

# LOW PRESSURE FILTERS

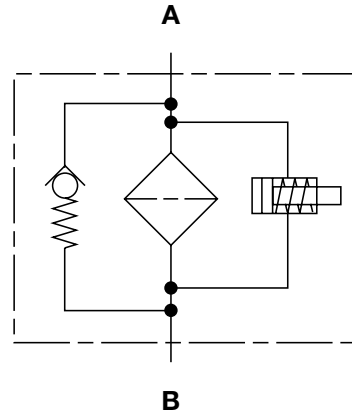
## RFL Welded Series

Inline Filters

230 psi • up to 3900 gpm



### Hydraulic Symbol



### Features

- Models 1300 to 15000 are made of rolled steel housings with bolt-on steel lids; Stainless steel models are available.
- ANSI flange connections for each filter size provide maximum connection flexibility eliminating additional adapters and intermediate flanges.
- Inlet and outlet connections are located on opposite sides of the housings.
- Clogging indicators have no external dynamic seal. High reliability is achieved and magnetic actuation eliminates a leak point.

Notes: This filter is configured with an .....R..... type (return/low pressure) element, so if the filter requires a bypass, the bypass is located in the closed end cap of the cartridge element.

Most states and local jurisdictions in the United States require pressure vessels to be ASME stamped. It is the responsibility of the end customer to research and fully understand the ASME code requirements of the jurisdiction this filter will ultimately be installed in, and to fully communicate these requirements to HYDAC.

### Technical Specifications

<b>Mounting Method</b>	Floor mounted legs
<b>Port Connection</b>	<b>Typical Connections</b>
1300/1320	4" ANSI 150# Flange
2500/2520	6" ANSI 150# Flange
4000/4020	8" ANSI 150# Flange
5200 - 7820	10" ANSI 150# Flange
15000/15020	12" ANSI 150# Flange
<b>Flow Direction</b>	Inlet & Outlet: Side
<b>Construction Materials</b>	
Housing, Lid	Steel
Note: Please contact HYDAC for available stainless steel models.	
<b>Flow Capacity</b>	
1300/1320	350 gpm (1300 lpm)
2500/2520	650 gpm (2500 lpm)
4000/4020	1050 gpm (4000 lpm)
5200/5220	1400 gpm (5200 lpm)
6500/6520	1700 gpm (6500 lpm)
7800/7820	2050 gpm (7800 lpm)
15000/15020	4000 gpm (15000 lpm)
<b>Housing Pressure Rating</b>	
Max. Allowable Working Pressure	150 psi (10 bar) <i>(standard)</i>
	232 psi (16 bar) <i>(optional)</i>
Fatigue Pressure	Contact HYDAC
Burst Pressure	Contact HYDAC
<b>Element Collapse Pressure Rating</b>	
ON, W/HC	290 psid (20 bar)
ECON2, BN4AM, AM, P/HC	145 psid (10 bar)
<b>Fluid Temperature Range</b>	14°F to 212°F (-10°C to 100°C)
Consult HYDAC for applications below 14°F (-10°C)	
<b>Fluid Compatibility</b>	Compatible with all hydrocarbon based, synthetic, water glycol, oil/water emulsion, and high water based fluids when the appropriate seals are selected.
<b>Indicator Trip Pressure</b>	
ΔP = 29 psid (2 bar) -10% <i>(standard)</i>	
ΔP = 72 psid (5 bar) -10% <i>(optional)</i>	
<b>Bypass Valve Cracking Pressure</b>	
ΔP = 43 psid (3 bar) +10% <i>(standard)</i>	
ΔP = 87 psid (6 bar) +10% <i>(optional)</i>	

### Applications



Gearboxes



Industrial



Power Generation



Pulp & Paper



Shipbuilding



Steel / Heavy Industry

## Model Code

<b>Filter Type</b> _____		<b>RFL</b>	<b>ON</b>	<b>1300</b>	<b>C</b>	<b>T</b>	<b>10</b>	<b>D</b>	<b>1</b>	<b>.</b>	<b>X</b>	<b>/</b>	<b>ZU</b>	<b>150</b>	<b>V</b>	<b>_____</b>	<b>DH-L110</b>
<b>Element Media</b> _____																	
ON = Optimicron®		XSX = Stat-X®															
BN/AM = Betamicron®/Aquamicron®																	
ECON2 = ECOmicron®		AM = Aquamicron®															
W/HC = Wire Mesh		P/HC = Polyester															
<b>Size</b> _____																	
1300/ 1320/ 2500/ 2520/ 4000/ 4020/ 5200/ 5220/																	
6500/ 6520/ 7800/ 7820/ 15000/ 15020																	
<b>Operating Pressure</b> _____																	
B = 150 psi (10 bar)		C = 232 psi (16 bar)															
<b>Type of Connection</b> _____																	
<b>ANSI Flange Ports</b>		<b>DIN DN Ports</b>															
3 = 2" ANSI Flange (sz. 1300)		L = DIN DN 50 2" Flange (sz. 1300)															
4 = 3" ANSI Flange (sz. 1300 - 2520)		Q = DIN DN 80 3" Flange (sz. 1300 - 2520)															
5 = 4" ANSI Flange (sz. 1300 - 7820)		R = DIN DN 100 4" Flange (sz. 1300 - 7820)															
7 = 6" ANSI Flange (sz. 2500 - 7820)		U = DIN DN 125 5" Flange (sz. 1320)															
8 = 8" ANSI Flange (sz. 4000 - 15020)		V = DIN DN 150 6" Flange (sz. 2500 - 7820)															
9 = 10" ANSI Flange (sz. 5200 - 15020)		W = DIN DN 200 8" Flange (sz. 4000 - 15020)															
10 = 12" ANSI Flange (sz. 15000 - 15020)		X = DIN DN 250 10" Flange (sz. 5200 - 15020)															
		Y = DIN DN 300 12" Flange (sz. 15000 - 15020)															
<b>Filtration Rating</b> (microns) _____																	
1, 3, 5, 10, 15, 20 = ON		3, 5, 10, 20 = XSX		3, 10 = BN4AM													
40 = AM		25, 50, 100, 200 = W/HC		10, 20 = P/HC		3, 5, 10, 20 = ECON2											
<b>Type of ΔP Clogging Indicator</b> _____																	
A, B, BM, C, D (Others available upon request, see Clogging Indicators section.)																	
<b>Type Code</b> _____																	
1																	
<b>Modification Number</b> (latest version always supplied) _____																	
<b>Country of Installation</b> _____																	
(omit) = standard (non coded)		ZU = ASME Coded with "ASME" Stamp															
<b>Flange</b> _____																	
(omit) = DIN Flange Connection to DIN 2501/1		150 = 150 lbs ANSI Flange															
<b>Seals</b> _____																	
(omit) = Nitrile rubber (NBR) (standard)		V = Fluorocarbon elastomer (FKM)															
<b>Bypass Valve</b> _____																	
(omit) = 43 psid (3 bar) (standard)																	
B1 = 14.5 psid (1 bar) (lubrication or coolant applications)																	
B6 = 87 psid (6 bar) (return line extended life)																	
KB = No Bypass (flushing system)		] not available with ECON2															
<b>Supplementary Details</b> _____																	
(omit) = Cover Lifting Device (Handle only)																	
DH = Cover Lifting Device (Davit lifting mechanism for sizes 4000 and larger, style may vary)																	
W = Indicator with brass piston (for water based fluids)																	
SO263 = Modification of elements for Skydrol or HYJET phosphate ester fluids																	
L24, L48, L110, L220 = Lamp for D-type clogging indicator (LXX, XX = voltage)																	
cRUus = Electrical indicator with underwriter's approval																	
SFREE = Element specially designed to minimize electrostatic charge generation																	
SO376 = Modification of ON and W/HC elements for HFA, HFB, HFC, and HFD flame retardant liquids																	

## Replacement Element Model Code

	1300	R	010	ON	/ V	B6
<b>Size</b>	0850, 1300, 1700, 2600					
<b>Filtration Rating</b> ( <i>micron</i> )	1, 3, 5, 10, 15, 20 = ON 3, 5, 10, 20 = XSX 3, 5, 10, 20 = ECON2 25, 50, 100, 200 = W/HC	3, 10 = BN4AM 40 = AM 10, 20 = P/HC				
<b>Element Media</b>	ON, XSX, BN4AM, ECON2, AM, W/HC, P/HC					
<b>Seals</b>	(omit) = Nitrile rubber (NBR) ( <i>standard</i> ) V = Fluorocarbon elastomer (FKM)					
<b>Bypass Valve</b>	(omit) = 43 psid (3 bar) ( <i>standard</i> ) B1 = 17.4 psid (1 bar) B6 = 87 psid (6 bar) KB = No Bypass					
<b>Supplementary Details</b>	W = (same as above) SO263 = (same as above) SFREE = (same as above) SQ376 = (same as above)					

## Clogging Indicator Model Code

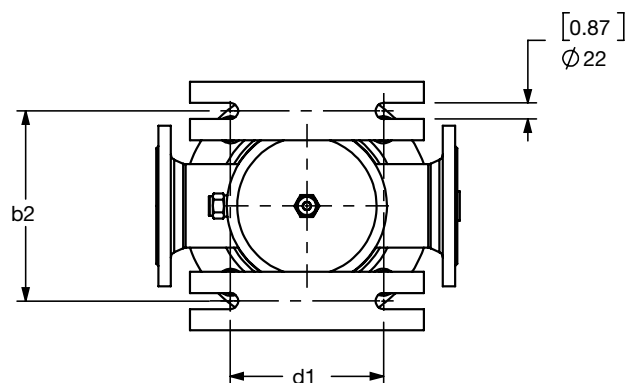
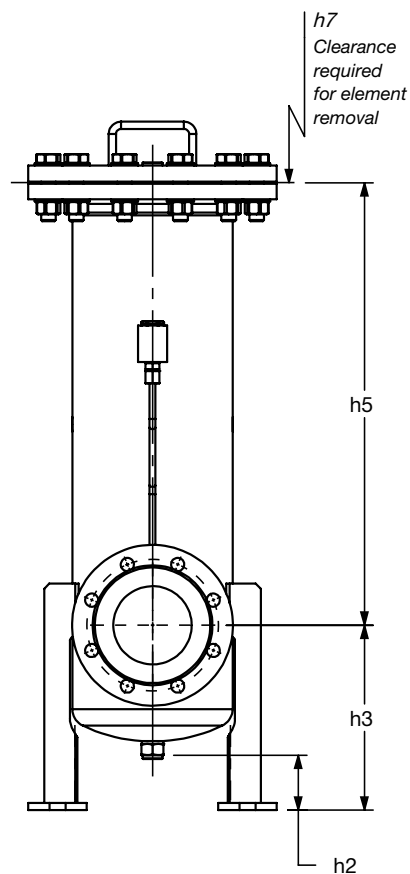
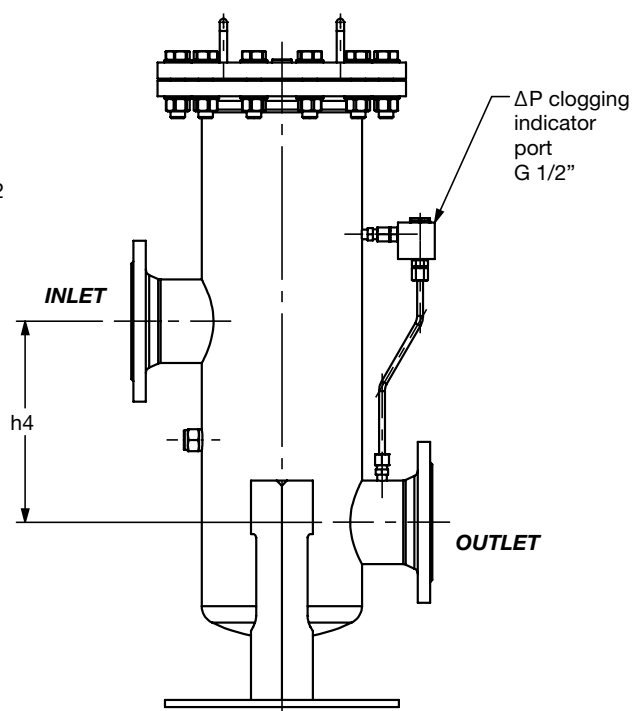
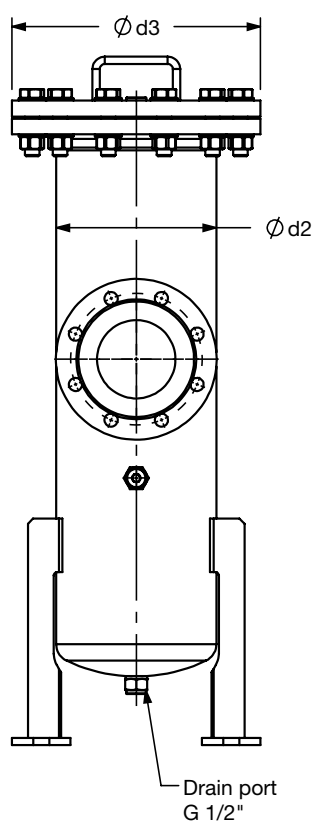
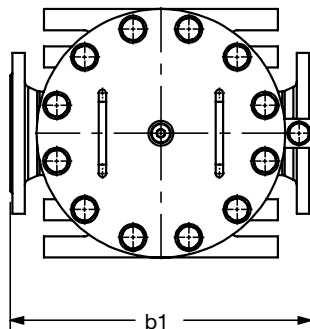
**Indicator Prefix** \_\_\_\_\_  
 VM = G 1/2 3000 psi  
**Trip Pressure** \_\_\_\_\_  
 2 = 29 psid (2 bar) (*standard*)  
 5 = 72 psid (5 bar) (*optional*)  
**Type of Indicator** \_\_\_\_\_  
 A = No indicator, plugged port  
 B = Pop-up indicator (*auto reset*)  
 BM = Pop-up indicator (*manual reset*)  
 C = electric switch - SPDT  
 D = electric switch & LED light – SPDT  
**Modification Number** \_\_\_\_\_  
**Supplementary Details** \_\_\_\_\_  
**Seals** \_\_\_\_\_  
 (omit) = Nitrile (NBR) (*standard*)  
 V = Fluorocarbon elastomer (FKM)  
**Light Voltage** (*D type indicators only*) \_\_\_\_\_  
 L24 = 24V      L110 = 110V  
**Thermal Lockout** (*VM, VD types C, D, J, and J4 only*) \_\_\_\_\_  
 T100 = Lockout below 100°F  
**Underwriters Approval** (*VM, VD types C, D, J, and J4 only*) \_\_\_\_\_  
 cRUus = Electrical indicator with underwriter's approval

(For additional details and options, see Clogging Indicators section.)

*Model Codes Containing RED are non-stock items — Minimum quantities may apply – Contact HYDAC for information and availability*

# LOW PRESSURE FILTERS

Dimensions  
RFL 1300 - 1320



Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print.

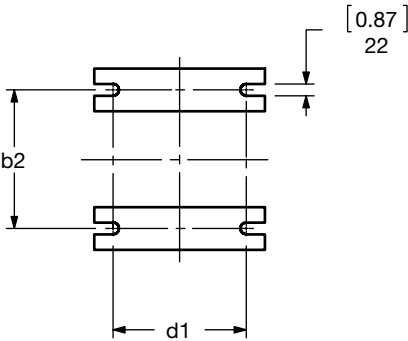
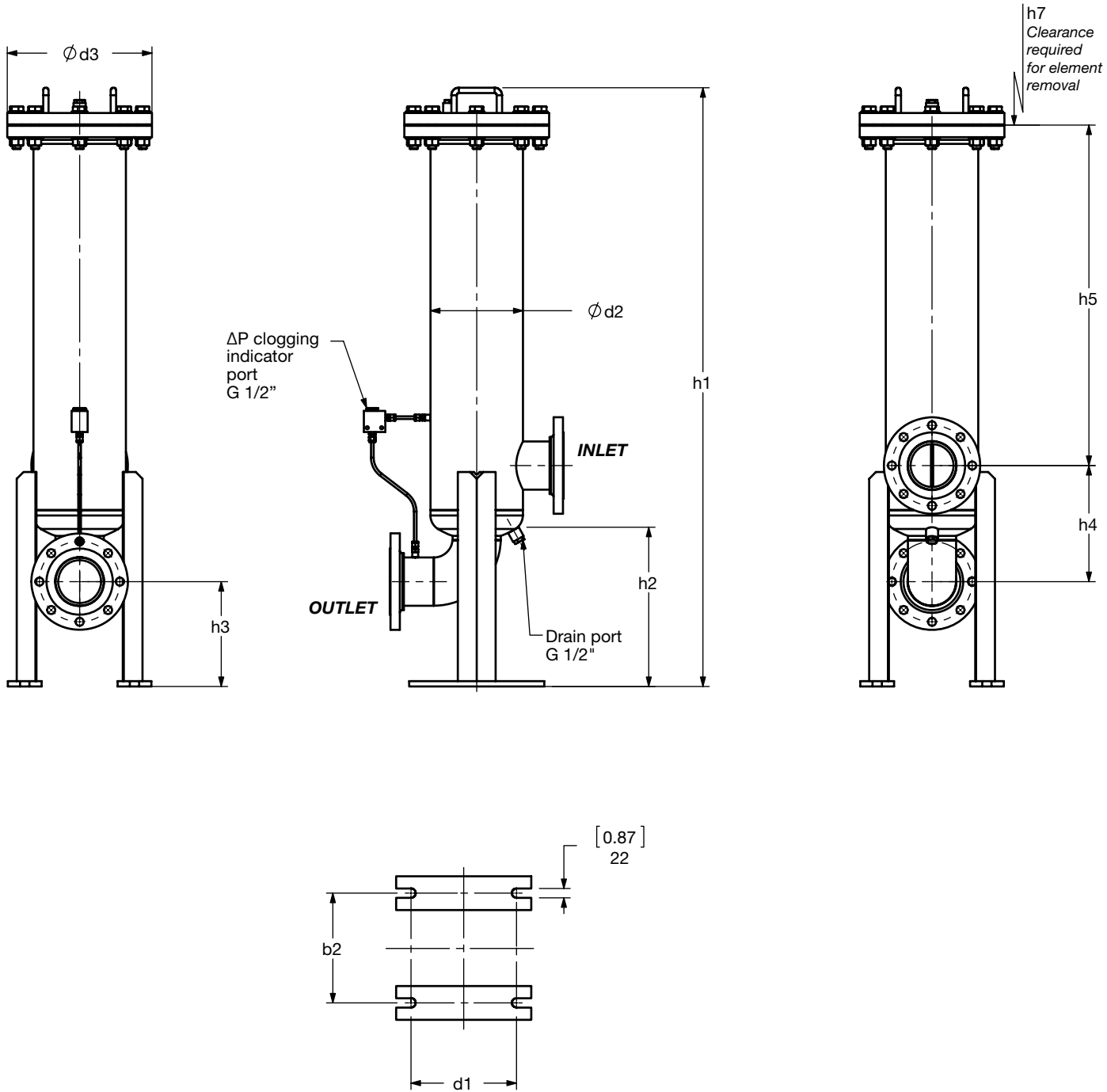
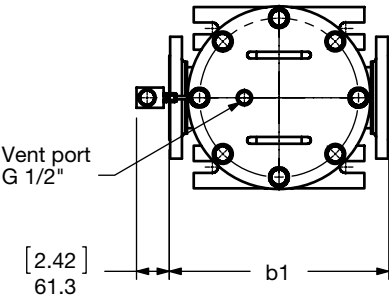
## Dimensions RFL 1300 - 1320

Size	Flange Port	b1	b2	d1	d2	d3	h1	h2	h3	h4	h5	h7	Wt. (lbs)	Use Bolt
RFL 1300	2" ANSI 150 lb RF	[16.22] 412	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382	[4.33] 110	[10.47] 266	[9.45] 240	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 940	141/172	5/8"-11 HEAVY HEX
	DIN DN 50	[16.22] 412	[10.24] 260	[9.84] 250"	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382	[4.33] 110	[10.98] 279	[8.94] 227	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 940"	141/172	M12
RFL 1300/1320	3" ANSI 150 lb RF	[16.22] 412	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382	[4.33] 110	[10.47] 266	[9.45] 240	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 94	141/179	5/8"-11 HEAVY HEX
	DIN DN 80	[16.22] 412	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382	[4.33] 110	[10.47] 266	[9.45] 240	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 940"	141/179	M16/ M16
	4" ANSI 150 lb RF	[16.22] 412	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382	[2.95] 75	[9.96] 253	[10.83] 275"	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 940"	64/179	5/8"-11 HEAVY HEX
	DIN DN 100	[16.22] 412	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[37] 942 [54.4] 1382"	[2.95] 75	[9.96] 253	[10.83] 275	[13.84] 354 [31.26] 794	[19.69] 500 [37.01] 940	64/179	M16/ M20
RFL 1320	DIN DN 125	[18.90] 480	[10.24] 260	[9.84] 250	[8.63] 219.1	[13.39] 340	[54.4] 1382	[2.75] 70	[9.96] 253	[13.78] 350	[29.82] 732	[37.01] 940	192	M16

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print..

# LOW PRESSURE FILTERS

Dimensions  
RFL 2500 - 2520



Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print.

## Dimensions RFL 2500 - 2520

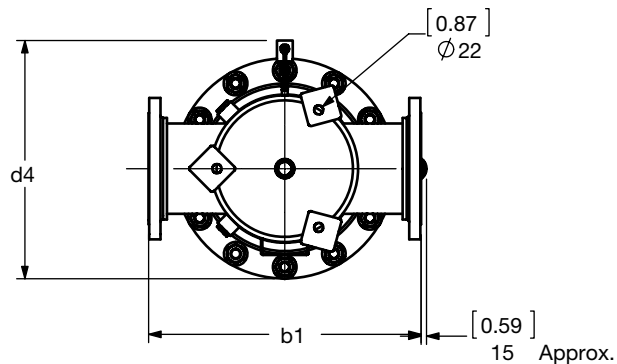
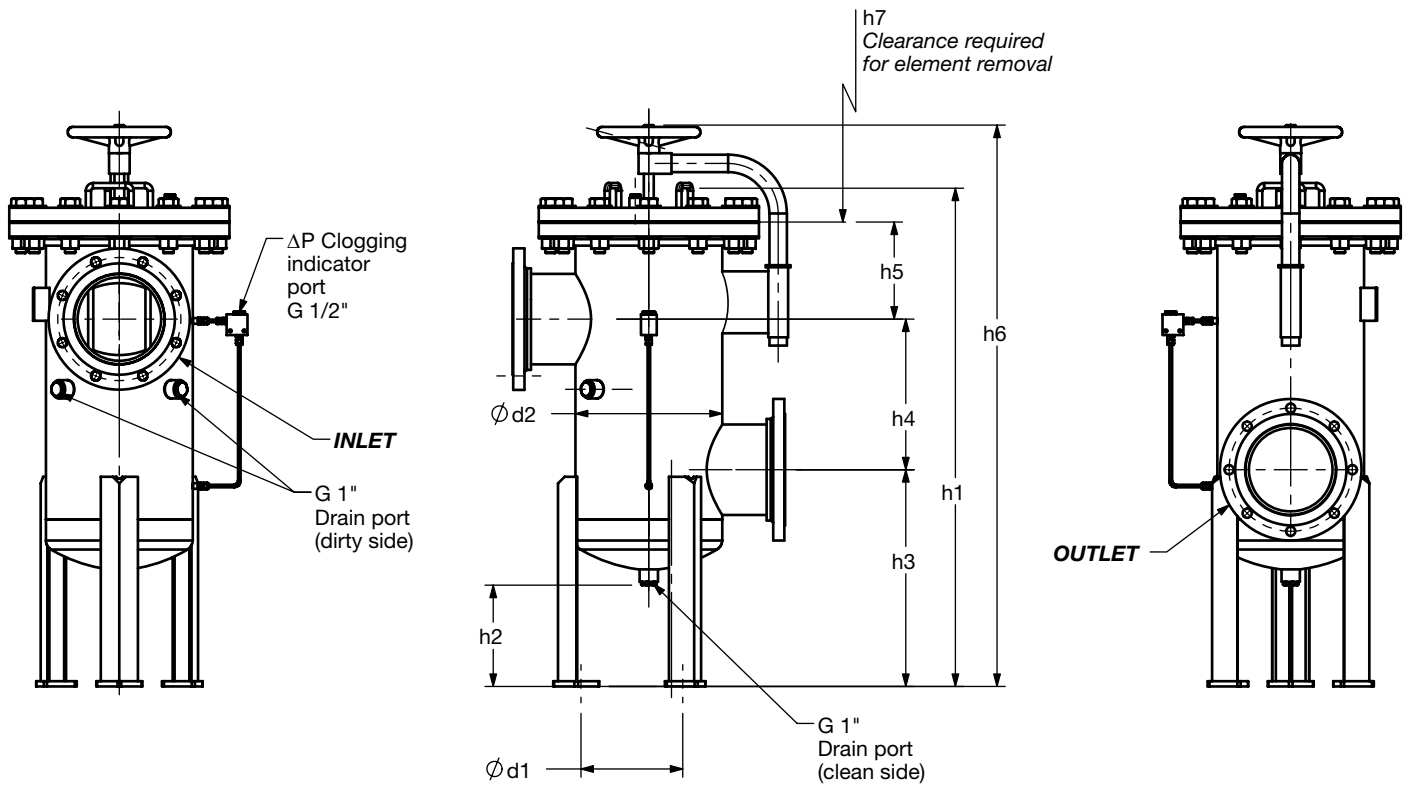
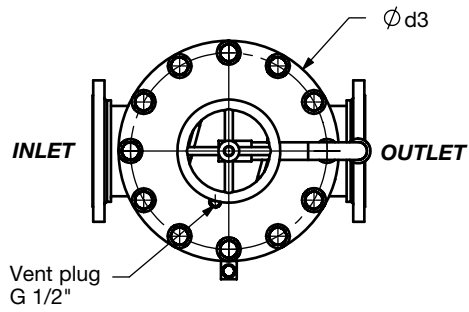
Size	Flange Port	b1	b2	d1	d2	d3	h1	h2	h3	h4	h5	h7	Wt. (lbs)	Use Bolt
RFL 2500/2520	3" ANSI 150 lb RF	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[38.98] 990 [54.33] 1380	[8.66] 220	[15.28] 388	[16.14] 410	[4.72] 120 [20.08] 510	[16.54] 420 [31.89] 810	160/192	5/8"-11 UNC HEAVY HEX
	DIN DN 80	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[38.98] 990 [54.33] 1380	[8.66] 220	[15.28] 388	[16.14] 410	[4.72] 120 [20.08] 510	[16.54] 420 [31.89] 810	160/192	M16X2
	4" ANSI 150 lb RF	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[41.34] 1050 [56.69] 1440	[8.66] 220	[17.24] 438	[11.97] 304	[9.29] 236 [24.65] 626	[16.54] 420 [31.89] 810	167/199	5/8"-11 UNC HEAVY HEX
	DIN DN 100	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[41.34] 1050 [56.69] 1440	[8.66] 220	[17.24] 438	[11.97] 304	[9.29] 236 [24.65] 626	[16.54] 420 [31.89] 810	167/199	M16X2
	DIN DN 125	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[41.34] 1050 [56.69] 1440	[8.66] 220	[17.24] 438	[14.96] 380	[6.30] 160 [21.65] 550	[16.54] 420 [31.89] 810	176/208	M16X2
	6" ANSI 150 lb RF	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[41.34] 1050 [56.69] 1440	[8.66] 220	[17.24] 438	[14.37] 365	[6.89] 175 [22.24] 565	[16.54] 420 [31.89] 810	185/217	3/4"-10 UNC HEAVY HEX
	DIN DN 150	[18.35] 466	[12.28] 312	[9.84] 250	[10.50] 273	[14.17] 360	[41.34] 1050 [56.69] 1440	[8.66] 220	[17.24] 438	[14.37] 365	[6.89] 175 [22.24] 565	[16.54] 420 [31.89] 810	185/217	M20X2.5

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print..

# LOW PRESSURE FILTERS

## Dimensions

RFL 4000 - 15020



Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print.

## Dimensions RFL 4000 - 15020

Size	Flange Port	b1	d1	d2	d3	d4	h1	h2	h3	h4	h5	h6	h7	Wt. (lbs.)	Use Bolt
RFL 4000/4020	DIN DN 100	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.40] 543	[42.48] 1079 [57.83] 1469	[10.47] 266	[18.7] 475	[11.97] 304	[8.70] 221 [26.02] 661	[48.03] 1220 [65.35] 1660	[16.54] 420 [31.89] 810	267 /323	M16X2
	4" ANSI 150 LB RF	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[42.48] 1079 [57.83] 1469	[10.47] 266	[18.7] 475	[11.97] 304	[8.70] 221 [26.02] 661	[48.03] 1220 [65.35] 1660	[16.54] 420 [31.89] 810	267 /323	5/8"-11 UNC HEAVY HEX
	DIN DN 125	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[46.02] 1169 [57.44] 1459	[10.47] 266	[20.67] 525	[14.96] 380	[7.28] 185 [22.64] 575	[51.57] 1310 [66.93] 1700	[16.54] 420 [31.89] 810	281 /337	M16X2
	6" ANSI 150 LB RF	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[46.02] 1169 [61.38] 1559	[10.47] 266	[20.67] 525	[14.96] 380	[7.87] 200 [23.23] 590	[52.17] 1325 [67.52] 1715	[16.54] 420 [31.89] 810	294 /350	3/4"-10 UNC HEAVY HEX
	DIN DN 150	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[46.02] 1169 [61.38] 1559	[10.47] 266	[20.67] 525	[14.96] 380	[7.87] 200 [23.23] 590	[52.17] 1325 [67.52] 1715	[16.54] 420 [31.89] 810	294 /350	M20X2.5
	8" ANSI 150 LB RF	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[47.4] 1204 [62.76] 1594	[10.47] 266	[20.67] 525	[14.37] 365	[9.25] 235 [24.61] 625	[52.95] 1345 [68.31] 1735	[16.54] 420 [31.89] 810	309 /365	3/4"-10 UNC HEAVY HEX
	DIN DN 200	[23.62] 600	[12.99] 330	[14.00] 355.6	[18.11] 460	[21.37] 543	[47.4] 1204 [62.76] 1594	[10.47] 266	[20.67] 525	[14.37] 365	[9.25] 235 [24.61] 625	[52.95] 1345 [68.31] 1735	[16.54] 420 [31.89] 810	309 /365	M20X2.5
RFL 5200/5220	DIN DN 100	[23.62] 600	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[45.04] 1144 [62.36] 1584	[9.61] 244	[18.31] 465	[11.97] 304	[11.69] 297 [29.02] 737	[50.63] 1286 [67.95] 1726	[19.69] 500 [37.01] 940	353 /450	M16X2
	4" ANSI 150 LB RF	[23.62] 600	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[45.04] 1144 [62.36] 1584	[9.61] 244	[18.31] 465	[11.97] 304	[11.69] 297 [29.02] 737	[50.63] 1286 [67.95] 1726	[19.69] 500 [37.01] 940	353 /450	5/8"-11 UNC HEAVY HEX
	DIN DN 125	[23.62] 600	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[49.45] 1256 [66.77] 1696	[9.61] 244	[20.67] 525	[14.96] 380	[10.67] 271 [27.99] 711	[54.96] 1396 [72.28] 1836	[19.69] 500 [37.01] 940	375 /472	M16X2
	DIN DN 150	[23.62] 600	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[49.45] 1256 [66.77] 1696	[9.61] 244	[20.67] 525	[14.37] 365	[11.26] 286 [28.58] 726	[54.96] 1396 [72.28] 1836	[19.69] 500 [37.01] 940	386 /483	M20X2.5
	6" ANSI 150 LB RF	[23.62] 600	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[49.45] 1256 [66.77] 1696	[9.61] 244	[20.67] 525	[14.37] 365	[11.26] 286 [28.58] 726	[54.96] 1396 [72.28] 1836	[19.69] 500 [37.01] 940	386 /483	3/4"-10 UNC HEAVY HEX
	DIN DN 200	[25.20] 640	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[49.45] 1256 [66.77] 1696	[9.61] 244	[20.67] 525	[14.37] 365	[11.26] 286 [28.58] 726	[54.96] 1396 [72.28] 1836	[19.69] 500 [37.01] 940	395 /492	M20X2.5
	8" ANSI 150 LB RF	[25.20] 640	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[49.45] 1256 [66.77] 1696	[9.61] 244	[20.67] 525	[14.37] 365	[11.26] 286 [28.58] 726	[54.96] 1396 [72.28] 1836	[19.69] 500 [37.01] 940	395 /492	3/4"-10 UNC HEAVY HEX
	DIN DN 250	[25.98] 660	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[52.13] 1324 [69.45] 1764	[9.61] 244	[22.05] 560	[17.72] 450	[9.29] 236 [26.61] 676	[57.72] 1466 [75.04] 1906	[19.69] 500 [37.01] 940	428 /525	M24X3
	10" ANSI 150 LB RF	[25.98] 660	[14.90] 380	[16.00] 406.4	[20.08] 510	[23.35] 593	[52.13] 1324 [69.45] 1764	[9.61] 244	[22.05] 560	[17.72] 450	[9.29] 236 [26.61] 676	[57.72] 1466 [75.04] 1906	[19.69] 500 [37.01] 940	428 /525	7/8"-9UNC HEAVY HEX

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print..

See next pages for other sizes of dimensions.



# LOW PRESSURE FILTERS

## Dimensions

### RFL 4000 - 15020

Size	Flange Port	b1	d1	d2	d3	d4	h1	h2	h3	h4	h5	h6	h7	Wt. (lbs.)	Use Bolt
RFL 6500/6520	DIN DN 100	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[11.97] 304	[13.23] 336 [30.55] 776	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	487/604	M16X2
	4" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[11.97] 304	[13.23] 336 [30.55] 776	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	487/604	5/8"-11UNC HEAVY HEX
	DIN DN 125	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.96] 380	[10.24] 260 [27.56] 700	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	496/613	M16X2
	DIN DN 150	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.37] 365	[10.83] 275 [28.15] 715	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	507/624	M20X2.5
	6" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.37] 365	[10.83] 275 [28.15] 715	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	507/ 624	3/4"-10UNC HEAVY HEX
	DIN DN 200	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[18.11] 460	[9.45] 240 [26.77] 680	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	540/657	M20X2.5
	8" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[18.11] 460	[9.45] 240 [26.77] 680	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	540/657	3/4"-10UNC HEAVY HEX
	DIN DN 250	[30.71] 780	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[17.72] 450	[9.84] 250 [27.17] 690	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	562/679	M24X3
	10" ANSI 150 LB RF	[30.71] 780	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[17.72] 450	[9.84] 250 [27.17] 690	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	562/679	7/8"-9UNC HEAVY HEX
RFL 7800/7820	DIN DN 100	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[11.97] 304	[13.23] 336 [30.55] 776	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	496/622	M16X2
	4" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[11.97] 304	[13.23] 336 [30.55] 776	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	496/622	5/8"-11UNC HEAVY HEX
	DIN DN 125	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.96] 380	[10.24] 260 [27.56] 700	[55.31] 1405 [72.64] 1845	[19.69] 500 [37.01] 940	505/631	M16X2
	6" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.37] 365	[10.24] 260 [27.56] 700	[54.72] 1390 [72.05] 1830	[19.69] 500 [37.01] 940	505/631	5/8"-11UNC HEAVY HEX
	DIN DN 150	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[49.61] 1260 [66.93] 1700	[10.04] 255	[21.26] 540	[14.37] 365	[10.83] 275 [28.15] 715	[54.72] 1390 [72.05] 1830	[19.69] 500 [37.01] 940	516/642	M20X2.5
	DIN DN 200	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[18.11] 460	[9.45] 240 [26.77] 680	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	549/675	M20X2.5
	8" ANSI 150 LB RF	[29.13] 740	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[18.11] 460	[9.45] 240 [26.77] 680	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	549/675	3/4"-10UNC HEAVY HEX
	DIN DN 250	[30.71] 780	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[17.72] 450	[9.84] 250 [27.17] 690	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	571/697	M24X3
	10" ANSI 150 LB RF	[30.71] 780	[18.90] 480	[20.00] 508	[24.41] 620	[27.51] 699	[54.33] 1380 [71.65] 1820	[10.04] 255	[23.62] 600	[17.72] 450	[9.84] 250 [27.17] 690	[60.04] 1525 [77.36] 1965	[19.69] 500 [37.01] 940	571/697	7/8"-9UNC HEAVY HEX

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.

For complete dimensions please contact HYDAC to request a certified print..

## Dimensions RFL 4000 - 15020

Size	Flange Port	b1	d1	d2	d3	d4	h1	h2	h3	h4	h5	h6	h7	Wt. (lbs.)	Use Bolt
RFL 15000/15020	DIN DN 200	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[56.1] 1425 [73.43] 1865	[10.35] 263	[25.79] 655	[14.37] 365	[12.99] 330 [30.31] 770	[64.17] 1630 [81.50] 2070	[19.69] 500 [37.01] 940	1047/1254	M20X2.5
	8" ANSI 150 LB RF	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[56.1] 1425 [73.43] 1865	[10.35] 263	[25.79] 655	[14.37] 365	[12.99] 330 [30.31] 770	[63.98] 1625 [81.50] 2070	[19.69] 500 [37.01] 940	1047/1254	3/4"-10UNC HEAVY HEX
	DIN DN 250	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[56.1] 1425 [73.43] 1865	[10.35] 263	[25.79] 655	[17.72] 450	[9.65] 245 [26.97] 685	[63.98] 1625 [81.50] 2070	[19.69] 500 [37.01] 940	1074/1280	M24X3
	10" ANSI 150 LB RF	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[56.1] 1425 [73.43] 1865	[10.35] 263	[25.79] 655	[17.72] 450	[9.65] 245 [26.97] 685	[63.98] 1625 [81.50] 2070	[19.69] 500 [37.01] 940	1074/1280	7/8"-9UNC HEAVY HEX
	DIN DN 300	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[58.86] 1495 [76.18] 1935	[10.35] 263	[26.38] 670	[20.28] 515	[9.25] 235 [26.57] 675	[66.93] 1700 [84.25] 2140	[19.69] 500 [37.01] 940	1129/1335	M24X3
	12" ANSI 150 LB RF	[39.37] 1000	[27.17] 690	[27.99] 711	[32.68] 830	[35.66] 906	[58.86] 1495 [76.18] 1935	[10.35] 263	[26.38] 670	[20.28] 515	[9.25] 235 [26.57] 675	[66.93] 1700 [84.25] 2140	[19.69] 500 [37.01] 940	1129/1335	7/8"-9UNC HEAVY HEX

Dimensions shown are [inches] millimeters for general information and overall envelope size only. Weights listed include element.  
For complete dimensions please contact HYDAC to request a certified print..

# LOW PRESSURE FILTERS

## Sizing Information

Total pressure loss through the filter is as follows:

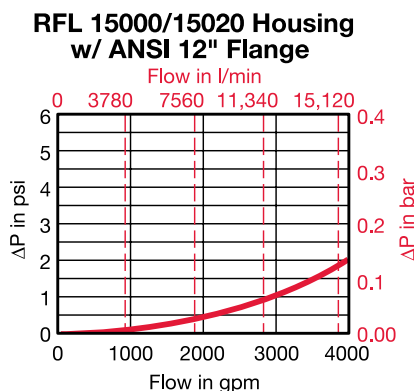
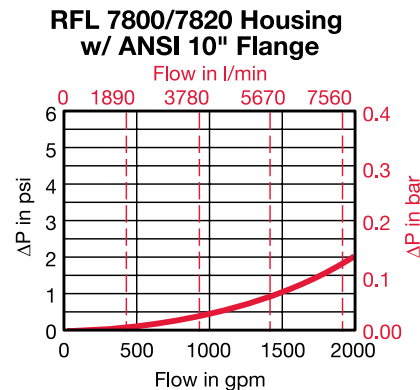
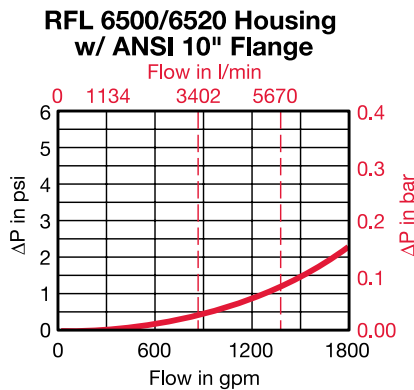
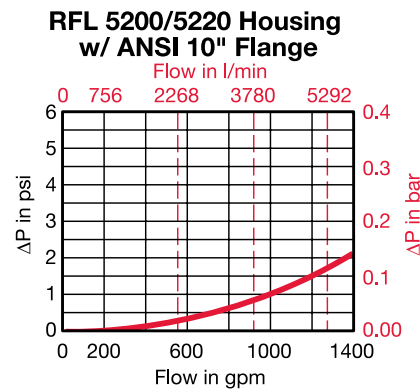
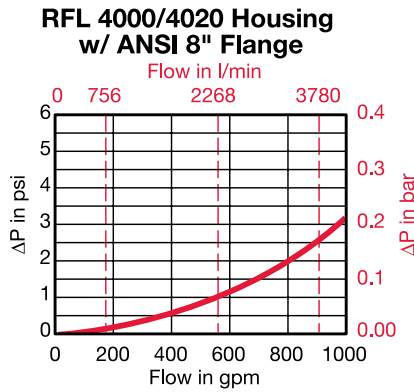
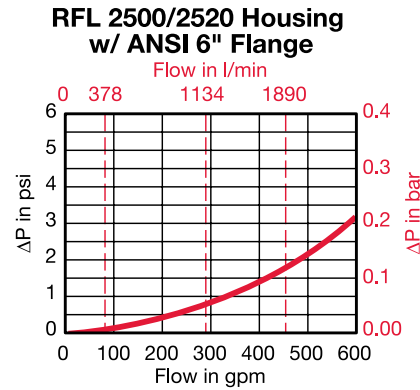
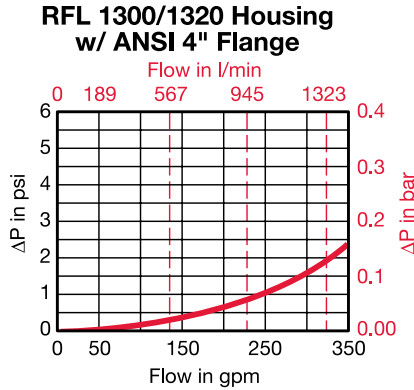
Assembly  $\Delta P$  = Housing  $\Delta P$  + Element  $\Delta P$

### Housing Curve:

Pressure loss through housing is as follows:

Housing  $\Delta P$  = Housing Curve  $\Delta P \times \frac{\text{Actual Specific Gravity}}{0.86}$

Adjustments must be made for viscosity & specific gravity of the fluid to be used! (see "Sizing HYDAC Filter Assemblies" in Section B - Overview)



## Required Element Per Housing

Housing Size	Element Size	Elements per Side
1300 / 1320	1300 / 2600	1 / 1
2500 / 2520	0850 / 1700	3 / 3
4000 / 4020	0850 / 1700	5 / 5
5200 / 5220	1300 / 2600	4 / 4
6500 / 6520	1300 / 2600	5 / 5
7800 / 7820	1300 / 2600	6 / 6
15000 / 15020	1300 / 2600	10 / 10

## Element K Factors

$\Delta P \text{ Elements} = \text{Elements (K)} \times \text{Flow Factor} \times \text{Flow Rate (gpm)} \times \frac{\text{Actual Viscosity (SUS)}}{141 \text{ SUS}} \times \frac{\text{Actual Specific Gravity}}{0.86}$   
 (From Tables Below)

Optimicron	...R...ON					
Size	1 µm	3 µm	5 µm	10 µm	15 µm	20 µm
0850 R XXX ON	0.152	0.072	0.055	0.032	0.024	0.02
1300 R XXX ON	0.094	0.04	0.032	0.019	0.018	0.012
1700 R XXX ON	0.074	0.035	0.029	0.015	0.014	0.01
2600 R XXX ON	0.046	0.02	0.016	0.01	0.009	0.006

Stat-X	...R...XSX				
Size	3 µm	5 µm	10 µm	20 µm	
0850 R XXX XSX	0.072	0.055	0.032	0.02	
1300 R XXX XSX	0.04	0.032	0.019	0.012	
1700 R XXX XSX	0.035	0.029	0.015	0.01	
2600 R XXX XSX	0.02	0.016	0.01	0.006	

ECOMICRON	...R...ECON2				
Size	3 µm	5 µm	10 µm	20 µm	
0850 R XXX ECON2	0.082	0.055	0.038	0.022	
1300 R XXX ECON2	0.044	0.033	0.022	0.016	
1700 R XXX ECON2	0.038	0.027	0.016	0.011	
2600 R XXX ECON2	0.022	0.016	0.011	0.005	

Betamicon/Aquamicon	...R...BN4AM	
Size	3 µm	10 µm
0850 R XXX BN4AM	0.154	0.049
1300 R XXX BN4AM	0.088	0.033
1700 R XXX BN4AM	0.071	0.027
2600 R XXX BN4AM	0.055	0.016

Aquamicon	...R...AM
Size	40 µm
0850 R 040 AM	0.040
1300 R 040 AM	0.026
1700 R 040 AM	0.020
2600 R 040 AM	0.013

Wire Screen	...R...W/HC
Size	25, 50, 100, 200 µm
0850 R XXX W/HC	0.003
1300 R XXX W/HC	0.002
1700 R XXX W/HC	0.001
2600 R XXX W/HC	0.001

Polyester	...R...P/HC	
Size	10 µm	20 µm
0850 R XXX P/HC	0.007	0.003
1300 R XXX P/HC	0.004	0.002
1700 R XXX P/HC	0.003	0.002
2600 R XXX P/HC	0.002	0.001

All Element K Factors in psi / gpm.