

Description

The Ultipor GF-HV filter is well suited for slurry filtration applications having high viscosities and substantial solid concentrations. Typical high solid concentration fluids include ceramic slurry, metal slurry and conductive paste. In addition, Ultipor GF-HV filters are appropriate for very fine, sub-micron dispersion filtration, such as that used in color resist, inkjet ink, polishing slurry and similar applications.

Pall's Ultipor GF medium is a resin-bonded microfiber matrix designed for fine filtration, low pressure loss and long service life. This resin-bonded structure resists contaminant unloading or media migration.

The unique HV version of the Ultipor GF filter family is specifically constructed for high-viscosity applications where standard media may not be suitable. The combination of a rigid support mesh and a highly porous medium structure provides exceptional flow characteristics, even at very fine sub-micron removal ratings and with high viscosity fluids.



Features	Advantages	Benefits
Unique matrix with resin-coated fibers	Robust, fixed pore structure	Resists unloading and media migration
Capable of filtration down to 0.1 µm	Fine filtration of dispersions	Lower cost for filtration versus membrane filters
Excellent particle removal and retention	Consistent and effective filter performance	Reproducible filtrate results from batch-to-batch
Optimized pleat spacing with stronger pleat support	Resists pleat deformation under conditions of high viscosity and high flow rate	Longer service life and excellent filter economics
Available lab test filter with small effective filter area	Permits testing and scale-up with identical versions of full-size filters	Facilitates selection of appropriate filter and enables prediction of filter performance in actual service
Medium utilizes very fine fibers in filter matrix	Very high void volume and porosity	Excellent flow rates

Specifications

Materials of Construction

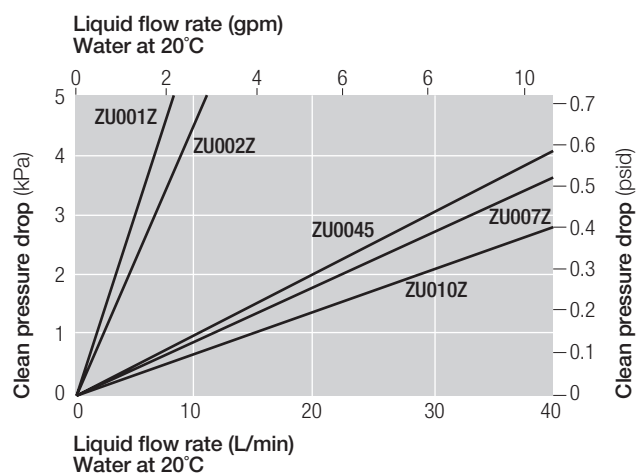
Components	Materials
Filter medium (µm)	Resin-bonded glass and aramid fiber blend matrix on a polyester substrate (positive zeta potential in certain fluids)
0.1, 0.2, 0.7	
0.45	Resin-bonded glass fiber media matrix on a polyester substrate
1	Resin-bonded glass fiber media matrix on a polyester substrate (positive zeta potential in certain fluids)
Support / drainage	Polypropylene mesh
Core / cage / end caps	Polypropylene
Gaskets / o-rings	EPDM
Shell (DFA4201)	Polypropylene

Removal Ratings and Operating Conditions

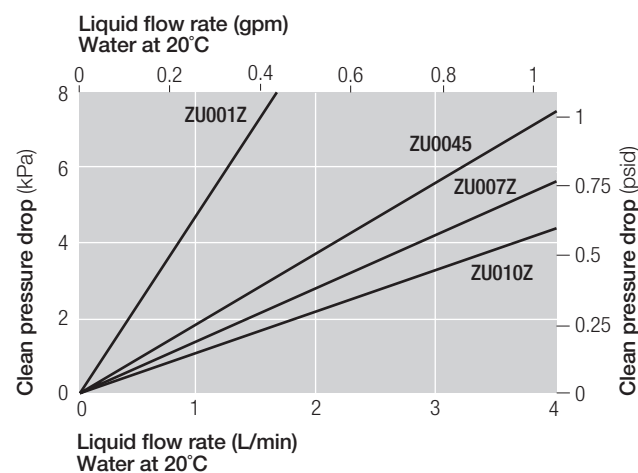
	AB / MCY / PUY	DFA4201
Removal ratings [liquid] (µm)	0.1, 0.2, 0.45, 0.7, 1	
Maximum operating temperature (liquid service in compatible fluid)	80°C / 176°F	38°C / 100°F
Maximum forward differential pressure	AB / MCY 0.55 MPa @ 20°C / 80 psid @ 68°F 0.41 MPa @ 80°C / 60 psid @ 176°F PUY 0.55 MPa @ 20°C / 80 psid @ 68°F 0.31 MPa @ 80°C / 45 psid @ 176°F	
Maximum operating pressure	See housing label	0.51 MPa @ 38°C / 75 psig @ 100°F

Pressure Drop vs. Liquid Flow Rate¹

AB1 / MCY1001 (254 mm / 10 in cartridge)

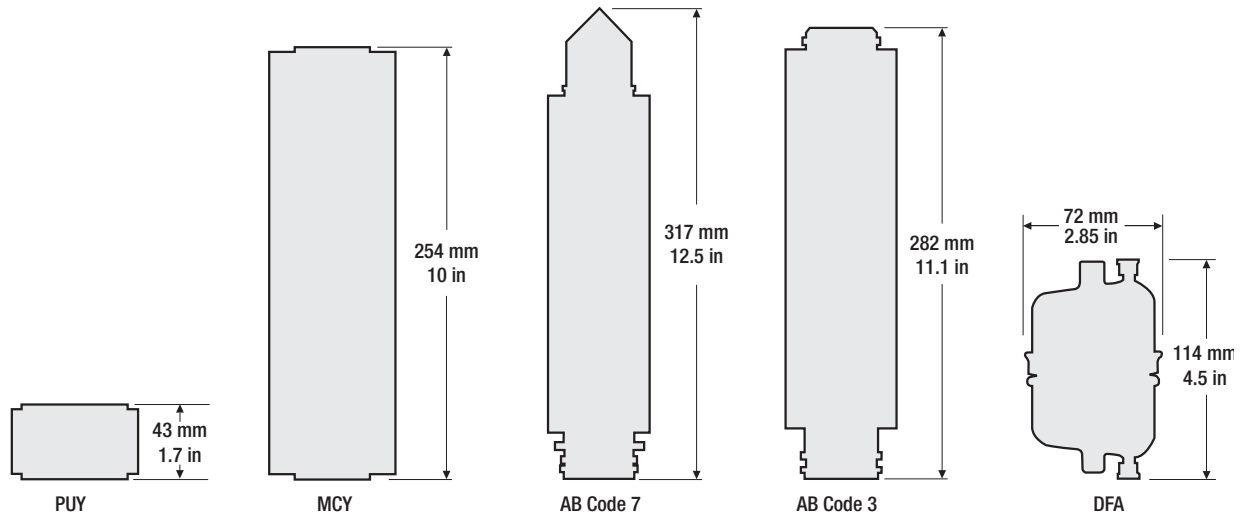


DFA4201



¹ For Liquids with a viscosity differing from water, multiply the pressure drop by the viscosity in centipoise.

Configurations and Dimensions (nominal)



Part Numbers / Ordering Information²

Lab Test Filter

PUY01 [2] J³

Double Open-Ended Filter

MCY1001 [2] J³

Single Open-Ended Filter

AB [1] [2] [3] [4]

Capsule Filter

DFA4201 [2]

Table 1

Code	Length
1	10 inch
2	20 inch
3	30 inch

Table 2

Code	Removal Ratings (µm)
ZU001Z	0.1 ⁴
ZU002Z	0.2 ⁴
ZU0045	0.45
ZU007Z	0.7
ZU010Z	1

Table 3

Code	O-ring Specifications
3	AS568A-222
7	AS568A-226

Table 4

Code	O-ring Materials
H1	FEP Encapsulated Fluoroelastomer
J	EPDM (Standard)

² Not all removal ratings are available in each filter style. Please contact Pall for the part number availability.

³ This filter only available with EPDM gaskets.

⁴ Removal rating based on PSL sphere retention with positive zeta potential media

Specifications and availability: The information provided in this literature was reviewed for accuracy at the time of publication. Product availability may be subject to change without notice. For current information, consult your local Pall distributor or contact Pall Corporation directly.



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