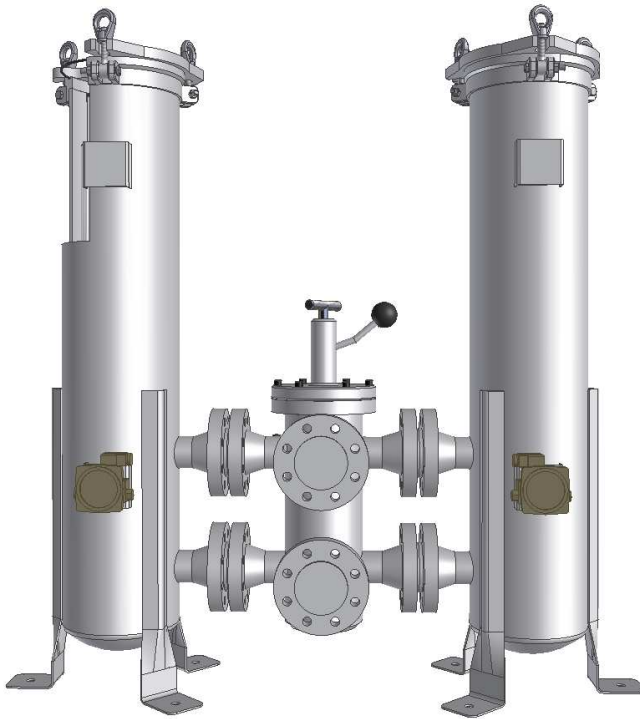


DLF/LFM - High Flow Duplex Assemblies

Flow rates to 560 lpm, 150 gpm / DLFM flow rate to 16875 lpm, 4500 gpm



TYPICAL APPLICATIONS

- Uptime critical & continuous operations
- Pulp and Paper
- Hydraulic and Lubrication oil
- Fuel and Fuel oil
- Rolling mill oil
- Processing liquids
- Bulk oil handling - Transfer and clean up
- Off-line systems and flushing
- Power generation
- Primary metals
- Mobile flushing systems
- Particulate and water removal
- Transfer line machining coolants
- Large gearbox filtration
- High flow Return-line filtration

PRODUCT SPECIFICATIONS & FEATURES

Max Flow Rate Visc: 150 SUS, 32 cSt		Recommended Series	
150 gpm (560 lpm)		LF Double length	
4500 gpm (16875 lpm)		DLFM multiple element series (call for sizing assistance)	
Operating Pressure		Standard 150 psi (10 bar)	
		Available up to 450 psi (30 bar)	
Pressure Indicators			
Up to 250 psi Operating		Differential pressure indicator (dual pressure gauges available)	
450 psi and higher		Differential pressure Indicator required	
Maximum Temperature		Standard 250°F	
		Call for high temperature specs	

- True 6-way transfer valve allows change over with one valve.
- Integrated pressure equalization and fill line.
- Carbon steel construction standard (304 stainless steel available).
- Duplexing option available for continuous filtration during filter element change-out.
- HP106 and HP107 element series have integral bypass valve (new bypass every time element is changed avoids bypass failure).
- Easy to service swing-lid design with eye nuts assures no lost hardware, hydraulic lift option available.
- Marine grade epoxy finish for non-stainless steel assemblies.
- Features Hy-Pro coreless element design with positive o-ring seals
- High differential pressure valve transfer capabilities.
- Drain and cleanout port allows for quick draining and easy access for sump cleanout.
- Hy-Pro Dualglass filter element media technology validated per ISO16889 multipass and DFE (modified ISO16889) industry leading multipass testing.

ASME U & UM CODE REQUIREMENTS

Standard vessels are manufactured to ASME code standards, but not certified. ASME U and UM code certification is available as an option. See table 11 under the duplex assembly housing selection ordering detail.



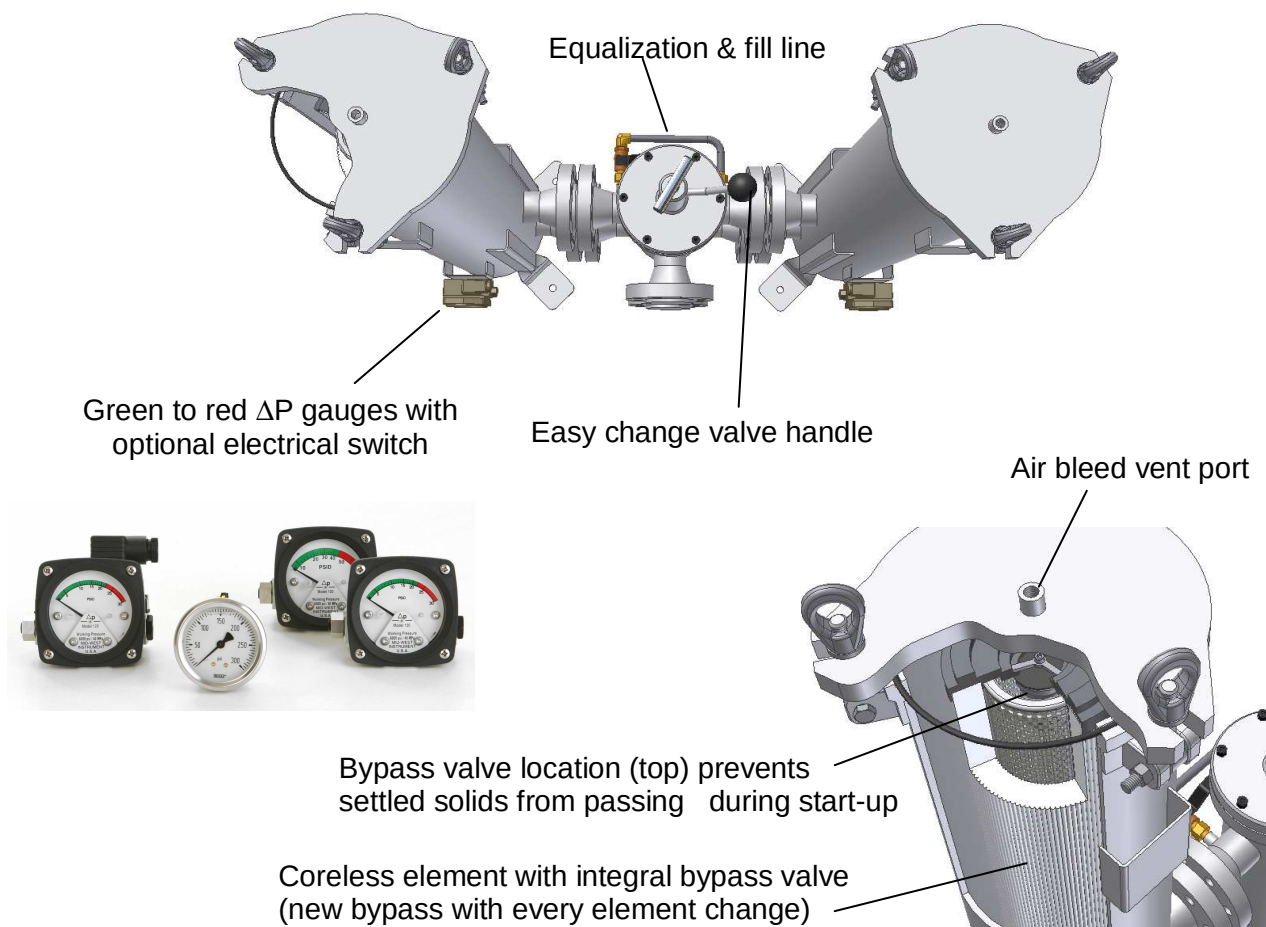
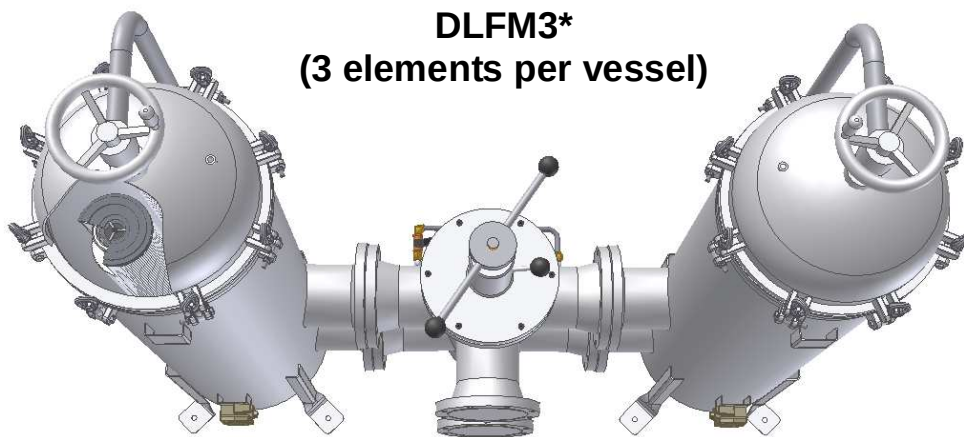
FILTRATION

DLF & DLFM DUPLEX PRODUCT FEATURES

Top loading housing minimizes mess

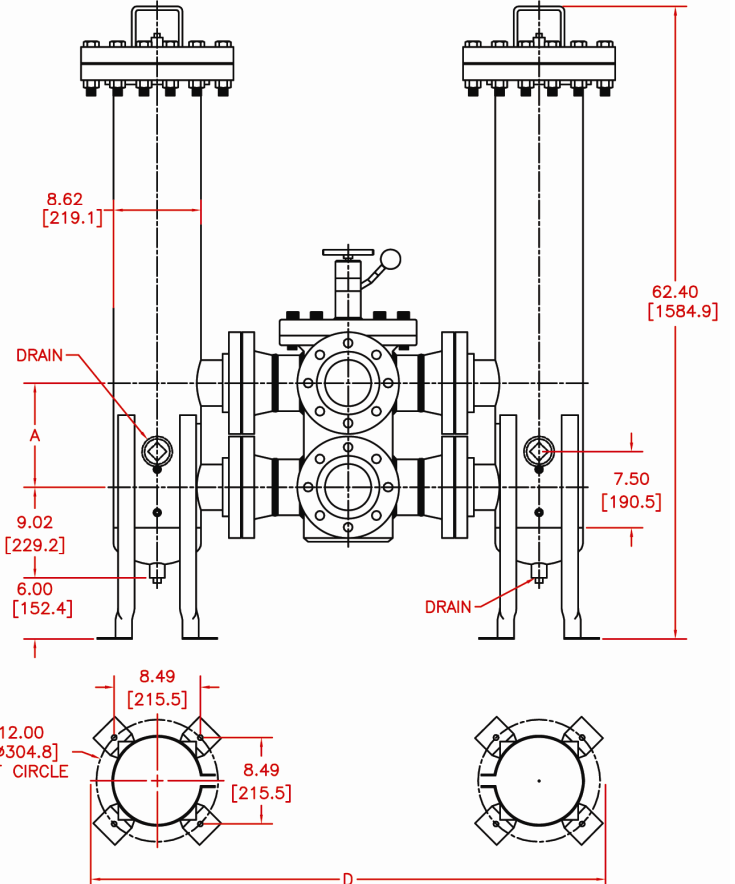
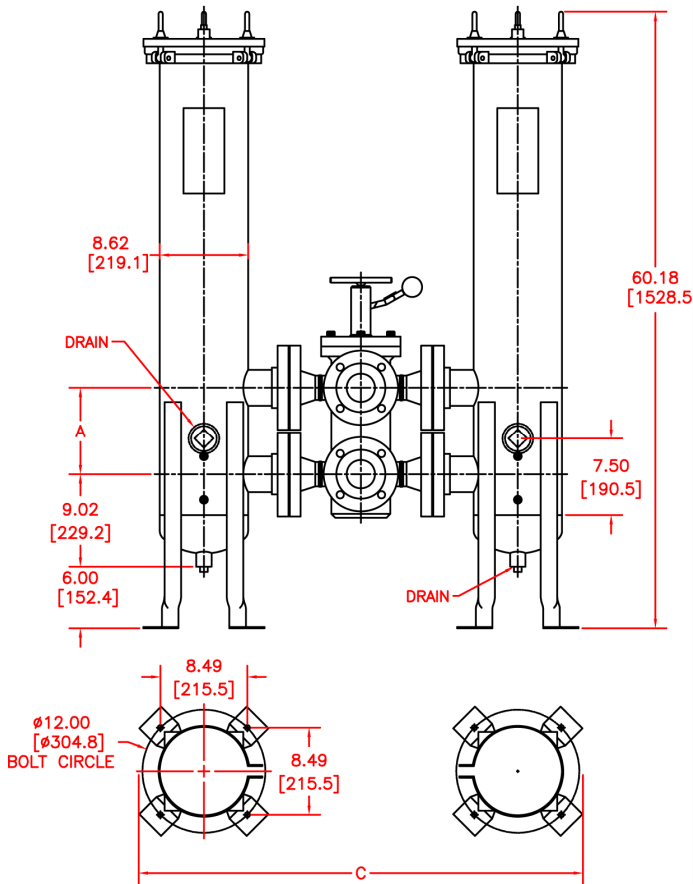
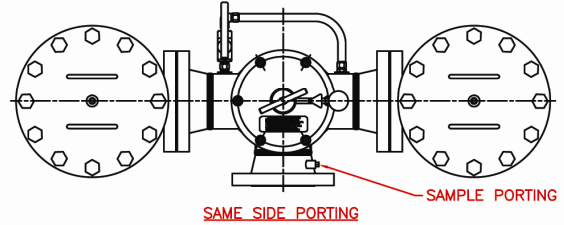
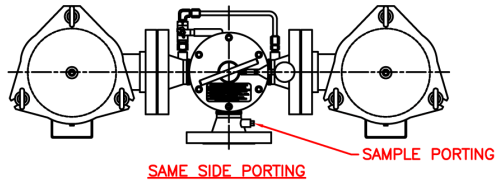
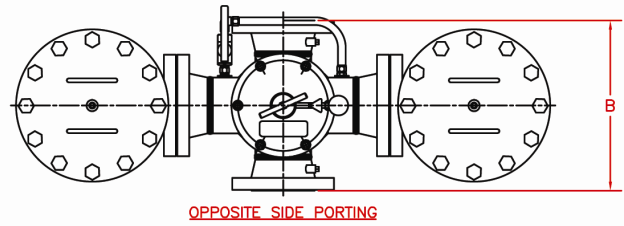
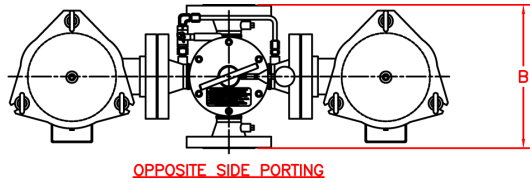
No tools required for cover removal
150psi (10 bar) & 250 psi (17 bar)

DLF* (single element)

DLFM3*
(3 elements per vessel)

DLF - up to 250 PSI (17 BAR)

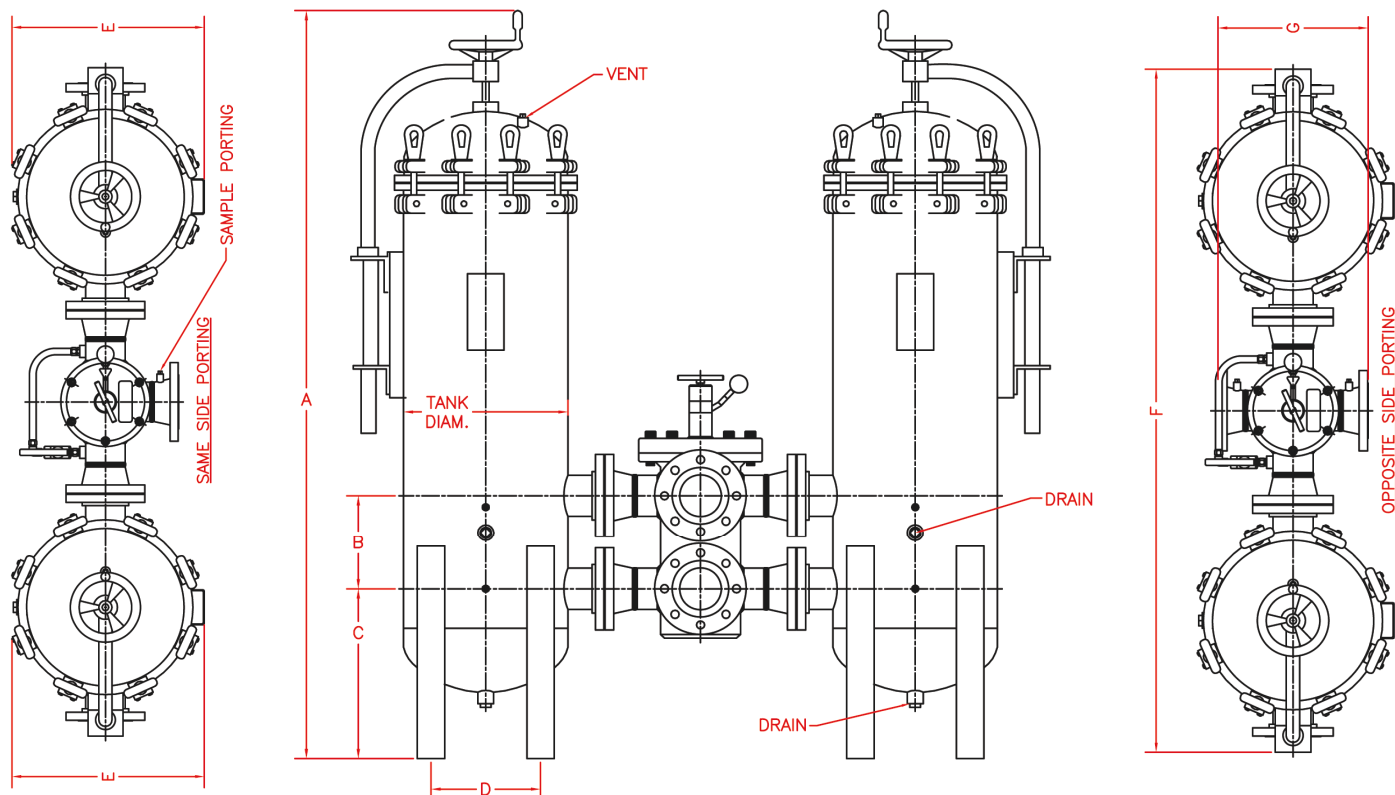
DLF - 450 PSI (30 BAR)



Dimension	Port Size ANSI Flange (DIN Flange)					
	2" (050)	3" (150#) (080, 10 bar)	3" (300#) (080, 17 bar)	4" (100)	6" (150#) (150, 10 bar)	6" (300#) (150, 17 bar)
A	6.75 (171,5)	7.75 (196,9)	8.50 (215,9)	10.25 (260,4)	11.50 (292,1)	13.00 (330,2)
B	14.00 (355,6)	14.00 (355,6)	14.00 (355,6)	16.75 (425,5)	19.75 (501,7)	19.75 (501,7)
C	41.35 (1050,3)	43.35 (1101,1)	43.35 (1101,1)	50.35 (1278,9)	55.35 (1405,9)	55.35 (1405,9)
D	41.70 (1059,2)	43.70 (1110,0)	43.70 (1110,0)	50.70 (1287,8)	55.70 (1414,8)	55.70 (1414,8)
Weight	389 lbs (180 kg)	451 lbs (205 kg)	490 lbs (225 kg)	544 lbs (250 kg)	721 lbs (330 kg)	835 lbs (380 kg)



DLFM* - 450 PSI (30 BAR)



Series	Elmt Qty.	Tank Diam.	Port Sizes	Weight Lbs (Kg)	A	B	C	D	E	F	G
DLFM3	3	16	2	1190 (541)	81.9 (2079,6)	6.8 (171,5)	18.5 (470,0)	10.0 (254,0)	19.5 (495,9)	63.5 (1612,9)	14.0 (355,6)
			3 (150 Lb)	1251 (568)	81.9 (2079,6)	7.8 (196,9)	18.5 (470,0)	10.0 (254,0)	19.5 (495,9)	65.5 (1663,7)	14.0 (355,6)
			3 (300 Lb)	1290 (586)	81.9 (2079,6)	8.5 (215,9)	18.5 (470,0)	10.0 (254,0)	19.5 (495,9)	65.5 (1663,7)	14.0 (355,6)
			4	1344 (611)	81.9 (2079,6)	10.3 (260,4)	18.5 (470,0)	10.0 (254,0)	19.5 (495,9)	72.5 (1841,5)	16.8 (425,5)
DLFM4	4	18	2	1360 (618)	81.9 (2079,6)	6.8 (171,5)	18.5 (470,0)	12.0 (304,8)	21.9 (557,9)	67.5 (1714,5)	14.0 (355,6)
			3 (150 Lb)	1421 (646)	81.9 (2079,6)	7.8 (196,9)	18.5 (470,0)	12.0 (304,8)	21.9 (557,9)	69.5 (1765,3)	14.0 (355,6)
			3 (300 Lb)	1460 (664)	81.9 (2079,6)	8.5 (215,9)	18.5 (470,0)	12.0 (304,8)	21.9 (557,9)	69.5 (1765,3)	14.0 (355,6)
			4	1514 (688)	81.9 (2079,6)	10.3 (260,4)	18.5 (470,0)	12.0 (304,8)	21.9 (557,9)	76.5 (1943,1)	16.8 (425,5)
DLFM9	9	24	3 (150Lb)	1811 (823)	81.9 (2079,6)	7.8 (196,9)	18.5 (470,0)	18.0 (457,2)	29.3 (743,9)	81.5 (2070,1)	14.0 (355,6)
			3 (300 Lb)	1850 (841)	81.9 (2079,6)	8.5 (215,9)	18.5 (470,0)	18.0 (457,2)	29.3 (743,9)	81.5 (2070,1)	14.0 (355,6)
			4	1904 (865)	81.9 (2079,6)	10.3 (260,4)	18.5 (470,0)	18.0 (457,2)	29.3 (743,9)	88.5 (2247,9)	16.8 (425,5)
			6 (150 Lb)	2081 (946)	81.9 (2079,6)	11.5 (292,1)	18.5 (470,0)	18.0 (457,2)	29.3 (743,9)	93.5 (2374,9)	19.8 (501,7)
DLFM14	14	30	6 (300 Lb)	2195 (998)	81.9 (2079,6)	13.0 (330,2)	18.5 (470,0)	18.0 (457,2)	29.3 (743,9)	93.5 (2374,9)	19.8 (501,7)
			3 (150 Lb)	2141 (973)	81.9 (2079,6)	7.8 (196,9)	18.5 (470,0)	24.0 (609,6)	36.6 (929,8)	93.5 (2374,9)	14.0 (355,6)
			3 (300 Lb)	2180 (991)	81.9 (2079,6)	8.5 (215,9)	18.5 (470,0)	24.0 (609,6)	36.6 (929,8)	93.5 (2374,9)	14.0 (355,6)
			4	2234 (1015)	81.9 (2079,6)	10.3 (260,4)	18.5 (470,0)	24.0 (609,6)	36.6 (929,8)	100.5 (2552,7)	16.8 (425,5)
DLFM22	22	36	6 (150 Lb)	2411 (1095)	81.9 (2079,6)	11.5 (292,1)	18.5 (470,0)	24.0 (609,6)	36.6 (929,8)	105.5 (2679,7)	19.8 (501,7)
			6 (300 Lb)	2525 (1148)	81.9 (2079,6)	13.0 (330,2)	18.5 (470,0)	24.0 (609,6)	36.6 (929,8)	105.5 (2679,7)	19.8 (501,7)
			4	2934 (1334)	81.9 (2079,6)	10.3 (260,4)	24.5 (622,3)	30.0 (762,0)	43.9 (1115,8)	112.5 (2857,5)	16.8 (425,5)
			6 (150 Lb)	3111 (1414)	81.9 (2079,6)	11.5 (292,1)	24.5 (622,3)	30.0 (762,0)	43.9 (1115,8)	117.5 (2984,5)	19.8 (501,7)
DLFM31	31	42	6 (300 Lb)	3225 (1465)	81.9 (2079,6)	13.0 (330,2)	24.5 (622,3)	30.0 (762,0)	43.9 (1115,8)	117.5 (2984,5)	19.8 (501,7)
			8	3595 (1634)	81.9 (2079,6)	14.0 (355,6)	24.5 (622,3)	30.0 (762,0)	43.9 (1115,8)	122.0 (3098,8)	30.5 (774,7)
			6 (150 Lb)	5831 (2650)	81.9 (2079,6)	11.5 (292,1)	24.5 (622,3)	36.0 (914,4)	51.3 (1301,8)	129.5 (3289,3)	19.8 (501,7)
			6 (300 Lb)	5945 (2702)	81.9 (2079,6)	13.0 (330,2)	24.5 (622,3)	36.0 (914,4)	51.3 (1301,8)	129.5 (3289,3)	19.8 (501,7)
DLFM38	38	48	8	6315 (2870)	81.9 (2079,6)	14.0 (355,6)	24.5 (622,3)	36.0 (914,4)	51.3 (1301,8)	134.0 (3403,6)	30.5 (774,7)
			10	6640 (3018)	81.9 (2079,6)	CALL	24.5 (622,3)	36.0 (914,4)	51.3 (1301,8)	CALL	CALL
			8	7315 (3334)	81.9 (2079,6)	14.0 (355,6)	24.5 (622,3)	42.0 (1066,8)	58.6 (1487,8)	146.0 (3708,4)	30.5 (774,7)
			10	7640 (3472)	81.9 (2079,6)	CALL	24.5 (622,3)	42.0 (1066,8)	58.6 (1487,8)	CALL	CALL
DLFM38	38	48	12	7982 (3628)	81.9 (2079,6)	CALL	24.5 (622,3)	42.0 (1066,8)	58.6 (1487,8)	CALL	CALL

Dynamic Filter Efficiency (DFE) Testing

Revolutionary test methods assure that DFE rated elements perform true to rating even under demanding variable flow and vibration conditions. Today's industrial and mobile hydraulic circuits require elements that deliver specified cleanliness under ALL circumstances. Wire mesh supports the media to ensure against cyclical flow fatigue, temperature, and chemical resistance failures possible in filter elements with synthetic support mesh. Contact your distributor or Hy-Pro for more information and published articles on DFE testing.

Media Options

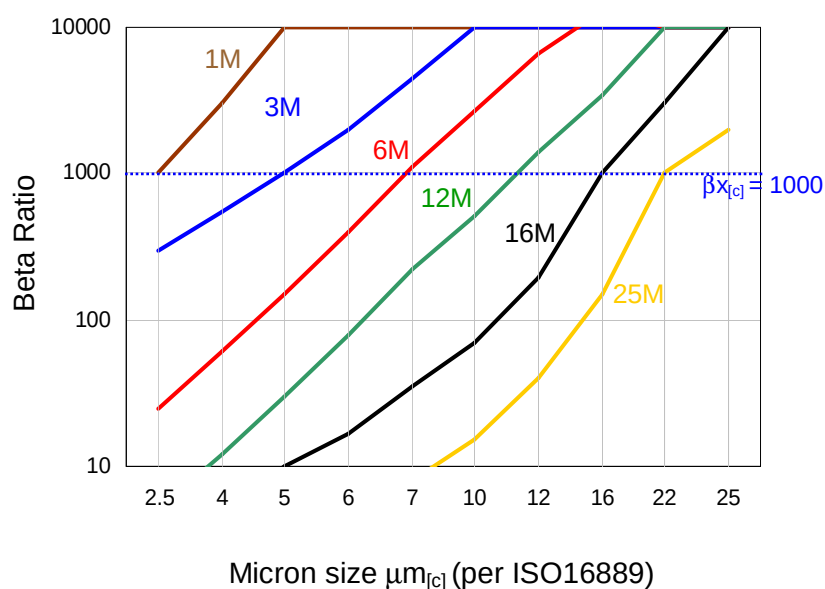
Through extensive testing we have developed media choices to handle any application. Options include G7 Dualglass, Dynafuzz (stainless fiber), and Wire mesh (stainless).

Fluid Compatibility

Petroleum based fluids, water glycol, polyol ester, phosphate ester, high water based fluids and many other synthetics. Contact us for seal material selection assistance.

FILTER MEDIA SPECIFICATIONS

Glass Media Code Filtration Efficiency (Beta Ratio) vs Micron Size



media code	media description
A	G7 Dualglass high performance media combined with water removal scrim. $\beta_{x[c]} = 1000$ ($\beta_x = 200$)
M	G7 Dualglass our latest generation of DFE rated, high performance glass media for all hydraulic & lubrication fluids. $\beta_{x[c]} = 1000$ ($\beta_x = 200$)
W	Stainless steel wire mesh media $\beta_{x[c]} = 2$ ($\beta_x = 2$) nominally rated

Hy-Pro G7 Dualglass media performance

