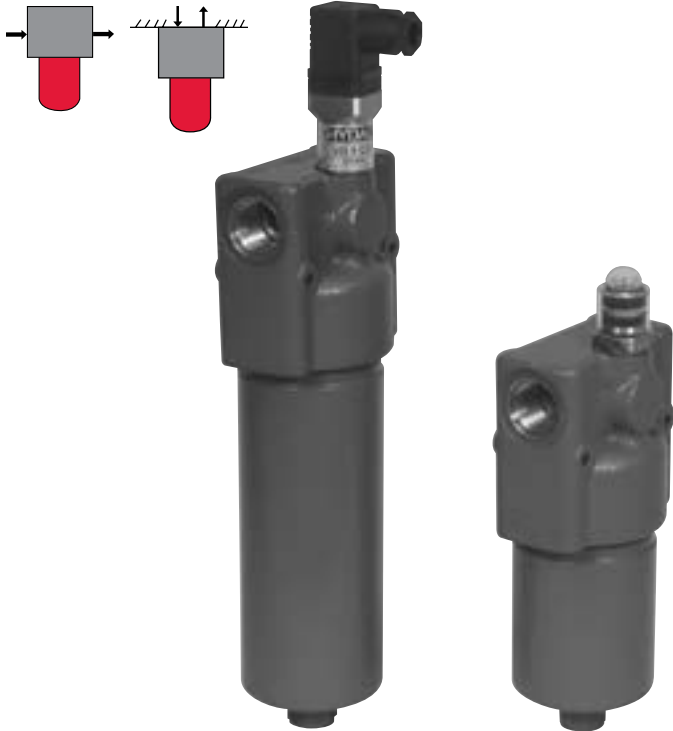


# HIGH PRESSURE FILTERS

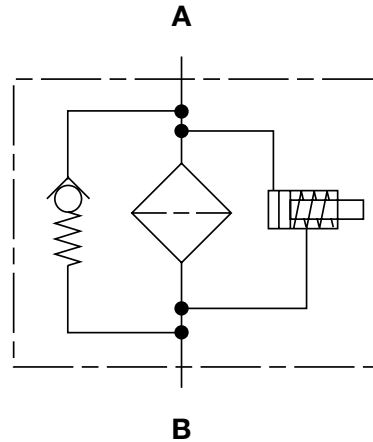
## HF2P Series

Inline Filters

4000 psi • up to 25 gpm



### Hydraulic Symbol



### Features

- Non-welded housing design reduces stress concentrations and prevents fatigue failure.
- Inlet/Outlet port options include SAE straight thread O-ring boss, BSPP and subplate mounting to allow easy installation without costly adapters.
- O-ring seals are used to provide positive, reliable sealing. A choice of O-ring materials (nitrile, fluorocarbon elastomer, ethylene propylene rubber) provides compatibility with petroleum oils, synthetic fluids, water-glycols, oil/water emulsions, and high water based fluids.
- Screw-in bowl mounted below the filter head requires minimal clearance to remove the element for replacement and contaminated fluid cannot be washed downstream when element is serviced.
- Clogging indicators are actuated by differential pressure and have no external dynamic seal. High reliability is achieved and magnetic indicator actuation eliminates a potential leak point.
- A poppet type bypass valve is typically mounted in the filter head out of the flow path between the inlet and outlet port to provide positive sealing during normal operation and fast response during cold starts and flow surges.
- Fatigue pressure rating equals maximum allowable working pressure rating.

### Applications



Agricultural



Automotive



Construction



Industrial

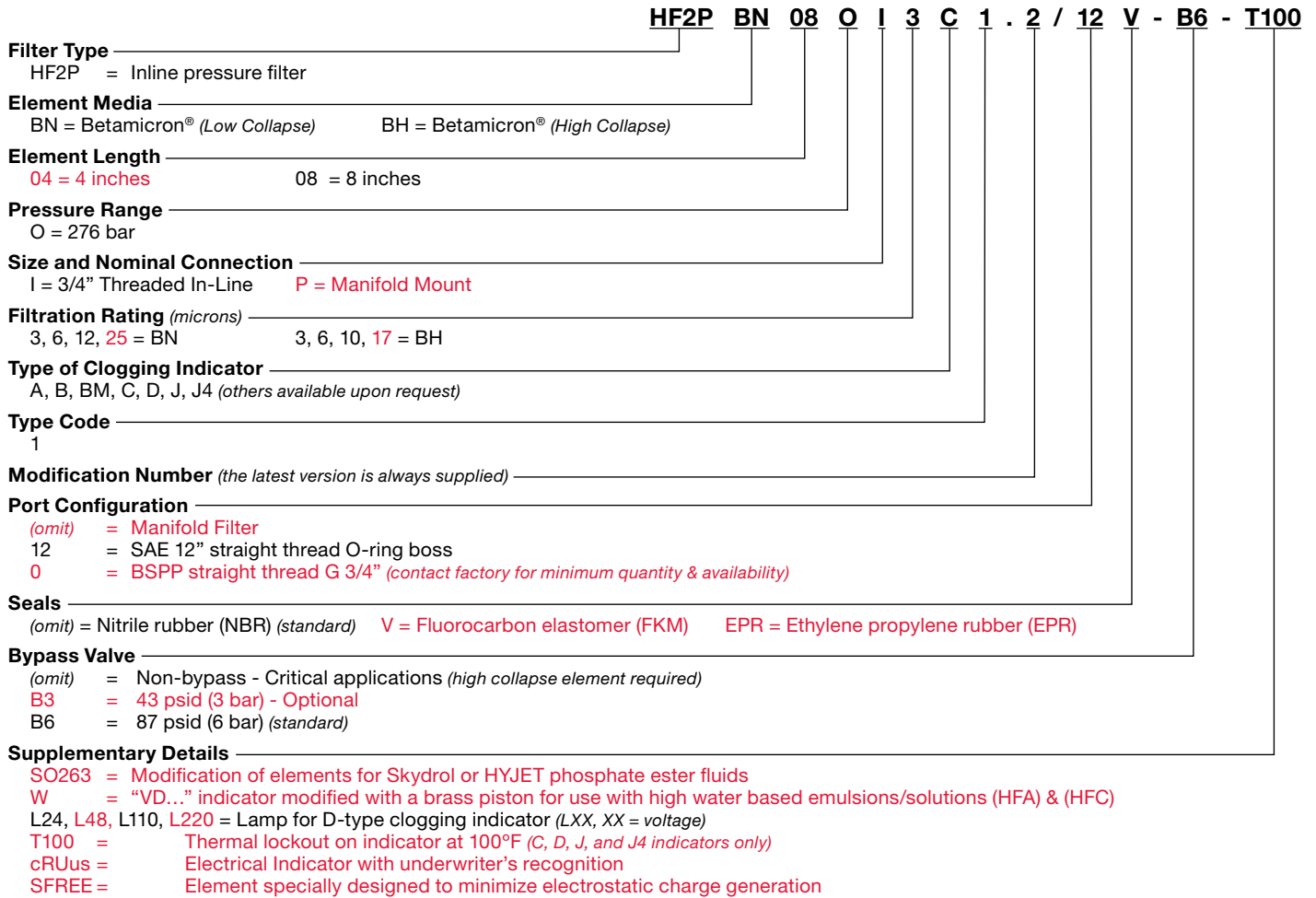


Railways

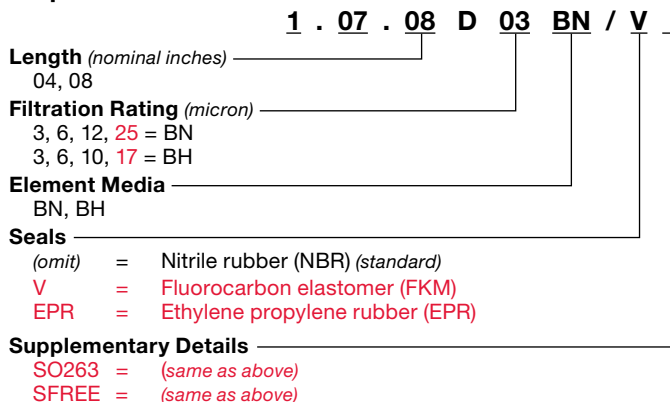
### Technical Specifications

<b>Mounting Method</b>	2 mounting holes	
<b>Port Connection</b>	SAE-12, 3/4" BSPP, Manifold Mount – (0.689")	
<b>Flow Direction</b>	Inlet: Side	Outlet: Side
<b>Construction Materials</b>		
Head	Ductile iron	
Bowl	Steel	
<b>Flow Capacity</b>		
4"	16 gpm (60 lpm)	
8"	25 gpm (95 lpm)	
<b>Housing Pressure Rating</b>		
Max. Allowable Working Pressure	4000 psi (276 bar)	
Fatigue Pressure	4000 psi (276 bar) @ 1 million cycles	
Burst Pressure	14,680 psi (1012 bar)	
<b>Element Collapse Pressure Rating</b>		
BH4HC	3045 psid (210 bar)	
BN	290 psid (20 bar)	
<b>Fluid Temperature Range</b>	14°F to 212°F (-10°C to 100°C) Consult HYDAC for applications operating 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>		
	$\Delta P = 29$ psid (2 bar) -10% (optional)	
	$\Delta P = 72$ psid (5 bar) -10% (standard)	
	$\Delta P = 116$ psid (8 bar) -10% (optional on bypass)	
<b>Bypass Valve Cracking Pressure</b>		
	$\Delta P = 43$ psid (3 bar) +10% (optional)	
	$\Delta P = 87$ psid (6 bar) +10% (standard)	
	Non Bypass Available	

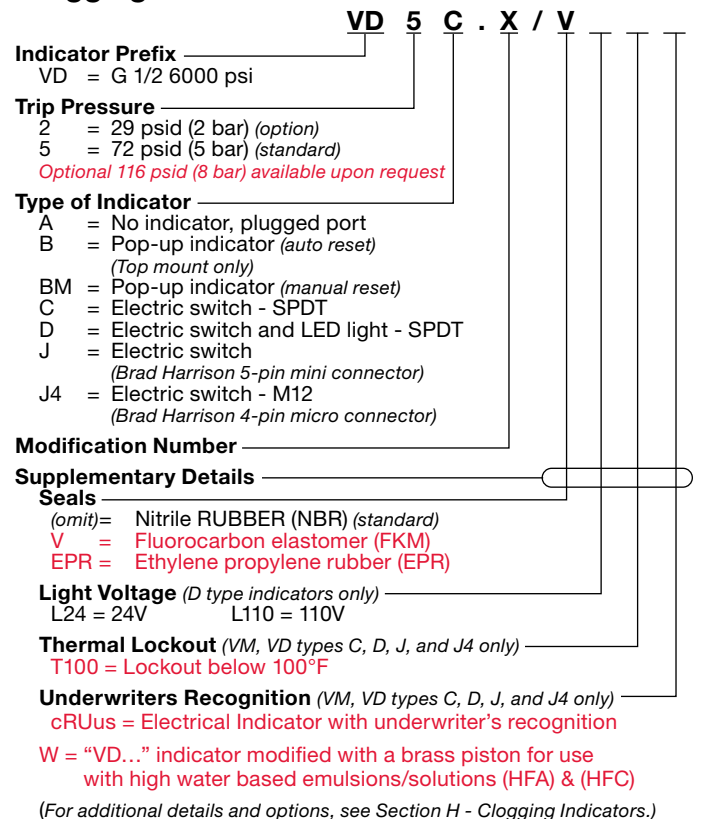
## Model Code



## Replacement Element Model Code



## Clogging Indicator Model Code

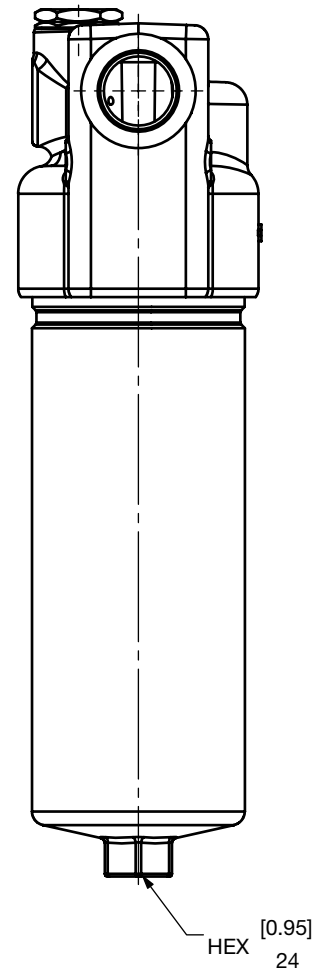
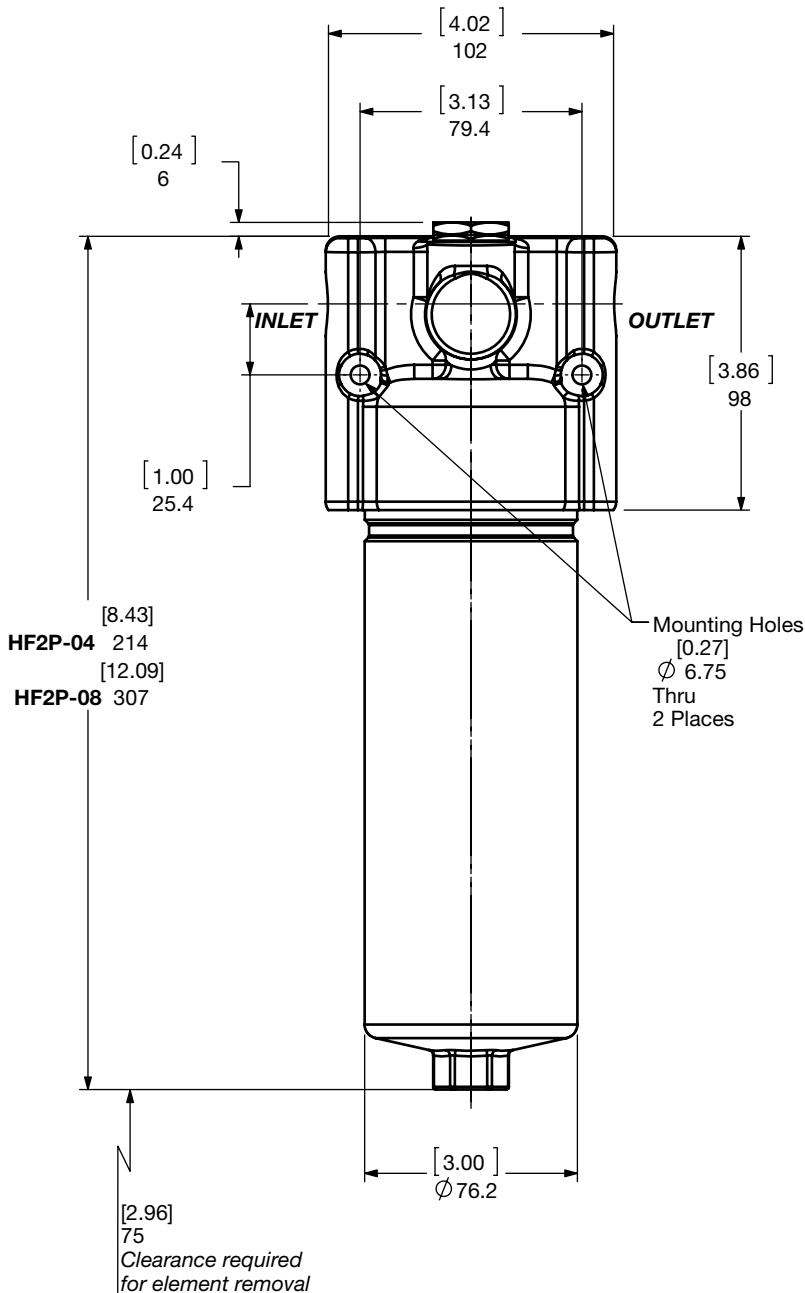
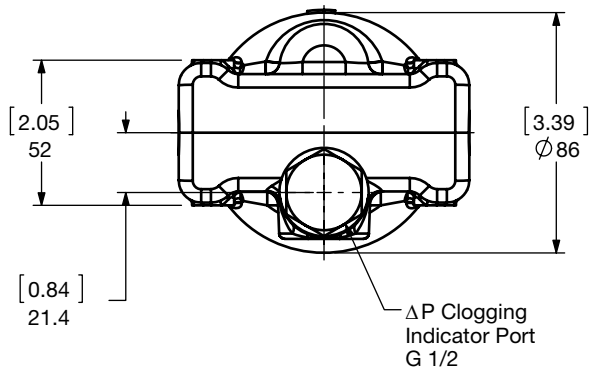


Model Codes Containing RED are non-stock items — Minimum quantities may apply — Contact HYDAC for information and availability

# HIGH PRESSURE FILTERS

## Dimensions

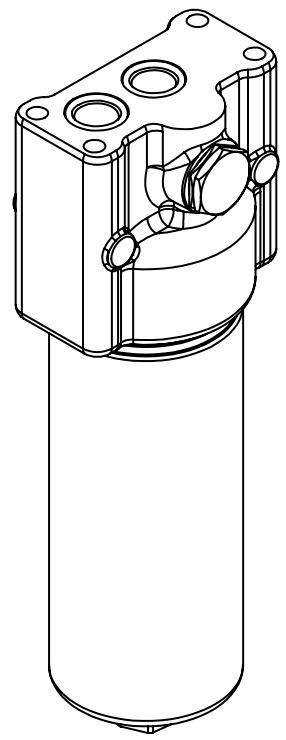
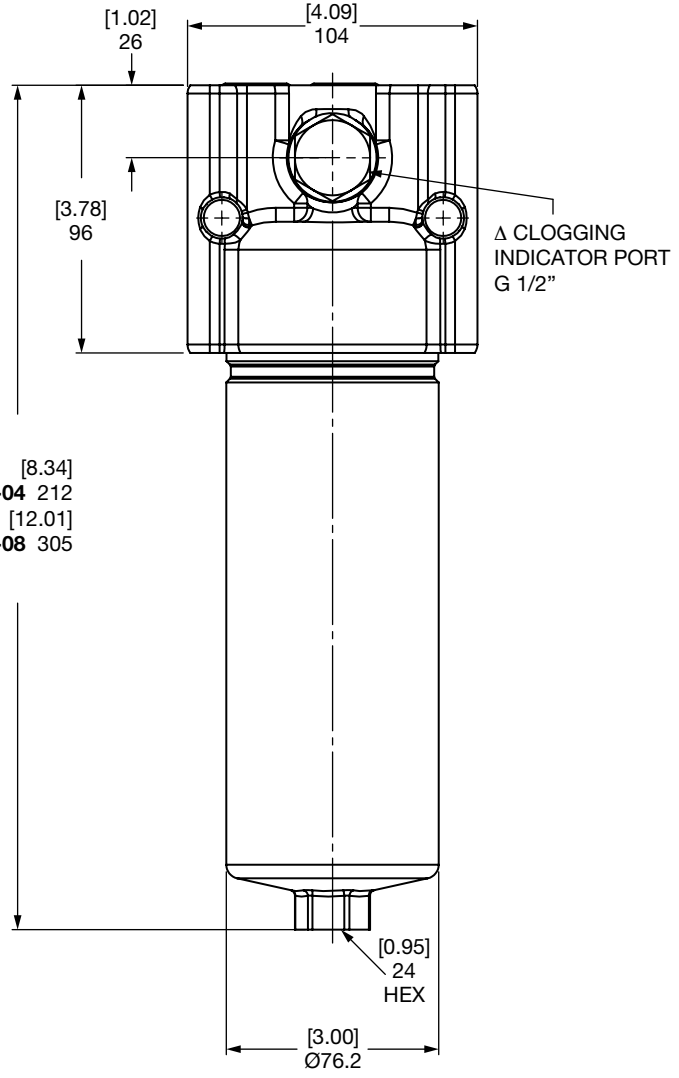
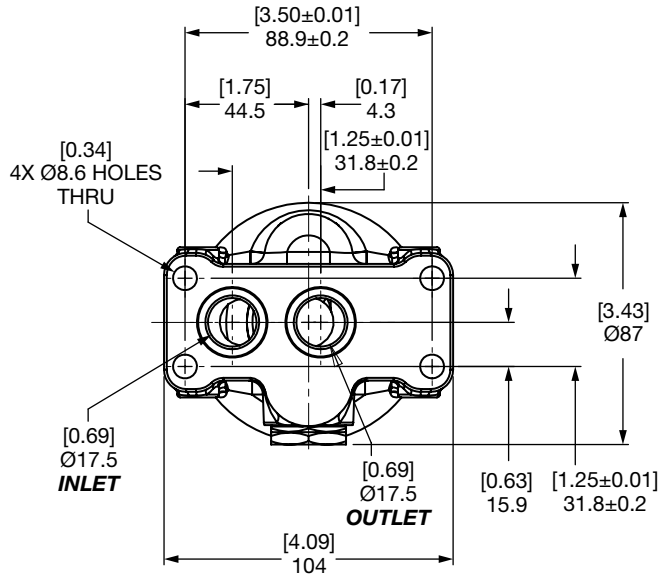
### HF2P Inline Mounting



Size	04	08
Weight (lbs.)	10.7	14.3

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 HF2P Subplate Mounting



**HF2P-04** 212  
 [8.34]  
**HF2P-08** 305  
 [12.01]

Size	04	08
Weight (lbs.)	10.7	14.3

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.

# HIGH PRESSURE FILTERS

## Sizing Information

Total pressure loss through the filter is as follows:

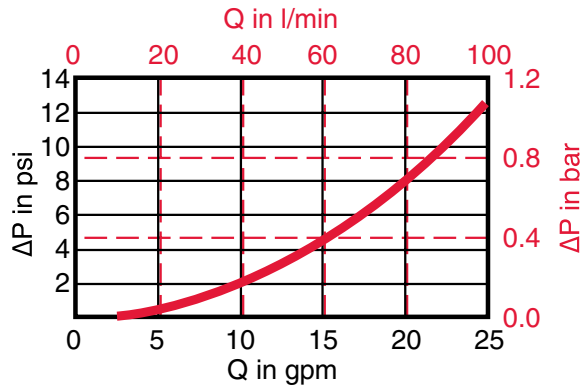
$$\text{Assembly } \Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$$

### Housing Curve:

Pressure loss through housing is as follows:

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

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



## Element K Factors

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

(From Tables Below)

Autospec HF2 Depth	1.07.08DXXBN (Low Collapse)			
Size	3 μm	6 μm	12 μm	25 μm
1.07.04DXXBN	2.046	1.735	0.925	0.531
1.07.08DXXBN	0.975	0.815	0.457	0.257

Autospec HF2 Depth	1.07.08DXXBH (High Collapse)			
Size	3 μm	6 μm	10 μm	17 μm
1.07.04DXXBH	2.400	1.690	1.027	0.538
1.07.08DXXBH	1.165	0.820	0.499	0.262

All Element K Factors in psi / gpm.

