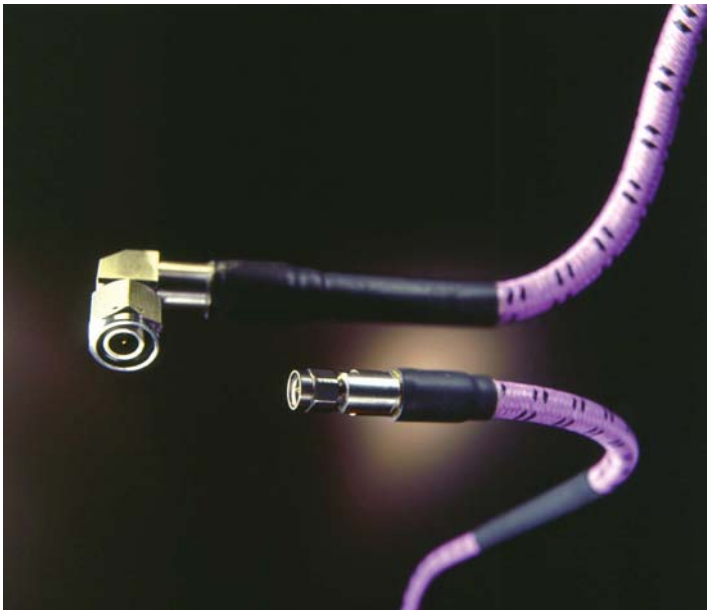
GORE™ Microwave / RF Assemblies

INTERNALLY RUGGEDIZED

Technical Summary

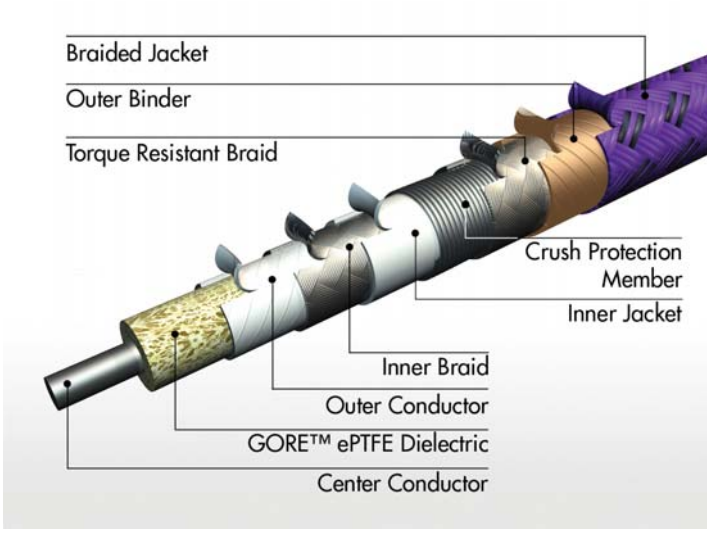
W. L. Gore & Associates, Inc., offers internally ruggedized microwave / RF coaxial assemblies (Mini-CP) that combine the electrical advantages of expanded PTFE dielectric with an integrated environmental protection system. Because the ruggedization is designed into the cable, the assemblies offer excellent durability while remaining exceptionally lightweight and flexible. Mini-CP is the cost-effective solution and preferred ruggedization for temperature chamber feed-through, airframe, and general purpose test applications.



GORE™ Ruggedized Microwave Assemblies are available with a variety of connectors.

Features & Benefits

- Extremely Flexible–The assemblies are easy to route with no sacrifices in bend radius.
- Electrically Stable–Specific assemblies feature excellent insertion phase and amplitude stability with flexure. These electrically stable and mechanically durable cables offer performance through 26.5 GHz and are available in both 50 and 75 ohm characteristic impedance.
- Crush Resistant–Unlike externally ruggedized assemblies, which offer only minimum crush resistance, the internally ruggedized assemblies offer a crush resistance of more than 250 lb per linear inch when tested in accordance with MIL-T-81490. There are no gaps within the ruggedization, therefore, cable ties can be used freely and without concern.
- Torque and Kink Resistant–The internal ruggedization of the cables provides torque resistance and the additional benefit of a locking bend radius, which resists kinking of the cable. This means greater reliability during installation and extended assembly service life.
- Thermal Vacuum Compatible–Versions of the assemblies can be specified with non-outgassing materials for thermal vacuum applications. Typical operating temperature range is from -55°C through +125°C.
- Abrasion Resistant–Gore has developed XT2000, a highly flexible abrasion-resistant jacket. The jacket resists the effects of sand, dust, and chaffing when tested in accordance with MIL-T-81490.



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Creative Technologies Worldwide

JK060719-02

Cable Options

Ruggedized Cable Part Number	Impedance (ohms)	Generic Core Type[2]	Enhanced Phase Stability	Maximum Use Frequency (GHz)	I. L. Typ. @ Fmax (dB/ft)	Nominal O. D. (Inches)	Nominal Weight (g/ft)	Minimum Bend Radius (Inches)
0T	50	G7	Yes	26.5	0.53	0.315	45	1.00
0U	50	G2	Yes	18.0	0.43	0.305	45	1.00
0R	50	G7	No	26.5	0.53	0.305	45	1.00
0S	50	G2	No	18.0	0.43	0.305	45	1.00
0W	50	G9	No	26.5	0.45	0.305	45	1.00
0X	50	G5	No	18.0	0.36	0.305	45	1.00
0P	50	G3	No	18.0	0.29	0.400	84	1.50
0Q	50	G6	No	18.0	0.25	0.400	84	1.50
0M	50	8W	No	18.0	0.22	0.420	88	1.50
0Y	75	75R	Yes	3.0	0.16	0.295	44	1.00

Connector Options[3]

Connector Type	Configuration	Cable Part Number					
		Max F (GHz)[4]	0S (18.0)	0X (18.0)	0P (18.0)	0Q (18.0)	0M (18.0)
SMA "R"	Straight Pin	18.0	R01	R01	R01	R01	R01
SMA "R"	Box Right Angle Pin	18.0	R7	R71	R71	R71	R71
SMA "R"	Straight Socket	18.0	R02	R02	R02	R02	R02
TNC	Straight Pin	12.4	T01	T01	T01	T01	T01
TNCA	Straight Pin	18.0	C01	C01	C01	C01	C01
TNCA	Box Right Angle Pin	18.0	C71	C71	C71	C71	C71
TNCA	Straight Socket	18.0	C02	C02			
Type N	Straight Pin	12.4	N01	N01	N01	N01	N01
Type N	Straight Socket	12.4	N02	N02			
Precision N	Straight Pin	18.0	Q01	Q01	Q01	Q01	Q01
Precision N	Box Right Angle Pin	18.0	Q71	Q71	Q71	Q71	Q71
Precision N	Straight Socket	18.0	Q02	Q02	Q02	Q02	Q02
Replaceable Interfaces[1]			Yes	Yes	Yes	Yes	Yes

Connector Type	Configuration	Cable Part Number					
		Max F (GHz)[4]	OR (26.5)	OW (26.5)	OT (26.5)	OU (18.0)	OY (3.0)
SMA "R"	Straight Pin	18.0				R01	
SMA "R"	Box Right Angle Pin	18.0				R71	
SMA "R"	Straight Socket	18.0				R02	
3.5mm	Straight Pin	26.5	D01	D01	D01	D01	
3.5mm	Straight Socket	26.5	D02	D02	D02	D02	
7mm	Hermaphroditic	18.0				K00	
TNCA	Straight Pin	18.0				C01	
TNCA	Box Right Angle Pin	18.0				C71	
TNCA	Straight Socket	18.0				C02	
Type N	Straight Pin	12.4				N01	N01
Type N	Straight Socket	12.4				N02	
Precision N	Straight Pin	18.0				Q01	
Precision N	Box Right Angle Pin	18.0				Q71	
Precision N	Straight Socket	18.0				Q02	
Type FD	Straight Pin	3.0					ZLF
Type FD	Straight Socket	3.0					ZLX
Replaceable Interfaces[1]			No	No	No	Yes	No

[1] For Replaceable Interfaces, specify 601 as intermediate interface, for end termination specify:

Connector Type	Gore P/N	Connector Type	Gore P/N
7mm	401	TNC Pin	801
SMA Pin	701	TNC Socket	802
SMA Socket	702	Type N Pin	901
		Type N Socket	902

[2] Generic Core Type should be used as a reference to determine electrical characteristics. This information is for REFERENCE ONLY and is NOT used when ordering.

[3] Other connector options may be available on request.

[4] Assembly F Max performance is limited to the lower of the capability of the cable or the connector type.