PF2

High Pressure In-line Filter Assembly

Ideal for a variety of applications including mobile applications, paper and saw mills, power generation, general industrial machine tools, and automotive manufacturing. With HF2 compatible port-to-port dimension, mounting pattern, and element design to meet the automotive manufacturing standard.

Max Flow Rate: 20 gpm (76 lpm)

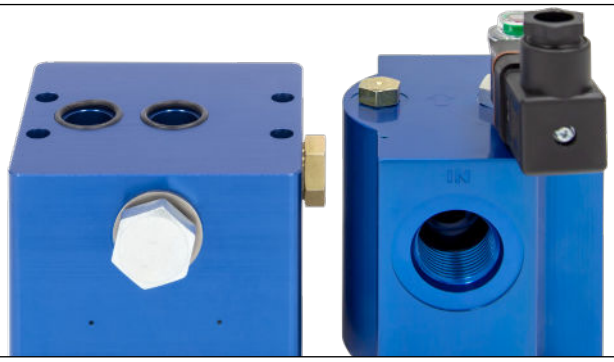
Max Operating Pressure: 4000 psi (275 bar)

Donaldson HY-PRO™

hyprofiltration.com/

Elements that go beyond industry standard.

G8 Dualglass and PE glass elements are DFE rated to assure performance even when exposed to the toughest hydraulic systems and provide unmatched particulate capture and retention to remove contamination from your hydraulic and lube oils, for good.

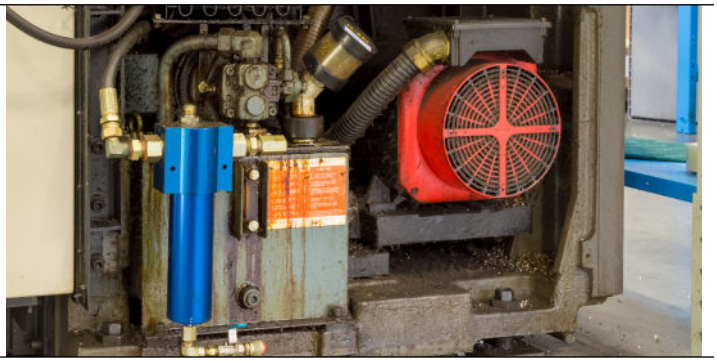


Small size, huge results.

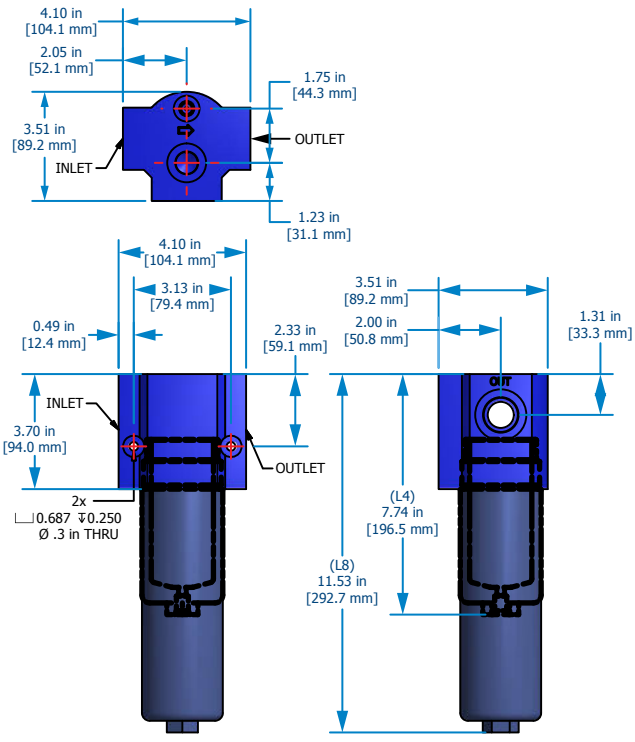
The compact size of PF2 filter assemblies make them the perfect addition directly upstream of your control valves and other sensitive components even in the tightest of spaces. And with two different mounting options to choose from, the incredible versatility of the PF2 makes it ideal for all of your high pressure filter applications.

Works under pressure.

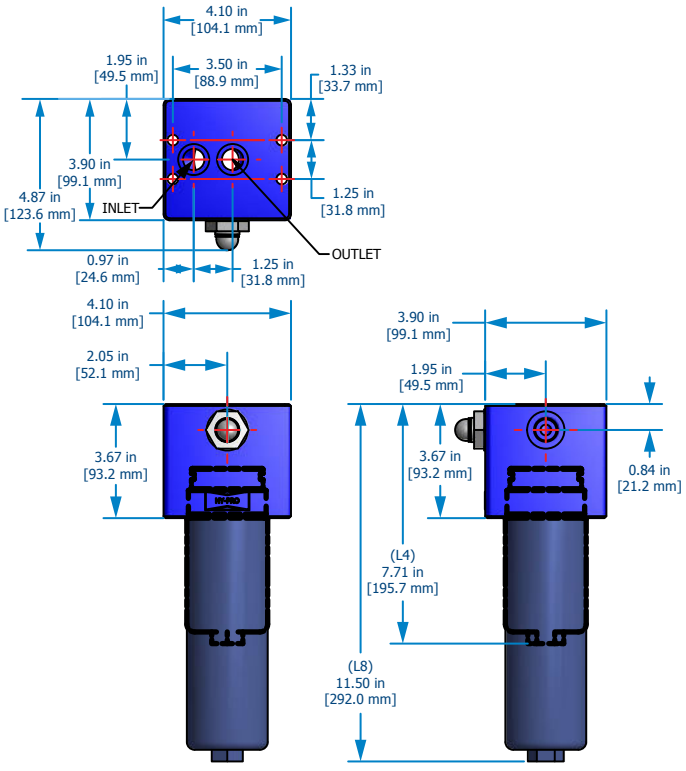
Applications for the PF2 include mobile, general industrial machine tools, paper mills, sawmills, and speed control circuits for power generation systems. So whether you're operating waste haulers, cement mixers, fire trucks, cranes, or CNC routers, you can be sure the PF2 will protect your critical components even when the pressure is on.



In-Line Mount Installation Drawing



Manifold Mount Installation Drawing



PF2 Specifications

Operating Temperature	**Fluid Temperature** 30°F to 225°F (0°C to 105°C)		**Ambient Temperature** -4°F to 140°F (-20C to 60C)	
Operating Pressure	4000 psi (275 bar) max			
Flow Fatigue Rating	2000 psi (137 bar)			
Burst Pressure	12,000 psi (827 bar) max			
ΔP Indicator Trigger	35 psid (2.4 bard) for 50 psid (3.4 bard) bypass. 70 psid (4.8 bard) for 90 psid (6.2 bard) bypass. 100 psid (6.9 bard) for no bypass.			
Element Collapse Rating	**Normal Collapse** 290 psid (20 bard)		**High Collapse** 3000 psid (206 bard)	
Integral Bypass Setting	50 psid (3.4 bard) 90 psid (6.2 bard)			
Materials of Construction	**Head** Anodized aluminum (grade T6061)	**Bowl** Anodized aluminum (grade T6061) Bowl drain #4 SAE standard	**Element Bypass Valve** Nickel plated/Stainless steel	**Element End Caps** Zinc or Tin coated carbon steel
Media Description	**M** G8 Dualglass, our latest generation of DFE rated, high performance glass media for all hydraulic & lubrication fluids. $\beta x_{[C]} \geq 4000$	**A** G8 Dualglass high performance media combined with water removal scrim. $\beta x_{[C]} \geq 4000$	**SF** Dynafuzz stainless steel fiber media $\beta x_{[C]} \geq 4000$	**W** Stainless steel wire mesh media $\beta x_{[C]} \geq 2$ ($\beta x \geq 2$)
Replacement Elements	To determine replacement elements, use corresponding codes from your assembly part number: **Filter Element Part Number** HP2[Collapse Rating Code]L[Length Code] – [Media Selection Code] [Seal Code]			**Example** HP20L4-12MV
Fluid Compatibility	Petroleum and mineral based fluids (standard). For polyol ester, phosphate ester, and other specified synthetic fluids use fluorocarbon seal option or contact factory.			

ΔP Factors[1]	Collapse	Length	Units	Media								
				1M	**2M**	**3M**	**6M**	**12M**	**15M**	**16M**	**25M**	****W**
	20	L4	psid/gpm	2.145	N/A	1.810	1.403	1.258	N/A	1.231	1.185	0.213
			bard/lpm	0.039	N/A	0.033	0.026	0.023	N/A	0.022	0.022	0.004
		L8	psid/gpm	1.118	N/A	0.944	0.731	0.656	N/A	0.642	0.618	0.111
			bard/lpm	0.020	N/A	0.017	0.013	0.012	N/A	0.012	0.011	0.002
	21	L4	psid/gpm	2.287	1.930	N/A	1.496	N/A	1.341	1.312	1.264	0.228
			bard/lpm	0.042	0.035	N/A	0.027	N/A	0.024	0.024	0.023	0.004
		L8	psid/gpm	1.188	1.003	N/A	0.777	N/A	0.672	0.657	0.647	0.116
			bard/lpm	0.022	0.018	N/A	0.014	N/A	0.012	0.012	0.012	0.002

[1]Max flow rates and ΔP factors assume ☒ = 150 SUS, 32 cSt. See filter assembly sizing guideline for viscosity conversion formula on page 22 for viscosity change.

PF2 Part Number Builder

PF2 [ ] [ ] [ ] [ ] [ ] - [ ] [ ]

Connection | Collapse | Length | Bypass | Indicator | Media | Seal

Connection

	Port Option	Max Flow Rate
G12[1]	¾" G thread (BSPP)	20 gpm (76 lpm)[2]
M12	¾" Manifold top mount	20 gpm (76 lpm)[2]
S12[1]	¾" SAE	20 gpm (76 lpm)[2]

Collapse Rating

0[3]	290 psid (20 bard) normal collapse element
1	3000 psid (206 bard) high collapse element

Element Length

4	4" (10 cm) nominal length filter element and housing
8	8" (20 cm) nominal length filter element and housing

Bypass

3	50 psid (3.4 bard) bypass
6	90 psid (6.2 bard) bypass
X	No bypass

ΔP Indicator

	Indicator Options	Thermal Lockout	Surge Control	Reset
D	Visual / Electrical (DIN 43650)	No	No	Auto
S	Visual / Electrical (DIN 43650)	Yes	Yes	Manual
V	Visual	No	No	Auto
X	No indicator (port plugged)	–	–	–
Y	Visual only	Yes	Yes	Manual

Media Selection

G8 Dualglass

1M	$\beta 3_{(C)} \geq 4000$
2M[4]	$\beta 5_{(C)} \geq 4000$
3M[5]	$\beta 5_{(C)} \geq 4000$
6M	$\beta 7_{(C)} \geq 4000$
12M[5]	$\beta 12_{(C)} \geq 4000$
15M[4]	$\beta 12_{(C)} \geq 4000$
16M	$\beta 17_{(C)} \geq 4000$
25M	$\beta 22_{(C)} \geq 4000$

G8 Dualglass + water removal

3A[5]	$\beta 5_{(C)} \geq 4000$
6A[5]	$\beta 7_{(C)} \geq 4000$
12A[5]	$\beta 12_{(C)} \geq 4000$
25A[5]	$\beta 22_{(C)} \geq 4000$

Dynafuzz stainless fiber

3SF	$\beta 4_{(C)} \geq 4000$
10SF	$\beta 11_{(C)} \geq 4000$

Stainless wire mesh

10W	10µ nominal
25W	25µ nominal
40W	40µ nominal
74W	74µ nominal
149W	149µ nominal

Seals

B	Nitrile (Buna)
V	Fluorocarbon
E-WS	EPR seals + stainless steel support mesh

[1]Vent connection standard on G12 and S12 models - #4 SAE.
[2]Maximum recommended flow rate based on velocity through port and internal flow path. Consult sizing guidelines or consult factory for sizing based on flow rate, viscosity, temperature, filter media selection.
[3]When chosen, must be paired with Bypass option "3" or "6."
[4]Compatible only with High Collapse Rating option "1."
[5]Not available on High Collapse Rating option "1."

For all up to date option details and compatibilites, please reference our Contamination Solutions Price List or contact customer service.

Want to find out more? Get in touch.
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Donaldson HY-PRO™

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