

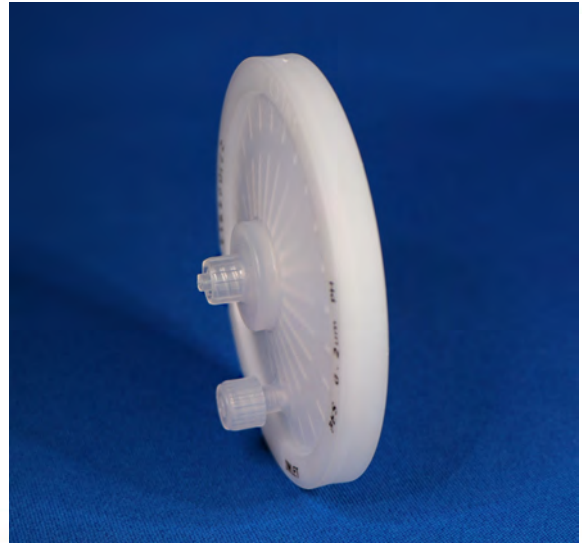


PureFlo D90R Filter Capsules (Disc Capsule)

Versatile Disc Capsule filter

PureFlo® D90R Filter Capsules (90mm diameter) have been designed for simple, quick, and efficient filtration of fluids and gases used in laboratory, pilot, and small-scale applications. The family of products is particularly suitable for scale up testing. Thirteen different media options can be placed in an all-polypropylene construction for excellent chemical compatibility. There are 28 different fitting options that can be mixed and matched for the inlet and outlet fittings.

The compact design of the filter capsule also reduces hold-up volume and exposure to hazardous chemicals. No adhesives or binders are used in the encapsulation process. The unit is thermally-sealed to ensure integrity.



Specifications

Materials of Construction:	Media: Polypropylene, Nylon, PTFE, Polyethylene, Glass Fiber, and PES Media Supports: Media Dependent Shell: Polypropylene, Nylon or Polyethylene Sealing: Thermally-welded
Fitting Connections:	See ordering guide for the availability. Any inlet/outlet combinations. (Custom adaptors available upon request)
Effective Filtration Area:	9.3 in ² (60 cm ²)
Dimensions:	90 mm (3.5 in)
Available Ratings:	0.04 µm to 70 µm (see Ordering Guide)
Autoclave Cycles:	The filters can be sterilized by autoclaving for 10 cycles at 257°F/125°C for 30 minutes. Polyethylene material can not be autoclaved. Note: Capsules must not be in situ steam-sterilized.

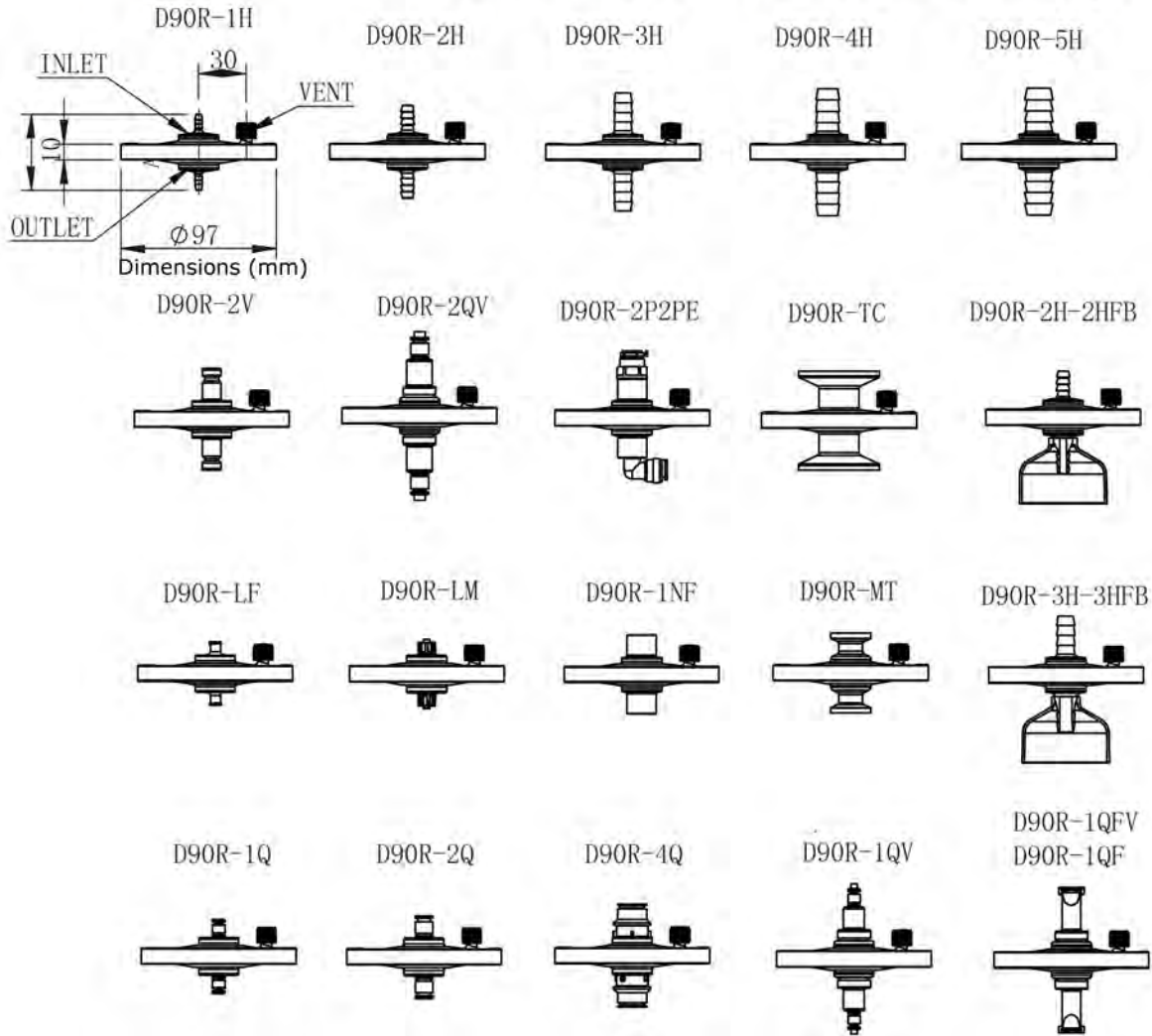
Applications	
Low flow	Ink
Lab scale testing	Beverages
Bio Bags	Pharmaceuticals
Fine Chemicals	Biologics
Vent Filter	Scale up processing
Water	Small volume

Operating Conditions

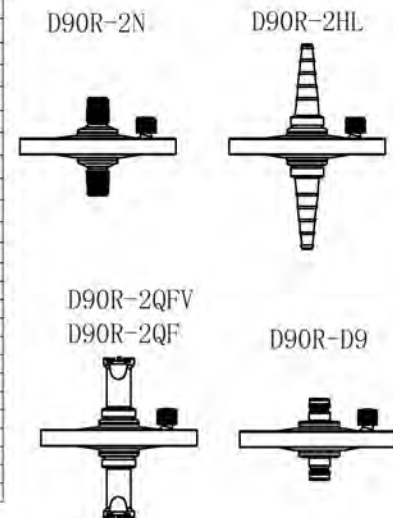
	PP Shell/ Nylon Shell	Gamma Stablized PP Shell	HDPE Shell	PVC Shell
Maximum working pressure @ 72°F/22°C:	Liquid: 80 psi (5.5 bar)	45 psi (3.1 bar)	80 psi (5.5 bar)	80 psi (5.5 bar)
	Gas: 60 psi (4.1 bar)	45 psi (3.1 bar)	60 psi (4.1 bar)	60 psi (4.1 bar)
Minimum burst pressure @ 72°F/22°C:	120 psi (8.3 bar)	60 psi (4.1 bar)	120 psi (8.3 bar)	120 psi (8.3 bar)
Maximum working temp:	176°F (80°C)	176°F (80°C)	140°F (60°C)	122°F (50°C)
Maximum forward differential pressure @ 72°F/22°C:	60 psid (4.1 bar)	45 psid (3.1 bar)	60 psid (4.1 bar)	60 psid (4.1 bar)
Maximum reverse differential pressure @ 72°F/22°C:	30 psid (2.1 bar)	30 psid (2.1 bar)	30 psid (2.1 bar)	30 psid (2.1 bar)
Maximum gamma irradiation resistance:		50 kGy	50 kGy	



PureFlo D90R Filter Capsules



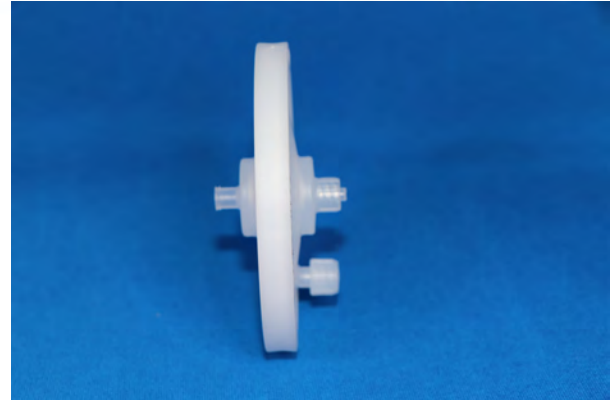
Code name	Inlet Fitting	Outlet Fitting	Size(±1)
D90R-1H	1/8" Hose Barb		47
D90R-2H	1/4" Hose Barb	1/4" Hose Barb	58
D90R-3H	3/8" Hose Barb	3/8" Hose Barb	73
D90R-4H	1/2" Hose Barb	1/2" Hose Barb	79
D90R-5H	5/8" Hose Barb	5/8" Hose Barb	79
D90R-2H-2HFB	1/4" Hose Barb	1/4" Hose Barb Filling Bell	83
D90R-3H-3HFB	3/8" Hose Barb	3/8" Hose Barb Filling Bell	91
D90R-D9	D99 LUDECKE Male Plugs compatible	D99 LUDECKE Male Plugs compatible	50
D90R-2V	1/4" Walther Quick Conne	1/4" Walther Quick Conne	63
D90R-2N	1/4" NPT	1/4" NPT	60
D90R-2UL	1/4"-1/2" Hose Barb	1/4"-1/2" Hose Barb	126
D90R-2P2PE	1/4" Push To Connect	1/4" Push To Connect-Elbow	82
D90R-1Q	1/8" Male Quick Coupling	1/8" Male Quick Coupling	46
D90R-2Q	1/4" Male Quick Coupling	1/4" Male Quick Coupling	51
D90R-4Q	1/2" Male Quick Coupling	1/2" Male Quick Coupling	63
D90R-LF	Luer Lock Female	Luer Lock Female	39
D90R-LM	Luer Lock Male	Luer Lock Male	43
D90R-1NF	1/8" FNPT	1/8" FNPT	49
D90R-1QV	1/8" Male Quick Coupling	1/8" Male Quick Coupling	93
D90R-1QFV/1QF	1/8" Female Quick Coupling	1/8" Female Quick Coupling	90
D90R-2QV	1/4" Male Quick Coupling	1/4" Male Quick Coupling	105
D90R-2QFV/2QF	1/4" Female Quick Coupling	1/4" Female Quick Coupling	98
D90R-MT	1/2" Tri Clamp	1/2" Tri Clamp	50
D90R-TC	1.5" Tri Clamp	1.5" Tri Clamp	64



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Regulatory Compliance:

The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological Test for Plastic. (Except Black PP)



PureFlo D90R Filter Capsule Ordering Guide

PureFlo D90R Capsule Filters	Filter Media	Pore Sizes (Micron)								Input Fitting	Output Fitting	Options
		Cellulose Acetate (A)	Charged Nylon (CN)	PTFE Philiic (HF) & Phobic (F)	Polypro Membrane (M)	Natural Glass Fiber (NG)	Polypro Media (P)	PES (S)				
D90R = 90mm Capsule filter	A = Cellulose Acetate	010 = 0.10	005 = 0.05	010 = 0.10	010 = 0.1	005 = 0.5	003 = 0.3	005 = 0.05	1H = 1/8" Hose Barb 1NF = 1/8" FNPT 1Q = 1/8" Male Quick Coupling 1QF = 1/8" Female Quick Coupling 1QFV = 1/8" Female Valved Quick Coupling 1QV = 1/8" Male Valved Quick Coupling 2H = 1/4" Hose Barb 2H-FB = 1/4" Hose Barb with filling bell -FC with Cap 2HL = 1/4" to 1/2" Hose barbs 2N = 1/4" MNPT 2P = 1/4" Push to Connect 2PE = 1/4" Push to Connect Elbow 2Q = 1/4" Male Quick Coupling for Metal latch 2QF = 1/4" Female Quick Coupling with Metal latch 2QFV = 1/4" Female Valved Quick Coupling for Metal latch 2QP = 1/4" Male Quick Coupling for Plastic latch 2QV = 1/4" Male Valved Quick Coupling for Metal latch 2V = 1/4" Wafter Quick Connect 3H = 3/8" Hose Barb 3H-FB = 3/8" Hose Barb with filling bell or -FC with Cap 4H = 1/2" Hose Barb 4Q = 1/2" Male Quick Coupling 5H = 5/8" Hose Barb D9 = D90 LUDECKE Male Plugs compatible fitting MT = 1/2" Tri Clamp SM = 1/2" Tri Clamp with SS insert Ring ST = 1 1/2" Tri Clamp with SS insert Ring TC = 1.5" Tri Clamp	1H 1NF 1Q 1QF 1QFV 1QV 2H 2H-FB 2HL 2N 2P 2PE 2Q 2QF 2QFV 2QP 2QV 2V 3H 3H-FB 4H 4Q 5H D9 MT SM ST TC	Shell Material Blank = Polypropylene E = Polyethylene Shell BLK = Black PP shell GP = Gamma stable Polypropylene Shell Sterilization ETO = Ethyrene Oxide Sterilization Other -1 = Single Bagged -NV = No vent fitting -FB = Filling Bell (2H only) -FC = Filling Bell w / Cap (2H only) O-Ring for Quick Coupling Blank = O-ring Silicon (Standard) -OE = O-ring EPDM -ON = O-ring Nitrile -OV = O-ring Viton	
	C = Carbon Fiber	020 = 0.20	010 = 0.10	020 = 0.20	020 = 0.2	010 = 1.0	006 = 0.6	010 = 0.10				
	CN = Charged Nylon	045 = 0.45	020 = 0.20	045 = 0.45		030 = 3.0	010 = 1.0	020 = 0.20				
	DP = Depth PP	065 = 0.65	045 = 0.45	100 = 1.0		050 = 5.0	030 = 3.0	045 = 0.45				
	F = PTFE Phobic	080 = 0.80	065 = 0.65	300 = 3.0		050 = 5.0	050 = 5.0	055 = 0.55				
	G = Glass Fiber	120 = 1.20	080 = 0.80	500 = 5.0		070 = 7.0	100 = 10	080 = 0.80				
	HF = PTFE Philiic		120 = 1.20	999 = 10		100 = 10	200 = 20	120 = 1.20				
	M = PP Membrane					200 = 20	300 = 30					
	N = Nylon					400 = 40	500 = 50					
	NG = Natural Glass					700 = 70						
NS = Nylon Screen					100 = 100	150 = 150						
P = PP Media					200 = 20	300 = 30						
PS = PP Screen					400 = 40	500 = 50						
S = PES					730 = 73							
SS = SS Screen					180 = 18							
TS = Polyester Screen					200 = 20							
UE = Polyethylene					250 = 25							
					370 = 37							
					460 = 46							
					530 = 53							
					610 = 61							
					740 = 74							
					10X = 105							
					15X = 150							
					20X = 200							
					25X = 250							

Example – 1.2 Micron Nylon Filter Media with 1/2" tri clamp fittings would be D90RN120MT. For Same filter with Carbon Fiber D90RCMTMT