

Metric dimensions in ().

70 gpm
265 lpm

300 psi
20 bar

Features and Benefits

- Threaded bowl allows for easier removal and facilitates element changes
- Standard 1.5" NPTF porting
- Pop-up visual alarm for dirt monitoring
- Standard 7/16" - 20 housing drain plug
- Includes E-DFE cartridge-style element
- 3 micron element is standard. Optional micron ratings: 1, 5, 10 and 25

Filter Housing Specifications

Flow Rating:	Up to 70 gpm (265 L/min) for 150 SUS (32 cSt) fluids
Max. Operating Pressure:	300 psi (20 bar)
Min. Yield Pressure:	1000 psi (70 bar), per NFPA T2.6.1
Rated Fatigue Pressure:	300 psi (20 bar), per NFPA T2.6.1-2005
Temp. Range:	-20°F to 225°F (-29°C to 107°C)
Bypass Setting:	Cracking: 30 psi (2 bar) Full Flow: 68 psi (4.7 bar)
Porting Head:	Cast Aluminum
Element Case:	Steel
Weight of IXBF 70:	14.75 lbs. (6.7 kg)
Standard Element Model:	E-DFE-3
Element Change Clearance:	2.50" (64 mm)

Element Performance Information

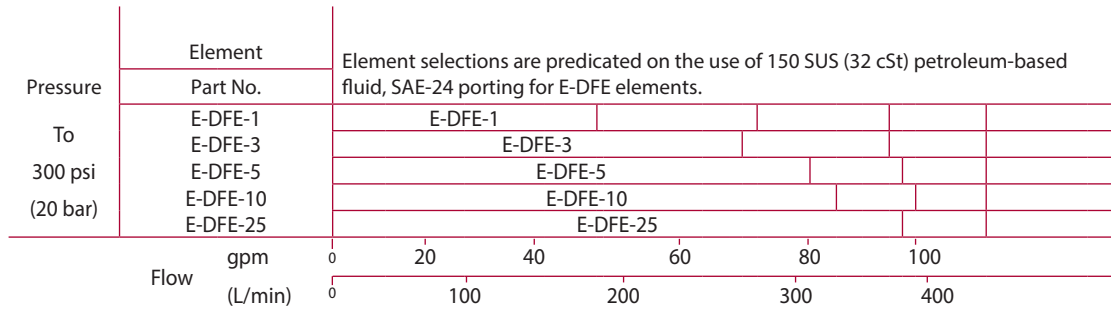
Element	Micron Rating	Filtration Ratio Per ISO 4572/NFPA T3.10.8.8 Using automated particle counter (APC) calibrated per ISO 4402			Filtration Ratio wrt ISO 16889 Using APC calibrated per ISO 11171	
		$\beta_x \geq 75$	$\beta_x \geq 100$	$\beta_x \geq 200$	$\beta_x(c) \geq 200$	$\beta_x(c) \geq 1000$
E-DFE-1	1	<1.0	<1.0	<1.0	<4.0	4.2
E-DFE-3	3	<1.0	<1.0	<2.0	<4.0	4.8
E-DFE-5	5	2.5	3.0	4.0	4.8	6.3
E-DFE-10	10	7.4	8.2	10.0	8.0	10.0
E-DFE-25	25	18.0	20.0	22.5	19.0	24.0

Dirt-Holding Capacity

Element	DHC (g)
E-DFE-1	112
E-DFE-3	115
E-DFE-5	119
E-DFE-10	108
E-DFE-25	93

Element Collapse Rating: 150 psid (10 bar) for standard elements
 Flow Direction: Outside In
 Element Nominal Dimensions: E-DFE: 3.9" (99 mm) O.D. x 9.0" (230 mm) long

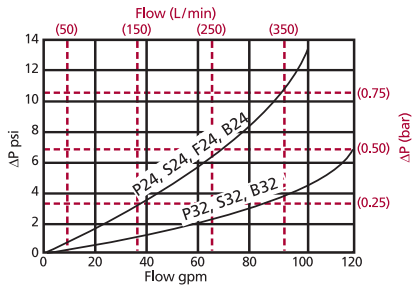
Element Selection Based on Flow Rate



Pressure Drop Information Based on Flow Rate and Viscosity

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

IXBF 70 $\Delta P_{\text{housing}}$ 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.

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

Exercise:

Determine ΔP at 60 gpm (225 L/min) for IXBF 70 using 200 SUS (44 cSt) fluid.

Solution:

$$\Delta P_{\text{housing}} = 6 \text{ psi [}.4 \text{ bar]}$$

$$\Delta P_{\text{element}} = 60 \times .03 \times (200 \div 150) = 2.4 \text{ psi}$$

or

$$= [225 \times (.03 \div 54.9) \times (44 \div 32) = .17 \text{ bar}]$$

$$\Delta P_{\text{total}} = 6 + 2.4 = 8.4 \text{ psi}$$

or

$$= [.4 + .17 = .57 \text{ bar}]$$

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

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

El. ΔP factors @ 150 SUS (32 cSt):

E-DFE-1	.20
E-DFE-3	.10
E-DFE-5	.08
E-DFE-10	.05
E-DFE-25	.04

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

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