

Metric dimensions in [].



Model	GPM	LPM	Standard Micron Rating
PXF 300	300	1135	3

300 gpm
1135 lpm
500 psi
35 bar

Features and Benefits

- Element changeout from the top minimizes oil spillage
- Length allows for extra capacity and higher flows
- Integral inlet and outlet test points are standard
- Standard differential pressure gauge
- 3" NPTF Porting
- 3 micron element is standard. Optional micron ratings: 1, 5, 10 and 25

Filter Housing Specifications

Flow Rating:	Up to 300 gpm (1135 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	500 psi (35 bar)
Min. Yield Pressure:	2500 psi (172 bar), per NFPA T2.6.1-R1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 30 psi (2.1 bar) Full Flow: 55 psi (3.8 bar)
Porting Base:	Cast Aluminum
Element Case:	Steel
Cap:	Ductile Iron
Weight:	185 lbs. (84 kg)
Standard Element Model:	E-XFE-3
Element Change Clearance:	33.8" (859 mm)

Element Performance Information

Element	Filtration Ratio Per ISO 4572/NFPA T3.10.8.8 Using automated particle counter (APC) calibrated per ISO 4402			Filtration Ratio wrt ISO 16889 Using APC calibrated per ISO 11171	
	$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
	E-XFE-1	<1.0	<1.0	<1.0	<4.0
E-XFE-3	<1.0	<1.0	<2.0	<4.0	4.8
E-XFE-5	2.5	3.0	4.0	4.8	6.3
E-XFE-10	7.4	8.2	10.0	8.0	10.0
E-XFE-25	18.0	20.0	22.5	19.0	24.0

Dirt Holding Capacity

Element	DHC (gm)
E-XFE-1	974
E-XFE-3	1001
E-XFE-5	954
E-XFE-10	940
E-XFE-25	853

Flow Direction: Outside In

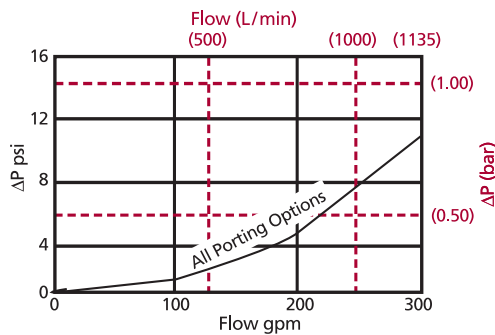
Element Nominal Dimensions: E-XFE:

6.0" (150 mm) O.D. x 38.70" (985 mm) long

Pressure Drop Information Based on Flow Rate and Viscosity

$\Delta P_{\text{housing}}$

PXF 300 $\Delta P_{\text{housing}}$ for fluids with sp gr = 0.86:



sp gr = specific gravity

Sizing of elements should be based on element flow information provided in the Element Selection chart above.

$$\Delta P_{\text{filter}} = \Delta P_{\text{housing}} + \Delta P_{\text{element}}$$

Exercise:
Determine ΔP at 150 gpm (570 L/min) for PXF 300 using 200 SUS (44 cSt) fluid.

Solution:

$$\begin{aligned} \Delta P_{\text{housing}} &= 3 \text{ psi } [.21 \text{ bar}] \\ \Delta P_{\text{element}} &= 150 \times .04 \times (200 \div 150) = 8.0 \text{ psi} \\ &\text{or} \\ &= [570 \times (.04 \div 54.9) \times (44 \div 32)] = .57 \text{ bar} \\ \Delta P_{\text{total}} &= 3.0 + 8.0 = 11.0 \text{ psi} \\ &\text{or} \\ &= [.21 + .57] = .78 \text{ bar} \end{aligned}$$

$\Delta P_{\text{element}}$

$\Delta P_{\text{element}} = \text{flow} \times \text{element } \Delta P \text{ factor} \times \text{viscosity factor}$

El. ΔP factors @ 150 SUS (32 cSt):

E-XFE-1	.03
E-XFE-3	.01
E-XFE-5	.01
E-XFE-10	.01

If working in units of bars & L/min, divide above factor by 54.9.

Viscosity factor: Divide viscosity by 150 SUS (32 cSt).