LR	R	_		_	R	_			_		R	NR	_	_		
Cyclohexane	R	NR	R	R	R	_	_	_	R	_	R		R		R	_	R	_		
Cyclohexanol	R	LR	R	R	R	_	_	_	R	_	R	_	_		R	_	_	_		
Cyclohexanone	R	NR	R	LR	R	_	_	_	R	_	R	_	_	_	R	_	N	_		
Detergents	R	R	R	R	R	R	R	_	R	R	_		_	_	R	R	_	_		
Dextrin	R	R	R	R	R	_	_	_	R	_	_	_	_	_	_	_	_	—		
Dibutyl phthalate	R	LR	R	LR	_	_	_	_	_	_	R	R	_	_	R	LR	NR	NR		
Diesel fuel	R	LR	R	LR	R	R	—	—	R	R	R	R	R	R	LR	NR	R	—		
Diethyl ether	R	NR	LR	LR	R	R	—	-	R	R	R	—	R	_	R	—	NR	NR		
Diethylamine	R	R	R	R	_	_	_	—	_	—	R	_	—	_	_	—	R	—		
Diethylene	R	R	_	—	_	_	—	—	—	—	—	—	—	_	—	—	—	—		
Diglycolic acid– 30%	R	R	R	R	_	_	_	_	_	_	_	_	_	_	_	_	_	-		
Diisooctyl phthalate	R	R	_	—	_	_	_	_	_	_	_	_	_	_	_	_	_	-		
Dimethyl phthalate	R	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Dimethylamine	R	R	—	—	—	—	—	—	—	—	R	—	—	_	—	—	—	—		
Dioctyl phthalate	R	LR	—	—	_	—	—	—	_	—	R		—			—	_	—		
Ethyl acetate	R	LR	R	LR	R	NR	R	LR	R	NR	R	—	—	—	LR	LR	NR	NR		
Ethyl alcohol (ethanol)	R	R	R	R	R	R	R	LR	R	R	R		R			_	LR	LR		
Ethyl ether	LR	LR	LR	LR	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Ethylamine	R	R		—	_			—		—			—			—	_	—		
Ethylene chloride	NR	NR	—	—	_	—	—	—	—	—	—	—	—	—	—	—	—	—		
Ethylene glycol	R	R	R	R	R	LR	R	LR	R	LR	R	LR	—		R	—	LR	—		
Ferric or ferrous compounds	R	R	R	R	—	_	_	_	_	_	LR	_	_	_	—	_	LR	-		
Ferric chloride	R	R	R	R	R	R		—	LR	—	LR		LR			—	R	—		
Ferrous chloride	R	R	R	R	R	R		—								—	R	—		
Ferric nitrate	R	R	R	R	_	—	—		—		—	—		—	—	—	R	—		
Ferrous nitrate	R	R		—	_								—			—	_	—		
Ferric or ferrous sulfate	R	R	R	R	_	_	R	R	_	_	_	_	_	_		_	R	_		
Fertilizers	R	R	R	R	_								—		R	—	_	—		
Formaldehyde– 30%	R	R	R	R	R	R	_	_	R	R	R	_	R	NR	R	_	NR	NR		
Formic acid–10%	R	—	R	R	LR	LR	LR	-	LR	LR	NR	NR	LR	NR	R	LR	NR	NR		
Formic acid–85%	R	LR	R	R	NR	NR			NR	NR	NR	NR			LR	NR	NR	NR		
Freon	R	LR	R	R	R	R	—	_	R	R	R	_	—	_	R	R	_	-		
Fuel oils	R	LR	R	LR	R				R		R		R	R	R		R	_		
Furfural		NR	R	R	R	_	_	_	R	_	R	_	_	_	R			—		
Gasoline	R	NR	R	LR	R	R	R	R	R	R	R	_	R	R	R	LR	LR	—		
Glucose	R	R	R	R	R				R	—			R	R			R	_		
Glycerin	R	R	R	R	R	R			R	R	R	LR	R	R	R	LR	R	—		
Glycerol	R	R		—	R	LR			R	LR			R	R				_		
n-Heptane	LR	NR	R	LR	R		R	LR	R		R		R	R	R	R	R	—		
Hexane	R	NR	R	LR	R	R	R	R	R	R	R		R	R	R	R	R	—		

	Ge	eneral A	pplicati	on Belt	Materia	als	Special Application Belt Materials Heat Heat Resistant Retardant												
															-				
	Polypro	pylene	Polyet	hylene	Ace	etal	Р	ĸ	EC A	cetal		stant Ion	Nylon	SELM		rdant erial	Hi-In	npact	
	70°F	140°F	70°F	140°F	-	140°F		140°F	-	140°F		140°F	-	140°F	70°F	140°F	-	140°F	
Chamical Name	(21°C)					(60°C) es: R =												(60°C)	
Chemical Name Hydrobromic acid–					-	es: K =	Resista	INT, NK =		sistant,			esistan	ce, — =	[ormatio			
10%	R	R	R	R	LR	_			LR	—	NR	NR			LR	—	NR	NR	
Hydrochloric acid	R	R	R	R	NR	NR	R	R	NR	NR	NR	NR	NR	NR	LR	LR	NR		
Hydrochloric acid– 2%	_	—	R	R	LR	NR	R	R	LR	NR	NR	NR	NR	NR	R	—	R	—	
Hydrochloric acid– 10%	R	R	R	R	NR	NR	LR	NR	NR	NR	NR	NR	NR	NR	R	_		_	
Hydrochloric acid– 38%	R	LR	R	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	—	_	—	—	
Hydrofluoric acid– 10%	R	R	R	R	NR	NR		_	NR	NR	NR	NR	NR	NR	LR	NR	NR	NR	
Hydrofluoric acid– 35%	R	R	R	R	NR	NR	_	_	NR	NR	NR	NR	_	_	NR	NR	NR	NR	
Hydrofluoric acid– 50%	R	LR	R	LR	NR	NR			NR	NR	NR	NR	_	_	NR	NR	NR	NR	
Hydrogen peroxide–3%	R	R	R	R	R	R	R	LR	R	R	NR	NR	R	R	R	LR	R	_	
Hydrogen peroxide–30%	R	LR	LR	NR	NR	NR	LR	LR	NR	NR	NR	NR	LR	NR	R	LR	LR	—	
Hydrogen peroxide–90%	LR	LR	LR	NR	NR	NR	_	_	NR	NR	NR	NR	NR	NR	_	_	NR	NR	
Hydrogen sulfide	R	R	R	R	LR	—			LR		LR	—	R	R	R	—	R	—	
Hydroiodic acid	NR	NR		_		—										—	NR	—	
Igepal	R	R	—			—				-					R	—	_	—	
lodine	R	R	R	R	NR	NR		—	NR	NR	NR	NR		—		—	R		
Isobutyl alcohol	R	R	R	R	_	_	_			-	_	_			_	_	NR	NR	
Isopropyl alcohol	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	_	R		
Isooctane	NR	NR	R	_		_	_	_	_	-	R	R	R	R		_	NR R	_	
Jet fuel	LR	NR		-	R	R			R	R		_			R	_		—	
Kerosene	R	NR	R	LR	R	R			R	R					R	R	R		
Lactic acid–10%			R	R	R		R	R	R		R	NR	R	R	R	_		_	
Lactic acid–80%	R	R	R	R	R	NR			R	NR	NR	NR	NR	NR			NR	—	
Lactose	R R	R LR	R	R									R	 		_			
Lanolin Lard	n		R	R								_	n 	n			 		
Lauric acid	R	R	n														n		
Lead acetate	R	R	 	 R						-	 R				 R	_	R		
Leau acetate	LR	NR	R	R	_						n		R		n		R		
Ligroin	LR	NR	n	n 									n				n		
Ligroin Lime sulfur	R															_			
Line sului	R	 	 	 	R	R			 	 	R		R	R		_	R		
Lubricating oil	R	R LR	R	LR	R	n 			R	n 	R	LR	R	R	R	 	R		
Magnesium compounds	R	R	R	R			_				LR		R	n 	n 	n —	NR		
Magnesium carbonate	R	R	R	R				_		_	_						R		
Magnesium chloride	R	R	R	R	R		LR	_	R	_	R		R		R	_	R		
Magnesium hydroxide	R	R	R	R	R	_		_	R	_	LR			_		_	R		
Magnesium nitrate	R	R	R	R	R	_	_	_	R	_	R	_	_	_	R	_	R		

	Ge	eneral A	pplicati	ion Belt	Materia	als	Special Application Belt Materials Heat Flame													
															-					
	Polynro	pylene	Polvet	hvlene	Ac	etal	p	ж	FC A	cetal	Resi: Ny	stant	Nylon	SELM		rdant erial	Hi-In	npact		
	70°F	140°F	70°F	140°F	-	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F	70°F	140°F		140°F		
	(21°C)	-	(21°C)	-		(60°C)		(60°C)	(21°C)	(60°C)	-	(60°C)	(21°C)	(60°C)	-	(60°C)	(21°C)	(60°C)		
Chemical Name		N	/laterial	Suitabi	lity Cod	les: R =	Resista	ant, NR :	= Not re	sistant,	LR = Li	imited r	esistan	ce, — =	No inf	ormatio	n			
Magnesium sulfate	R	R	R	R	R	_	—	-	R	_	R	—	_	—	R	-	R	_		
Malic acid	R	LR	R	R	NR	NR	—	—	NR	NR	—	—	NR	NR	R	—	R	—		
Maple syrup	R	—	_	—	_	—	_	-	—	—	_	_	_	_	_	—	_	—		
Manganese sulfate	R	L	R	R	—	R	—	-	—	R	R	_	R	-	R	—		—		
Margarine	R	R	R	R		—	_	—	—	—	—	—	R	R	_	—	_	—		
Meat juices or sauces	R	R	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		
Mercuric compounds	R	R	R	R	—	_	—	_	_	_	—	—	—	_	_	_	NR	—		
Mercuric chloride	R	R	R	R	—	—			—	_	NR	NR	R			_	R			
Mercury	R	R	R	R	R	—	—		R	—	R	_	R	R	R	—	R	—		
Methyl alcohol	R	R	R	R	R	R	LR	LR	R	R	LR	_	R	R	NR	NR	LR	—		
Methyl cellosolve	R	_	_	—	—	—	—	-	—	—	_	_	_	_	_	_	_	—		
Methyl chloride	NR	NR	LR	—	R	-			R		R							$\lfloor - \rfloor$		
Methyl ethyl ketone	R	R	R	NR	LR	LR	LR	LR	LR	LR	R	—	R	R	NR	NR	LR	—		
Methyl isobutyl ketone	R	R	R	NR	—	_	_	-	_	_	—	—	R	R	—	-	NR	NR		
Methylene chloride	LR	NR	LR	LR	NR	NR	NR	NR	NR	NR	LR	_	NR	NR	NR	NR	NR	NR		
Methylsulfuric acid	R	R	R	R	—	—	—	-	—	—	—	—	—	—	_	—	_	—		
Milk	R	R	R	R	R	—	_	—	R	—	LR	—	R	R	R	—	R	—		
Mineral oil	R	LR	R	LR	R	R	_	—	R	R			R	R	R	R	R	—		
Mineral spirits	R	R	R	—	—	—	—	-	—	—	—	—	—	—	—	—	R	—		
Molasses	R	R	R	R	_	—	—	-	—	—	_	_	_	_	R	_	R	—		
Motor oil	R	NR	R	LR	R	R	R	R	R	R	R	_	R	R	R	LR	R	—		
Naphtha	R	LR	R	LR	R	—			R		R	_	R	R	R		R			
Nickel compounds	R	R	R	R		—					LR	_	LR	_	_		_			
Nickel chloride	R	R	R	R	R		_		R		R	_	—	_	R		R			
Nickel nitrate	R	R	R	R	_	—					R		R	R	R		R	—		
Nickel sulfate	R	R	R	R	R	—	_	_	R	—	R		R	R	R	—	R	—		
Nitric acid–10%	R	R	R	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	R	LR	NR	NR		
Nitric acid–30%	R	R	R	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR			
Nitric acid–50%	NR	NR	LR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Nitric acid–fuming	NR	NR	NR	NR	NR	NR			NR	NR	NR	NR	NR	NR	NR	NR	NR			
Nitrobenzene	R	LR	NR	LR	LR				LR		LR	NR	LR	LR	R	-	NR	NR		
Nitrous acid	LR	LR														-				
Nut oil Nutmeg oil	R NR		R R	R R	_				<u> </u>	<u> </u>										
Nutrieg on Nitrous oxide	R	NR	к	к	_			<u> </u>		_							R			
Oleic acid	R		R	LR	R				R		R	R	R	NR	R	R	R			
Olive oil	R	R	R	R	n 				n 			n 	R	R	n 					
Orange oil	R	n 		n 		_	_						R	R						
Oxalic acid–10%	R	R	R	R	NR	NR		<u> </u>	NR	NR	LR	NR	R	LR	R	R				
Oxalic acid–10%	R	R	R	R	NR	NR			NR	NR			n 		R					
Oxygen (atmospheric	R	R	R	R	R				R		R	R	R	R	R		R			
pressure)	LR	NR	LR	NR	NR	NR			NR	NR	NR	NR	R	n 	LR	NR	R			
020118	LK	INF	LŬ	INK	INF	INFI			INE	INF	INF	INF	ň	_	LK	INF	ň	—		

	Ge	eneral A	pplicati	on Belt	Materia	als	Special Application Belt Materials Heat Flame													
	Dohumu	nulana	Delvet	hulono	A a	atal		NV.	FC 4	ootol	Resi	stant	Nulon	CEI M	Reta	rdant	U: Im	anaat		
	70°F	pylene 140°F	Polyet 70°F	nylene 140°F	Ace 70°F	etal 140°F	70°F	K 140°F	EC A 70°F	cetal 140°F	™y 70°F	lon 140°F	Nylon 70°F	SELM 140°F	70°F	erial 140°F	HI-IN 70°F	1pact 140°F		
		(60°C)		(60°C)			-			(60°C)	-									
Chemical Name		N	/laterial	Suitabi	lity Cod	es: R =	Resista	int, NR =	= Not re	sistant,	LR = L	imited r	esistan	ce, — =	No inf	ormatio	n			
Palm nut oil	R	—	R	_		_	_			_		_	R	R		_		—		
Palmitic acid	R	R	R	R		—					R	—	_	_	R	R	R	—		
Peanut oil	R	LR	R	R		—	_				_		R	R						
Peppermint oil	R	NR	R	R	_	—	_		_		_	—	R	_	_	—	_			
Perchloric acid– 20%	R	R	R	R	NR	NR	_	_	NR	NR	_	_	NR	NR	_	_	NR	NR		
Perchloroethylene	NR	NR	NR	NR	—	—		-	_		LR	NR	LR	NR	_	—	_	—		
Peroxyacetic acid	R	R		—	NR	NR	R	R	NR	NR	NR	NR	LR	NR	_	—	R	—		
Phthalic acid-50%	R	R	R	R	—	—	_	-	—		—	—	—	—	_	—	—	—		
Phenol	R	R	R	R	NR	NR	_		NR	NR	NR	NR	NR	NR	NR	NR	NR	—		
Phenol-5%	R	R	R	LR	NR	NR	_		NR	NR	LR	NR	NR	NR	NR	NR	NR	NR		
Phosphoric acid– 10%	R	R	R	R	NR	NR	R	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Phosphoric Acid– 30%	R	R	R	R	NR	NR	R	R	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Phosphoric acid– 50%	R	R	R	R	NR	NR	—	_	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Phosphoric acid– 85%	R	R	R	LR	NR	NR	_	-	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
Photographic solutions	R	R	LR	LR	R	_	_	_	R	_	_	_	R	R	R	R	R	—		
Pineapple juice	R	R	R	R	_	_	—	—	_	—	—	—	_	_	_	—	_	—		
Plating solutions	R	R	_	—	_	—	—	—	_	_	—	—	_	—	_	—	NR	NR		
Potassium compounds	R	R	R	R	_	_	_	-	—	_	R	_	_	_	R	R	NR	—		
Potassium carbonate	R	R	R	R	R	_	_	_	R	_		_	R	R		_	R	—		
Potassium chlorate	R	R	R	R	_	_	_	_	_				R	LR		_		—		
Potassium chloride	R	R	R	R	R	R	_	—	R	R	R	R	R	R	R	LR	R	—		
Potassium hydroxide	R	R	R	R	LR	—	R	-	LR	_	LR	_	R	R	R	R	R	_		
Potassium iodine	R	—	R	R		—	—	—	_	—	_	—	R	R	_	—	R	—		
Potassium iodide (3% iodine)	R	R	R	R	—	_	_	-	—	_	—	_	—	—	—	_	NR	_		
Potassium permanganate– 1%	R	R	R	R	R	-	_	_	R	_	NR	NR	NR	NR	R	LR	NR	NR		
Potassium sulfate	R	R	R	R	R	R	_	_	R	R	—	—	R	R	_	—	R	—		
Silicone	R	R	R	R	_	_		_	_	_		_	_	_		_				
Silicone oil	R	R	R	R	R	R	_	_	R	R	R	R	R	R	R	R	R	—		
Silver cyanide	R	R		—	_	—	—	—	_		—	—	_	_	_	—	_	—		
Silver nitrate	R	R	R	R	_	—	_	—	_	—	R	—	_	_	_		R	—		
Sodium acetate	R	R	R	R	R	R	—	—	R	R		—	R	R		—	R	—		
Sodium bicarbonate	R	R	R	R	R	R			R	R			R	R	R	LR	R	_		
Sodium bisulfate	R	R	R	R	R	—	—	—	R	_	_	_	R		R	—	R	—		
Sodium bisulfite	R	R	R	R	NR	NR	NR	—	NR	NR	_	—	R	LR	R	LR	_	—		
Sodium borate	R	—	R	R	R	—	_	—	R	—	_		R	R		—	R	—		
Sodium bromide	R	R	R	R	_			—	_	—	LR	—	_	_		—	_	—		
Sodium carbonate	R	R	R	R	R	R	—	—	R	R	R		R	R	R	LR	R	—		
Sodium chlorate	R	R	R	R	R	R	_	_	R	R	R	—	R	LR	_	—	R	—		

	Ge	eneral A	pplicati	on Belt	Materia	als	Special Application Belt Materials Heat Resistant Retardant													
															-	-				
	Polypro	pylene	Polvet	hvlene	Ace	etal	Р	к	EC A	cetal		stant Ion	Nylon	SELM		rdant erial	Hi-In	ipact		
	70°F	140°F	-	140°F		140°F		140°F		140°F	70°F	140°F	70°F	140°F	70°F	140°F		140°F		
	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)	(21°C)	(60°C)		
Chemical Name		N	/laterial	Suitabi	lity Cod	es: R =	Resista	int, NR =	= Not re	sistant,	LR = L	imited r	esistan	ce, — =	No inf	ormatio	n			
Sodium chloride	R	R	R	R		—	R	_			R		R	LR	R	—	R	_		
Sodium cyanide	R	R	R	R	R	—	_		R		R	—	_	—	_	—	NR	NR		
Sodium fluoride	R	R	R	R		_	_	_					_		_	_	R	_		
Sodium hydroxide–10%	R	R	R	R	R	R	R	NR	R	R	LR	NR	R	R	R	_	R	_		
Sodium hydroxide–50%	R	R	R	R	LR	_	LR ^a	NR	LR	_	NR	NR	R	R	_	_	NR	_		
Sodium hypochlorite–5% Cl	R	LR	R	_	NR	NR	LR ^a	_	NR	NR	LR	NR	R	NR	LR	NR	R	—		
Sodium hypochlorite– 12.5% Cl	R	LR	LR	NR	NR	NR	_	_	NR	NR	NR	NR	_	NR	LR	NR	_	_		
Sodium nitrate	R	R	R	R	R	R	—	—	R	R	R	—	R	R	R	—	R	—		
Sodium phosphate	R	—	R	R	R	_	_	_	R	_		_	R	R		_				
Stannic chloride	R	R	R	R	—	_	—	—	—	—	—	—	_	—	_	—	LR	_		
Stannous chloride	R	R	R	R	—	—	—	—	—	—	—	—	R	R	_	—	R	—		
Starch	R	R	R	R	—	—	—	—	—	—	—	—	R	R	—	—	—	—		
Starch syrup	R	R	R	R	_	—	_	—	_	—	_	_	_	_	_	—	_	—		
Stearic acid	R	—	R	LR	R	—	—	—	R	—	R	—	R	NR	R	—	R	—		
Succinic acid	R	R	R	R	_	—	_	—	—	—	—	—		—		—	—	—		
Sucrose	R	R	R	R		—	_						_		_	—	—	_		
Sugar	R	R	R	R	_	—	—			—		_	R	R	_	—	—	_		
Sulfamic acid– 20%	R	NR	_	_	_	_	_	_	_	_	_	_	_	_	_	_	—	_		
Sulfate liquors	R	R	_	_		_	_						_		_	—	_	_		
Sulfur	R	R	R	R	R	—			R		R	—	R	—		—	_			
Sulfur chloride	R	—	—	—		—	_				—	—	_	—	—	—	NR	NR		
Sulfur dioxide	R	R	R	R	NR	_	_		NR		R	LR	R	R	R	—	LR	_		
Sulfuric acid–3%	R	R	R	R	LR	_	R	R	LR		NR	NR	NR	NR	R	R	R			
Sulfuric acid–50%	R	R	R	R	NR	NR			NR	NR	NR	NR	NR	NR	R	—				
Sulfuric acid–70%	R	LR	R	LR	NR	NR	_	-	NR	NR	NR	NR	NR	NR		—	_	—		
Sulfuric acid– Fuming	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	LR	LR	_	_		
Sulfurous acid	R	LR	R	R	_	_	_		_		LR	_	_	_	R	_	R	_		
Tallow	R	R	R	R	R	_			R						R	_				
Tannic acid–10%	R	R	R	R	_	_	_				_	_	_		_	—	NR	NR		
Tartaric acid	R	R	R	R	R	_			R		R	LR	R	LR	R		R			
Tetrahydrofuran	R		NR	NR	LR		— 	— 	LR	— 	R	— 	R	NR	LR	NR	NR	NR		
Toluene	R	NR	LR	NR	R	R	R	LR	R	R	R	R	R	R	R	R	NR	NR		
Tomato juice Transformer oil	R	R	R	R									R	R						
	R R	NR LR	R	LR		_	<u> </u>				R		R	R	R	R	 R			
Tributyl phosphate Trichloroacetic acid	R	R	 	 R	 NR	 NR	_	_	NR	NR	 NR	NR	_		NR	NR	NR	 NR		
Trichloroethylene	R	NR			NR	NR	NR	NR	NR	NR										
Tricresyl phosphate	R	LR			_	_	_				_			_		_	_			
Trisodium phosphate	R	R	R	R			_		_		_	_			_	_	R			
Turpentine oil	R	NR	LR	NR	R	—	—	-	R	-	R	—	R	LR	R	—	_	—		

	Ge	eneral A	pplicati	ion Belt	Materia	als				Sp	oecial A	pplicati	on Belt	Materia	ls			
											Resi	eat stant			Fla Reta	me rdant		
	Polypro	pylene	Polyet	hylene	Ace	etal	P	K	EC A	cetal	Ny	lon	Nylon	SELM	Mat	erial	Hi-In	npact
	70°F	140°F	70°F (21°C)		70°F	140°F	70°F (21°C)	140°F (60°C)	70°F	140°F	70°F	140°F	70°F (21°C)	140°F	70°F	140°F	70°F	-
Chemical Name	(21 0)	. ,	. ,	. ,	. ,	. ,	. ,	int, NR =	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,	(00 0)
Urea	R	R	R	R	R	—	—	—	R		R	—	R	R	R	_	R	—
Varnish	R	—	R	R	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vaseline	R	R	LR	LR	R	_	R	R	R	_	R	_	R	R	R	_	—	—
Vegetable oil	—	—	R	LR	R	—	—	—	R	—	_	_	_	_	R	R	—	—
Vinegar	R	R	R	R	R	—	—	—	R	—	—	_	R	LR	—	—	R	—
Wine	R	R	R	-	R	—	R	R	R	—	_		R	R	R	—	—	—
Xylene	NR	NR	LR	NR	R	R	—	—	R	R	R	R	R	R	LR	NR	NR	NR
Zinc compounds	R	R	R	R	—	—	—	—	_	—	LR	_	LR	_	R	R	LR	—
Zinc carbonate	R	R	R	R	-	—	—	—	—	—	—	—	—	—	—	—	—	—
Zinc chloride	R	R	R	R	R	—	R	R	R	—	NR	NR	R	R	R	—	R	—
Zinc oxide	R	R	R	R	—	—	—	—	_	_	_	_	_	-	—	_	—	—
Zinc sulfate	R	R	R	R	-	_	_	-	_	—	LR	_	R	R	R	_	R	—
^a Limited resistanc	e rating	due to d	iscolora	tion.														

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