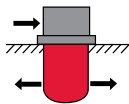


SPECIAL ORDER FILTERS - LOW PRESSURE

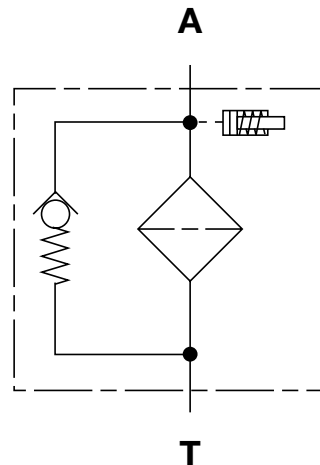
RFMP Series

In-Tank Return Line Filters

100 psi • up to 26 gpm



Hydraulic Symbol



Features

- The compact and lightweight design make RFMP filters especially suitable for mobile applications.
- RFMP filters integrate the head and bowl into a single one piece polyamide housing. This makes for a more leak-tight housing.
- The housing is designed so that a down tube can be attached to the outlet spout.

Note: This filter is configured with anR.... type (return/low pressure) element, so if the filter requires a bypass, the bypass is located in the closed end cap of the cartridge element.

Technical Specifications

Mounting Method	
165	4 mounting holes - filter housing
Port Connections	
	Inlet / Outlet
165	1" Hose Barb/1.26" smooth port
Direction of Flow	
	Side inlet and bottom outlet.
Mat. of Construc.	
165	Housing Polyamide Lid Plastic
Flow Capacity	
165	26 gpm (100 lpm)
Housing Pressure Rating	
Max. Allowable Working Pressure*	101.5 psi (7 bar)
Element Collapse Pressure Rating	
ON	290 psid (20 bar)
ECON2, P/HC, MM	145 psid (10 bar)
Fluid Temperature Range	
	-22°F to 176°F (-30°C to 80°C)
Consult HYDAC for applications below -22°F (-30°C)	
Fluid Compatibility	
Compatible with all petroleum oils and synthetic fluids rated for use with nitrile rubber (NBR) seals.	
Indicator Trip Pressure	
	P = 29 psi (2 bar) -10% (standard)
Bypass Valve Cracking Pressure	
	ΔP = 43 psid (3 bar) +10% (standard)

*Note: All RFMP Filters MAWP reduce to 7 bar (101.5 psi) when using the following "VMF" and "VR" indicators: B, BM, E, ES, GC, LE, LZ.

Applications

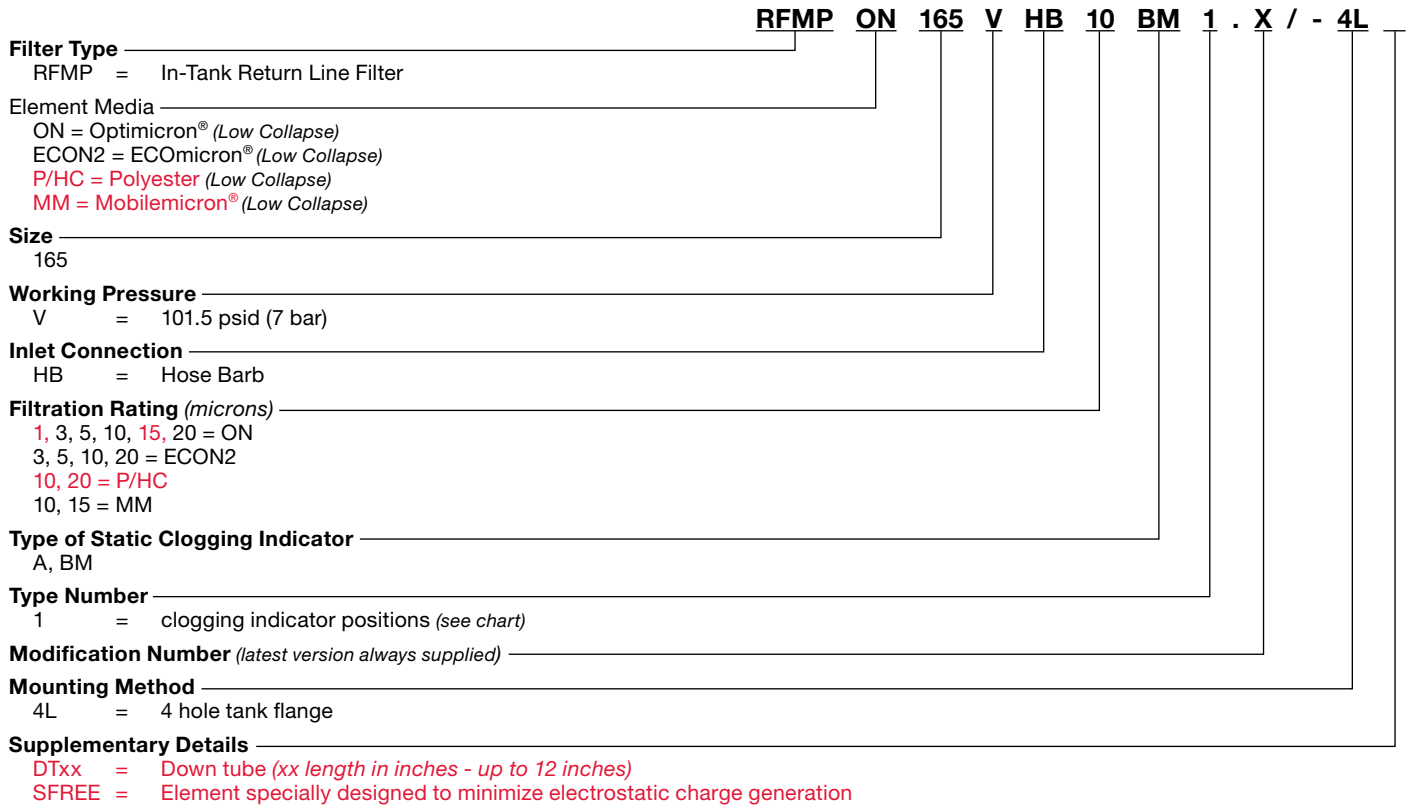


Agricultural

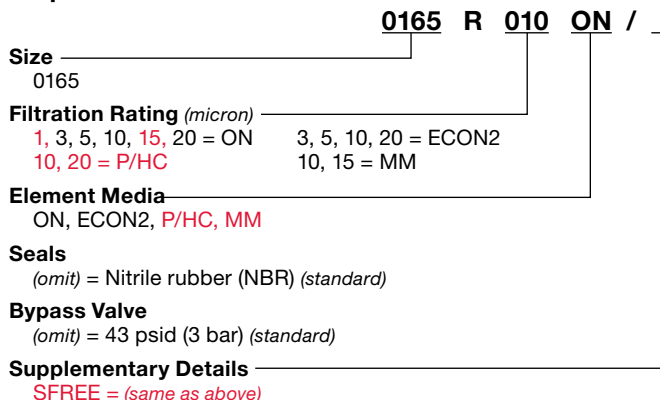


Construction

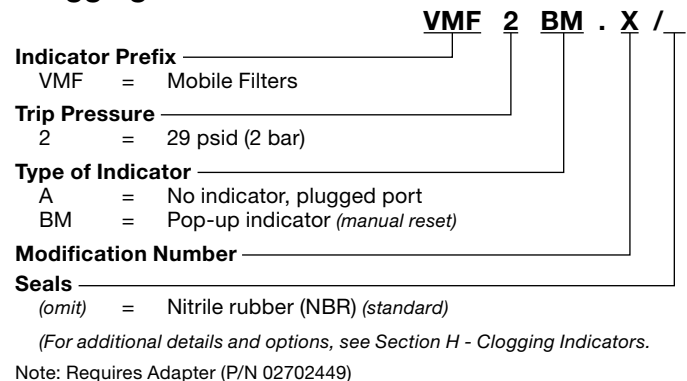
Model Code



Replacement Element Model Code



Clogging Indicator Model Code

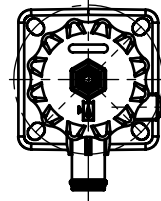


Model Codes Containing RED are non-stock items — Minimum quantities may apply — Contact HYDAC for information and availability

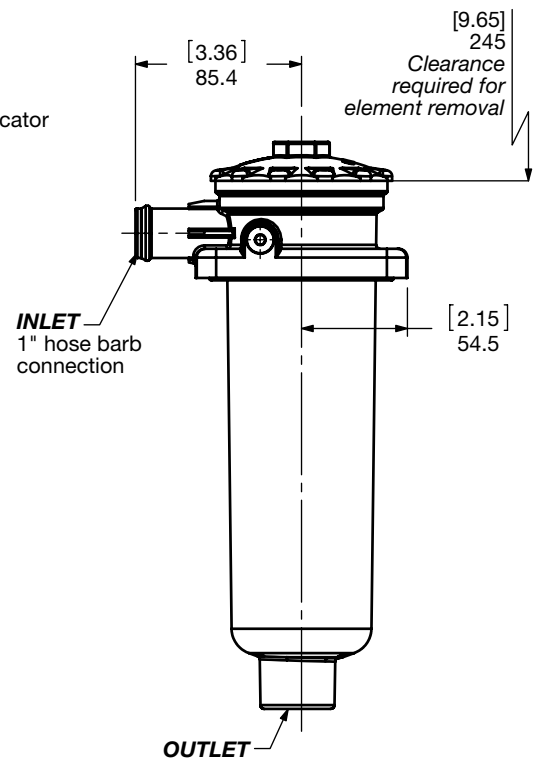
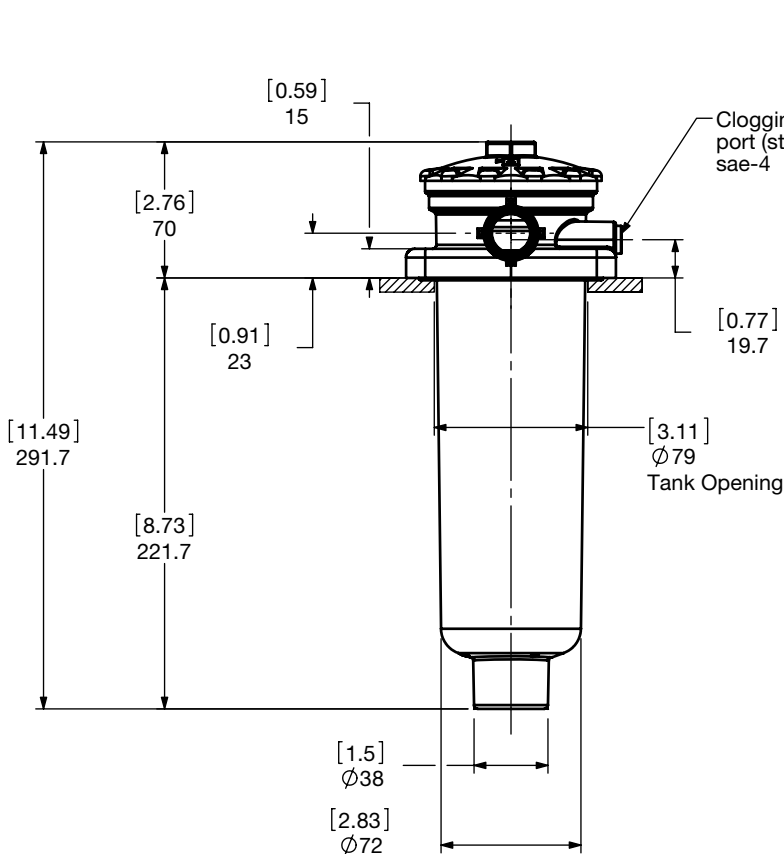
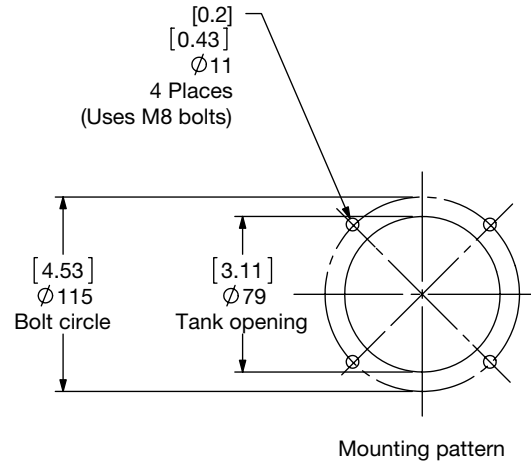
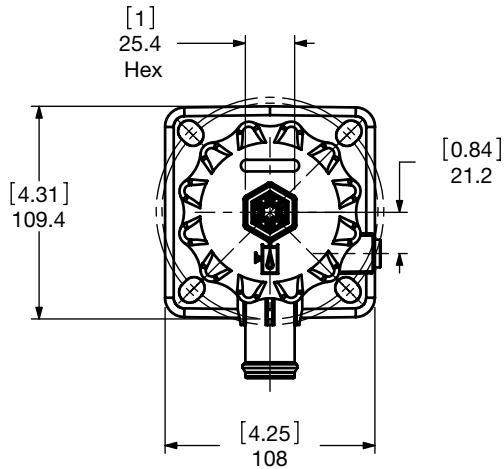
SPECIAL ORDER FILTERS - LOW PRESSURE

Dimensions

RFMP 165



1.X
Clogging indicator
location
(right front)
Uses indicator model (VMF...)
with adapter (P/N: 02702449)



Size	165
Weight (lbs.)	2.5

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

Sizing Information

Total pressure loss through the filter is as follows:

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

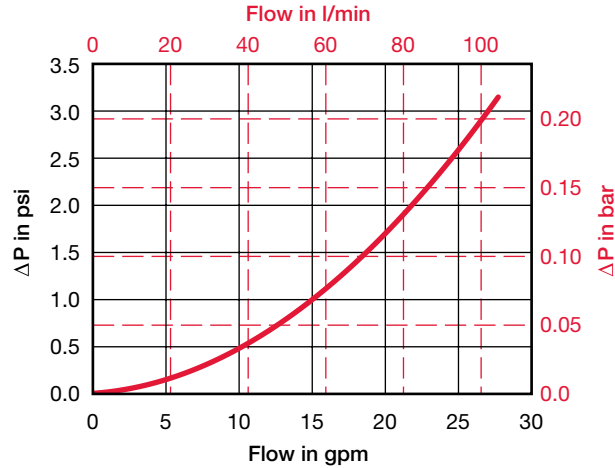
Housing Curve:

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)

RFMP 165 Housing



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)

Optimicron	...R...ON					
Size	1 μm	3 μm	5 μm	10 μm	15 μm	20 μm
0165 R XXX ON	0.774	0.518	0.404	0.221	0.123	0.133

ECOMICRON	...R...ECON2			
Size	3 μm	5 μm	10 μm	20 μm
0165 R XXX ECON2	0.615	0.428	0.247	0.132

MOBILEMICRON	...R...MM		
Size	8 μm	10 μm	15 μm
0165 R XXX MM	0.146	0.146	0.091

POLYESTER	...R...P/HC	
Size	10 μm	20 μm
0165 R XXX P/HC	0.033	0.016

All Element K Factors in psi / gpm.