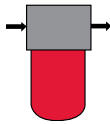


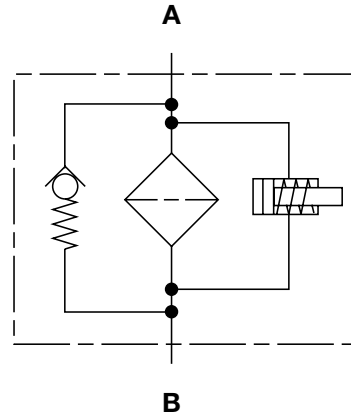
## FLN Series

### Inline Filters

360 psi • up to 100 gpm



### Hydraulic Symbol



### Features

- Aluminum alloy is water tolerant - anodization is not required for high water based fluids (HWBF).
- Non-welded housing design reduces stress concentrations and prevents fatigue failure.
- SAE straight thread O-ring boss porting to allow easy installation without costly adapters.
- O-ring seals are used to provide positive, reliable sealing.
- 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.
- Differential Pressure Indicators. HYDAC indicators have no external dynamic seal. This results in a high system reliability due to magnetic actuation, thus eliminating a potential leak point.
- A poppet-type bypass valve (optional) is mounted in-line between the inlet and outlet ports to provide positive sealing during normal operation and fast opening during cold starts and flow surges.

### Applications



Agricultural



Automotive



Construction



Gearboxes



Industrial



Power Generation

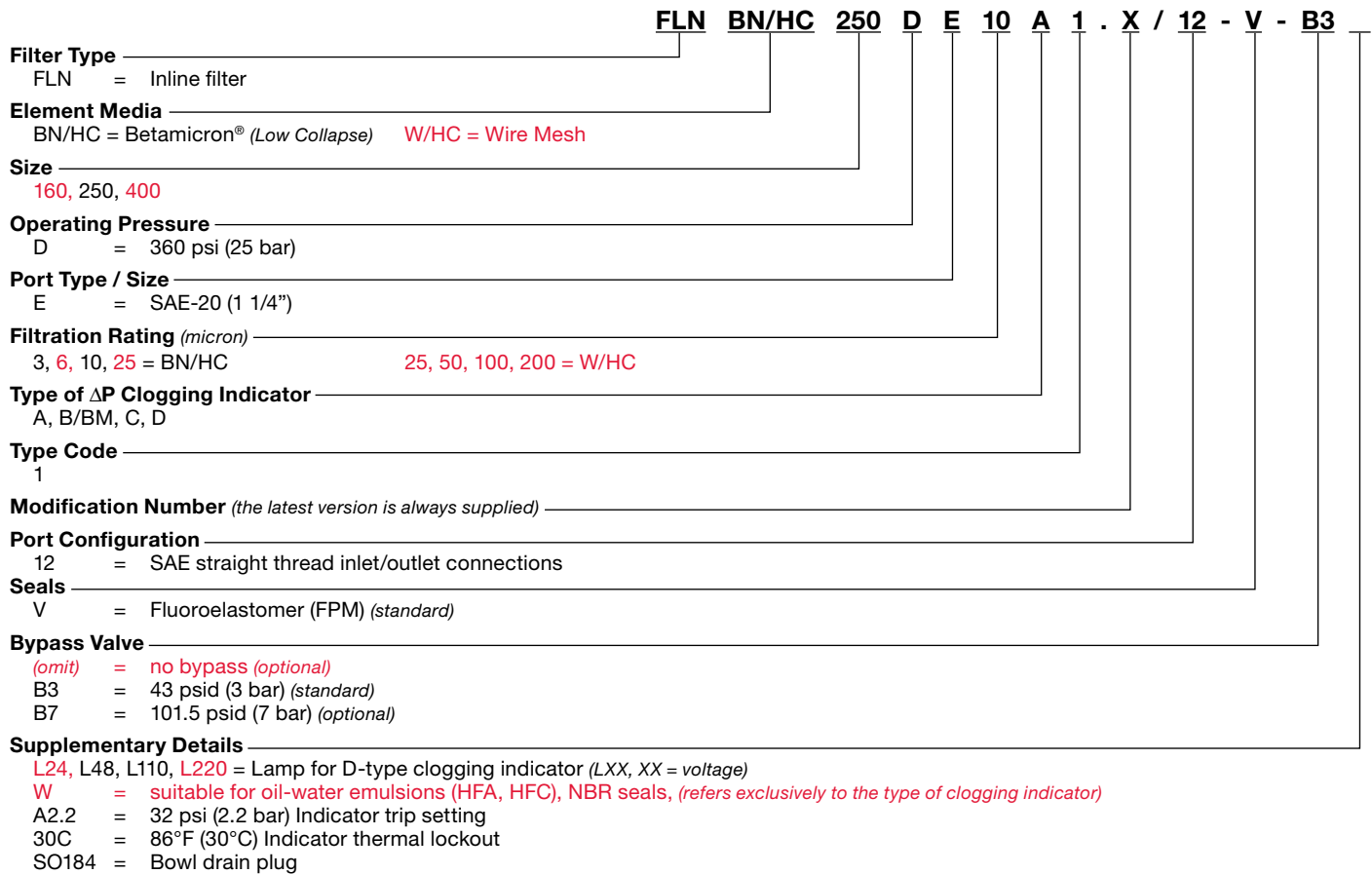


Pulp & Paper

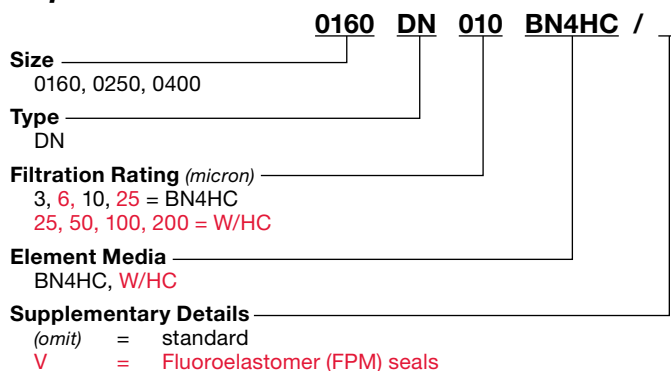
### Technical Details

<b>Mounting Method</b>	2 mounting holes in the filter head	
<b>Port Connection</b>	SAE-20 (1-5/8-12UN)	
<b>Flow Direction</b>	Inlet: Side	Outlet: Side
<b>Construction Materials</b>	Aluminum	
<b>Flow Capacity</b>	160 43 gpm (160 lpm) 250 66 gpm (250 lpm) 400 150 gpm (400 lpm)	
<b>Housing Pressure Rating</b>	Max. Operating Pressure 360 psi (25 bar) Proof Pressure 540 psi (38 bar) Fatigue Pressure 360 psi (25 bar) Burst Pressure Contact HYDAC office	
<b>Element Collapse Pressure Rating</b>	BN/HC, W/HC 290 psid (20 bar) Fluid Temperature Range -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>	ΔP = 29 psid (2 bar) -10% ΔP = 72 psid (5 bar) -10% ΔP = 116 psid (8 bar) -10%	
<b>Bypass Valve Cracking Pressure</b>	ΔP = 43 psid (3 bar) +10% ΔP = 102 psid (7 bar) +10%	

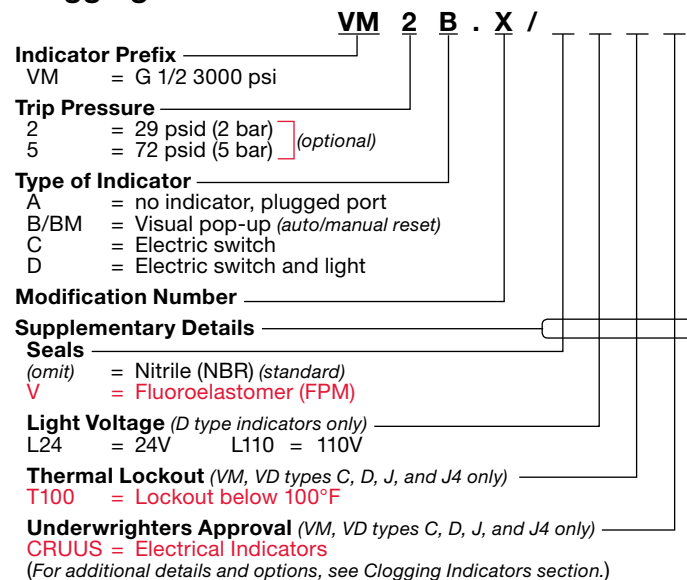
## Model Code



## Replacement Element Model Code

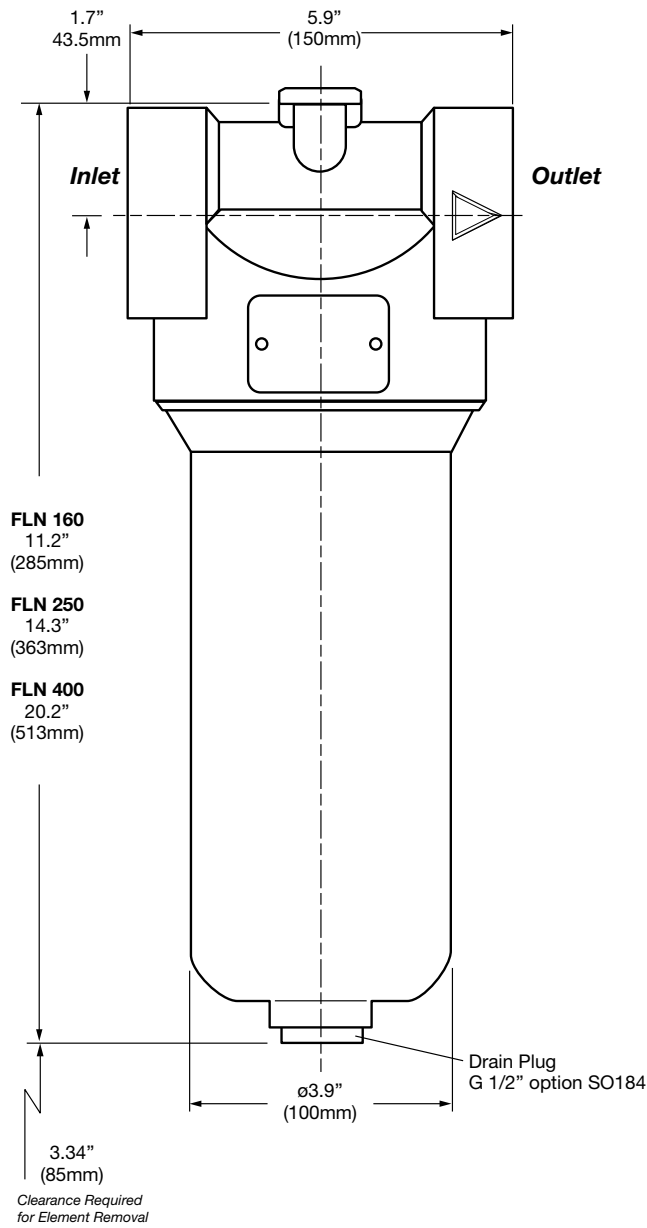
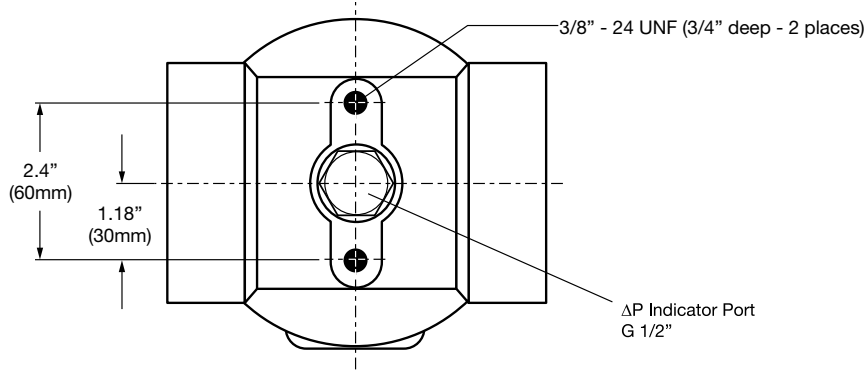


## Clogging Indicator Model Code



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

## Dimensions



Size	160	250	400
Weight (lbs.)	4.3	4.9	5.9

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:

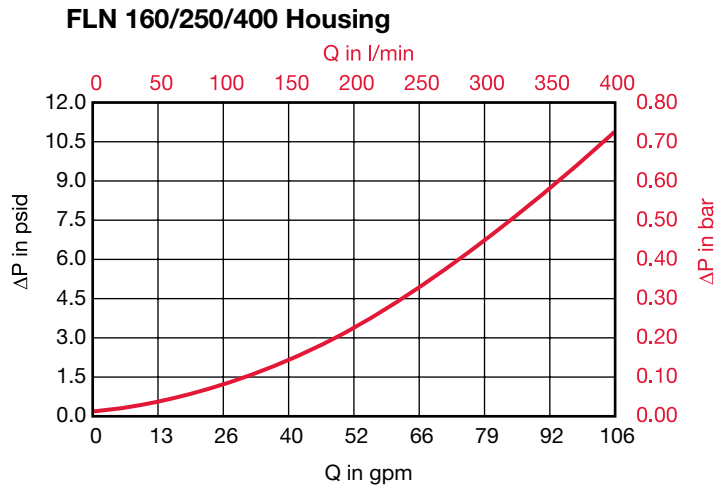
$$\text{Assembly } \Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$$

### 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

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

(From Tables Below)

Size	...DN...BN/HC			
	3 μm	5 μm	10 μm	25 μm
0160	0.439	0.306	0.202	0.143
0250	0.275	0.178	0.111	0.091
0400	0.178	0.110	0.073	0.055

All Element K Factors in psi / gpm.