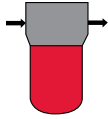


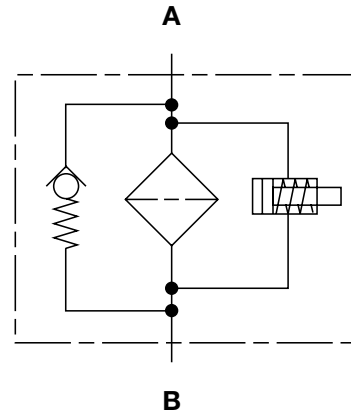
## MFM Series

### Inline Filters

4000 PSI • up to 30 GPM



### Hydraulic Symbol



### Features

- Because of their efficient design and construction, MFM filters are considered a cost effective solution for new equipment, or as a replacement for filters already specified on existing equipment.
- The MFM filter is available in 4 sizes comprised of four different bowl and element lengths. The models 35, 55, 75, and 95, provide maximum flow rates of 10, 18, 25, and 30 GPM respectively.
- A quick-response by-pass valve protects against high differential pressures caused by cold start-ups, flow surges and pressure spikes.
- The high bypass pressure setting (100 psid) minimizes the possibility of contamination due to premature bypassing.
- Filters may be specified with or without a clogging indicator. Both Visual and electrical indicators are available. Standard indicators actuate at 72 psid.
- Filter materials are compatible with all mineral, lubricating oils, and commonly used fire retardant fluids per ISO 2943.
- Fatigue pressure rating equals maximum allowable working pressure rating.

### Applications



Agricultural



Automotive



Construction



Gearboxes



Industrial

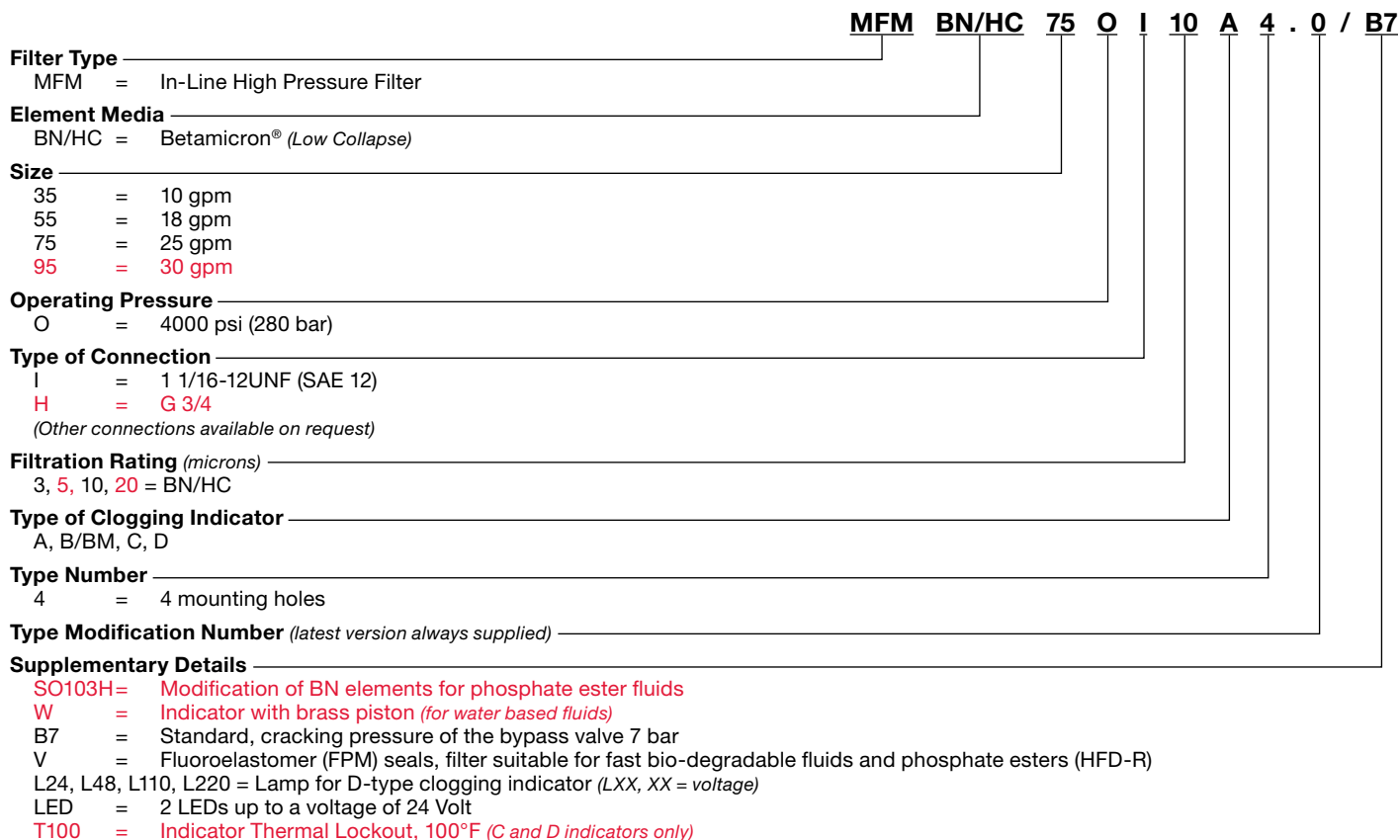


Commercial  
Municipal

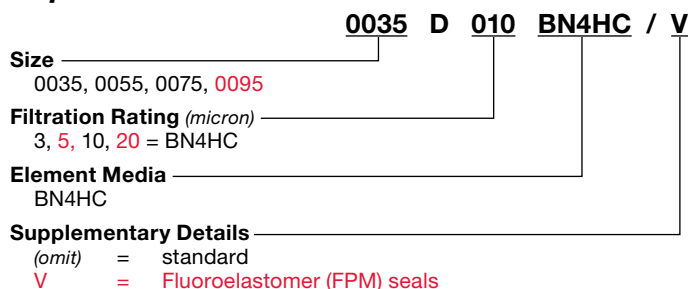
### Technical Details

<b>Mounting Method</b>	4 mounting holes - filter head	
<b>Port Connection</b>	SAE-12, 3/4" BSPP	
<b>Flow Direction</b>	Inlet: Side	Outlet: Side <i>(opposite each other)</i>
<b>Construction Materials</b>		
Head	Ductile iron	
Bowl	Steel	
<b>Flow Capacity</b>		
35	10 gpm (35 lpm)	
55	18 gpm (68 lpm)	
75	25 gpm (95 lpm)	
95	30 gpm (113 lpm)	
<b>Housing Pressure Rating</b>		
Max. Operating Pressure	4000 psi (280 bar)	
Proof Pressure	6000 psi (400 bar)	
Fatigue Pressure	4000 psi (280 bar) @ 1 million cycles	
	4600 psi (320 bar) @ 100,000 cycles	
Burst Pressure	13,920 psi (960 bar)	
<b>Element Collapse Pressure Rating</b>		
BN/HC	290 psid (20 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>		
$\Delta P = 72 \text{ psid (5 bar) } -10\%$		
<b>Bypass Valve Cracking Pressure</b>		
$\Delta P = 100 \text{ psid (7 bar) } +10\%$ (standard)		

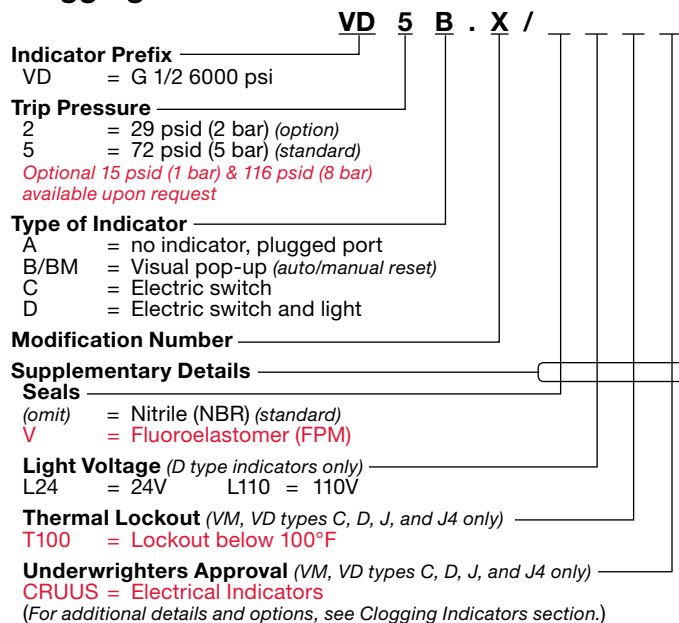
## Model Code



## Replacement Element Model Code

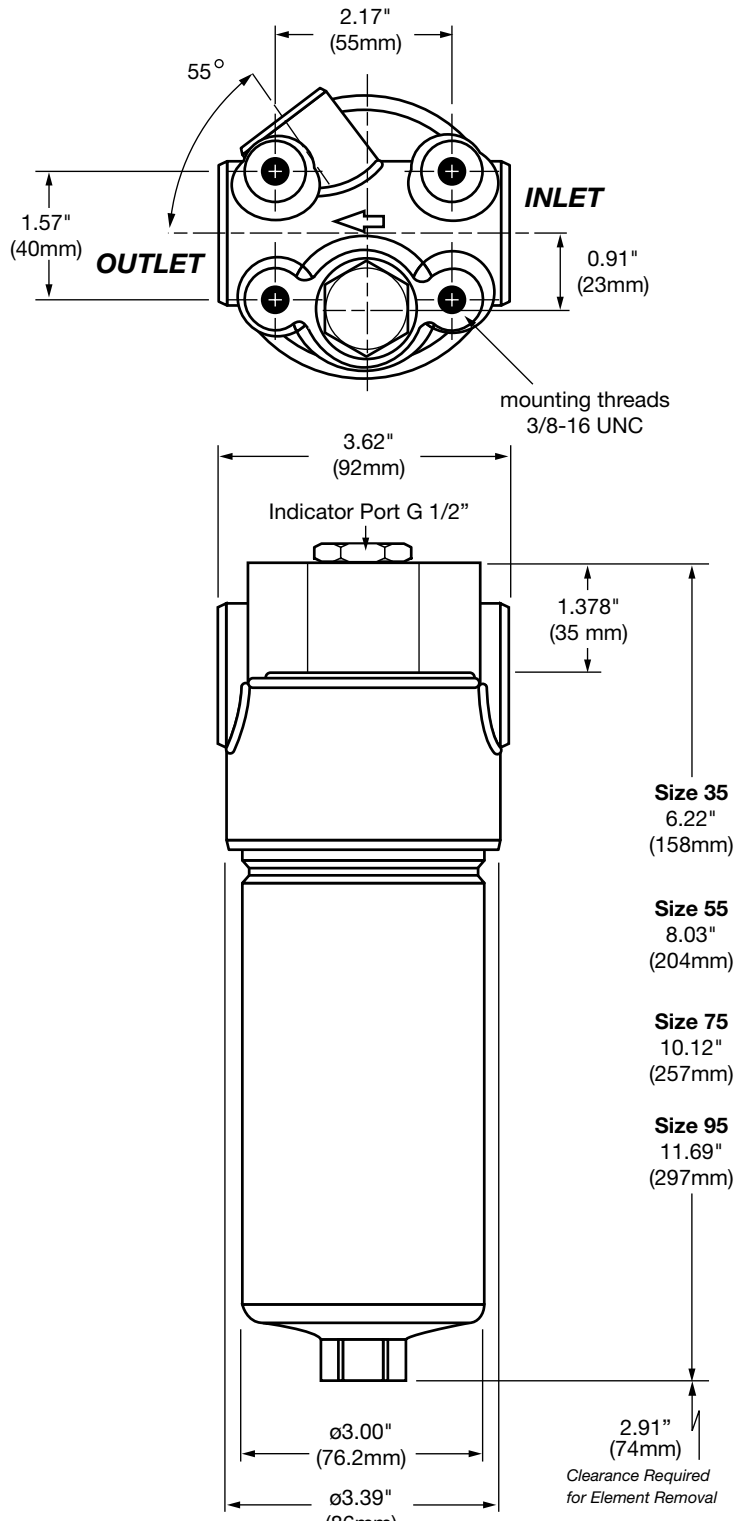


## Clogging Indicator Model Code



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

## Dimensions



Size	35	55	75	95
Weight (lbs.)	6.39	8.29	9.90	10.60

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:

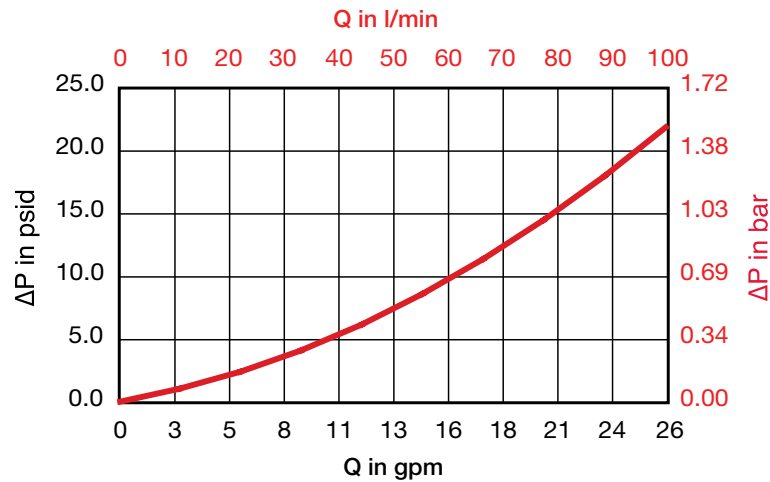
$$\text{Assembly } \Delta P = \text{Housing } \Delta P + \text{Element } \Delta P$$

### 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	...D...BN4HC (Betamicon® Low Collapse)			
	3 μm	5 μm	10 μm	20 μm
0035	1.294	1.041	0.811	0.510
0055	0.751	0.603	0.444	0.263
0075	0.510	0.411	0.290	0.170
0095	0.411	0.329	0.225	0.132

All Element K Factors in psi / gpm.