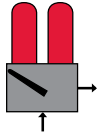


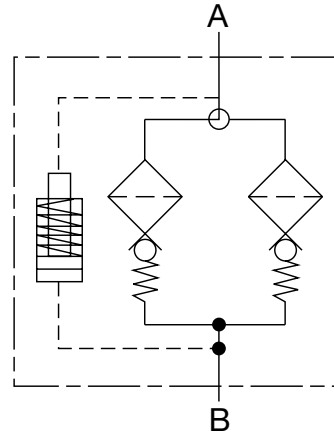
## HFDK4P Series

### Inline Duplex Filters

4500 psi • up to 90 gpm



### Hydraulic Symbol



### Features

- The HFDK4P pressure duplex filter meets HF4 automotive specification element requirements.
- The HFDK4P filters have a filter head and lid of ductile iron and a cold formed steel housing to meet high fatigue pressure requirements.
- The filter housings are designed to withstand pressure surges as well as high static pressure loads.
- The screw-in lids allow top access for the filter element to be easily removed for replacement.
- Visual (pop-up), electrical, electrical/visual (lamp), or electronic differential type clogging indicators are available.
- HFDK4P filters are available only with high collapse pressure elements with no bypass provided.

### Technical Details

<b>Mounting Method</b>	4 mounting holes
<b>Port Connection</b>	2" SAE Flange Code 62
<b>Flow Direction</b>	Inlet: Bottom    Outlet: Back
<b>Construction Materials</b>	
Head, Lid	Ductile iron
Housing	Steel
<b>Flow Capacity</b>	
9"	50 gpm (189 lpm)
18"	75 gpm (284 lpm)
27"	90 gpm (340 lpm)
<b>Housing Pressure Rating</b>	
Max. Operating Pressure	4500 psi (315 bar)
Proof Pressure	6800 psi (475 bar)
Fatigue Pressure	4500 psi (315 bar)
Burst Pressure	Contact HYDAC Office
<b>Element Collapse Pressure Rating</b>	
BH	3045 psid (210 bar)
<b>Fluid Temperature Range</b>	
-22° to 250°F (-30° to 121°C)	
<b>Fluid Compatibility</b>	
Compatible with all petroleum oils and synthetic fluids rated for use with Fluoroelastomer or Ethylene Propylene seals. Contact HYDAC for information on special housing and element constructions available for use with water glycols, oil/water emulsions, and HWBF.	
<b>Indicator Trip Pressure</b>	
$\Delta P = 116 \text{ psid (8 bar) } -10\% \text{ (standard)}$	
$\Delta P = 72 \text{ psid (5 bar) } -10\% \text{ (optional)}$	

### Applications



Automotive



Industrial



Power Generation



Pulp & Paper

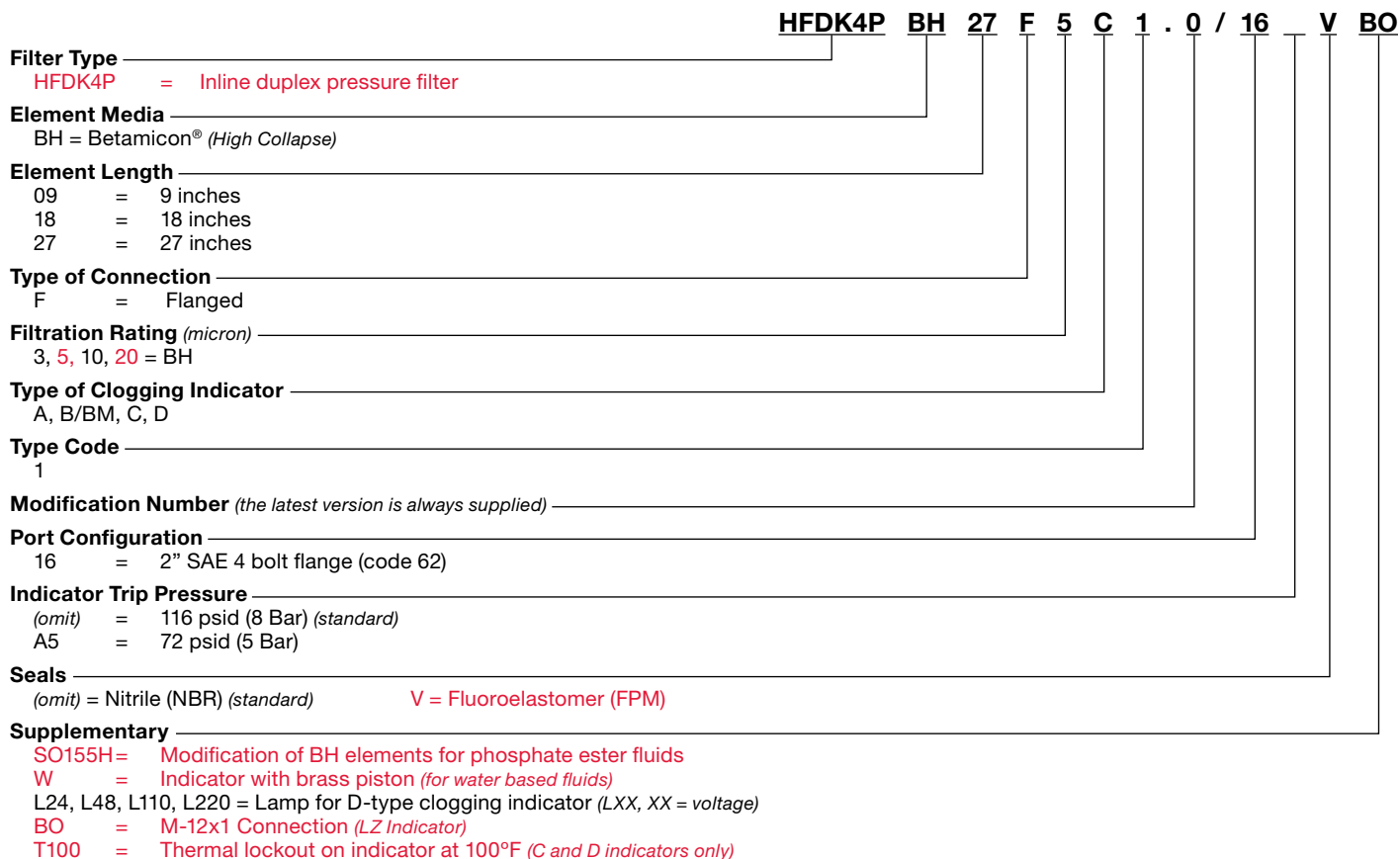


Shipbuilding

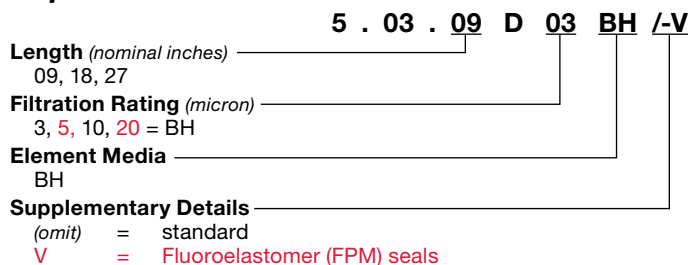


Steel / Heavy Industry

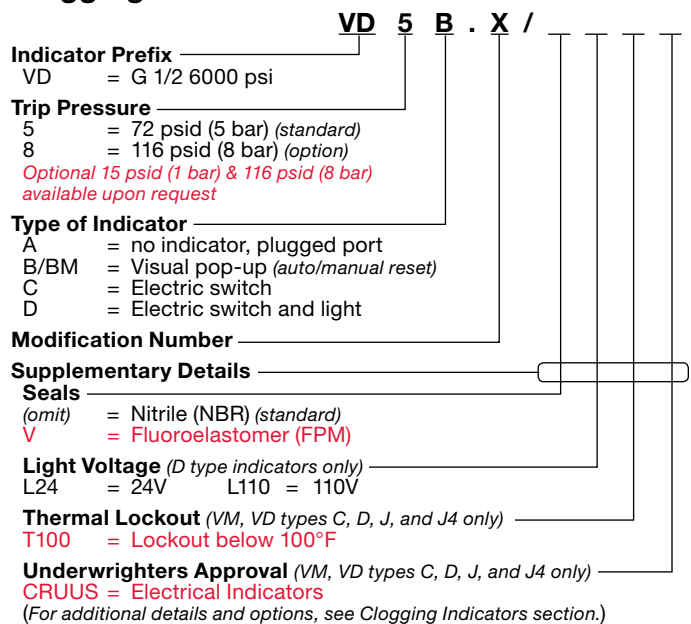
## Model Code



## Replacement Element Model Code



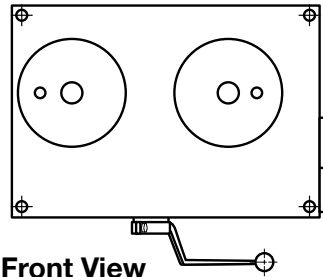
## Clogging Indicator Model Code



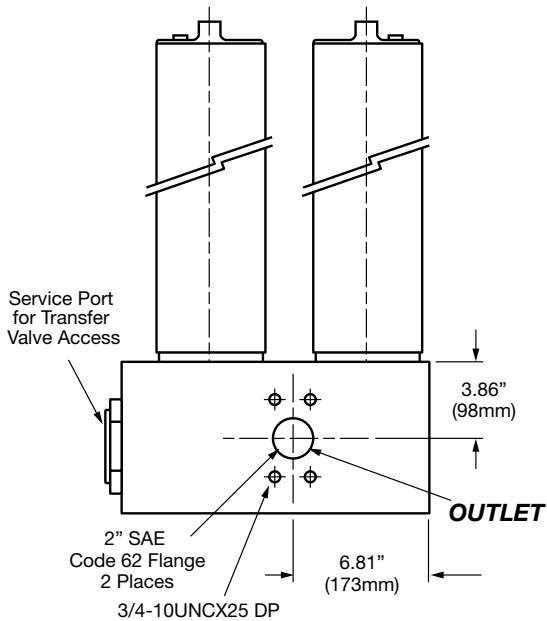
Model Codes Containing RED are non-stock items — Minimum quantities may apply — Contact HYDAC for information and availability

## Dimensions

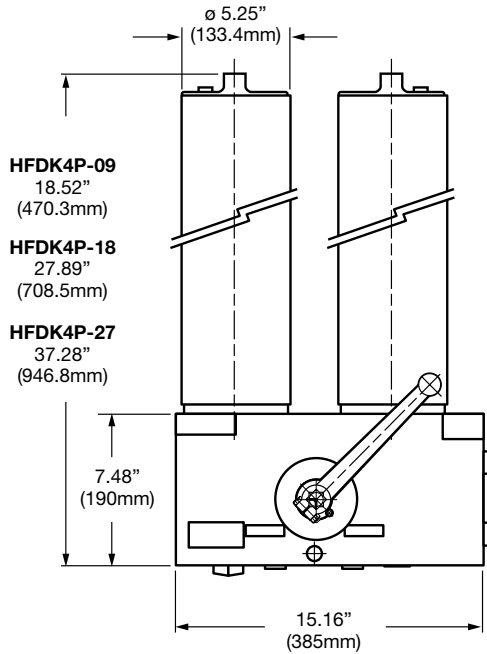
### Top View



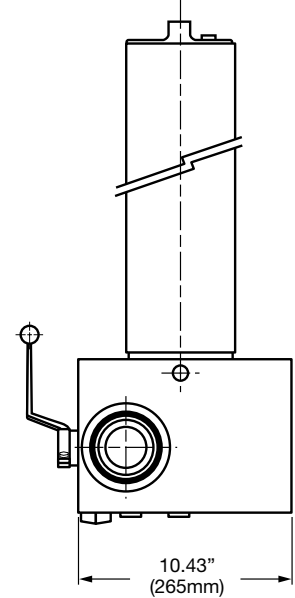
### Back View



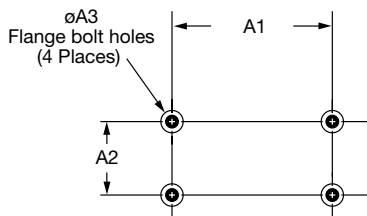
### Front View



### Side View

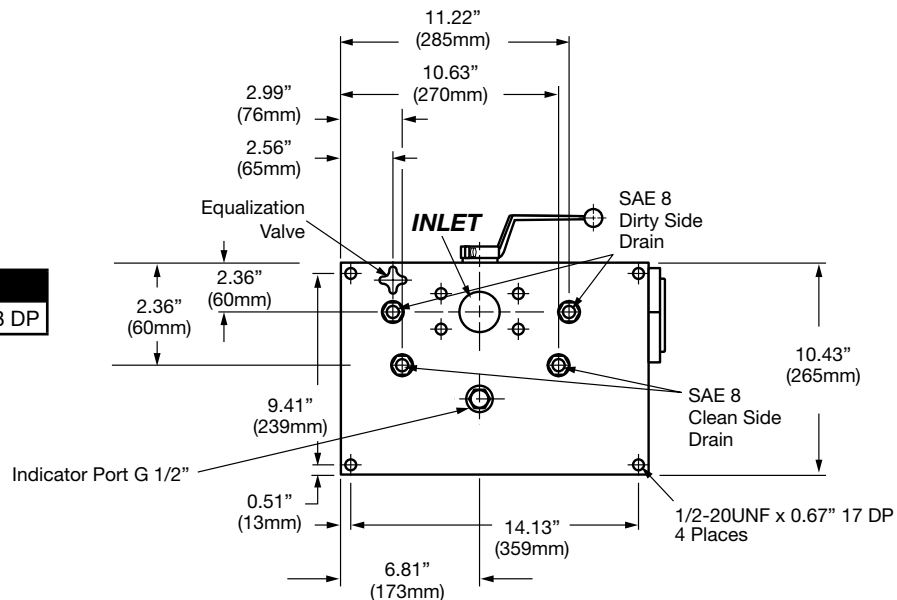


### Flange Detail



A1	A2	A3
96.8±0.3	44.5±0.3	3/4"-10UNC-2B x 38 DP

### Bottom View



Size	09	18	27
Weight (lbs.)	345	385.4	425.4

Dimensions shown are for general information and overall envelope size only. Weights listed are without element. For complete dimensions please contact HYDAC to request a certified print.

## Sizing Information

Total pressure loss through the filter is as follows:

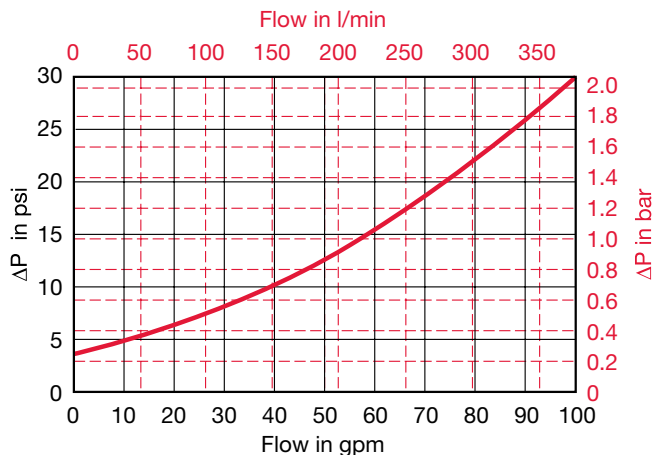
$$\text{Assembly } \Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$$

### 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 section on page 19)



## Element K Factors

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

Size	5.03.XXDBH			
	3 μm	5 μm	10 μm	20 μm
09	0.2068	0.1457	0.0886	0.0465
18	0.0967	0.0681	0.0414	0.0217
27	0.0630	0.0444	0.0270	0.0142

All Element K Factors in psi / gpm.