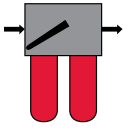
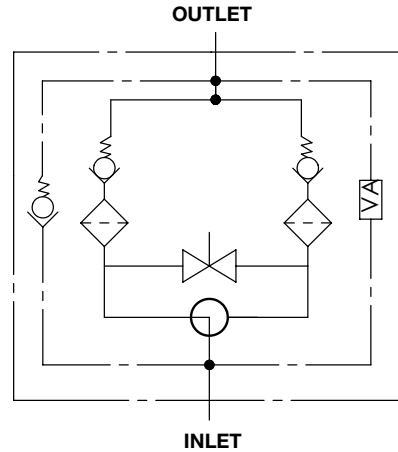


FMND Series

Inline Duplex Filters
3000 psi • up to 100 gpm



Hydraulic Symbol



Features

- The FMND filter consists of a ductile iron filter head with built-in changeover valve and three different lengths of screw-in filter bowls.
- The FMND filter can be supplied with or without bypass valve, (located in head assembly) but includes vent and drain screws, and also a connection for a differential pressure clogging indicator.
- Pressure equalization requirement is achieved by raising the changeover lever prior to switching it to the relevant filter side.
- Fatigue pressure rating = maximum allowable working pressure rating.
- Germanischer Lloyd (GL) approved
- This filter meets the requirements of DIN 24550 as follows:
 - Filter size 0160 with G 1-1/4" port selection
 - Filter size 0250 with G 1-1/2" port selection
 - Filter size 0400 with SAE-DN 38 1-1/2" Flange Port Selection

Technical Specifications

Mounting Method	4 Mounting holes
Port Connections	Inlet / Outlet 1-1/4" Threaded – SAE 20, 1-1/4" BSPP 1-1/2" Threaded – SAE 24, 1-1/2" BSPP 1-1/2" Flange-SAE-DN 38
Flow Direction	Inlet: Side Outlet: Opposite Side
Construction Materials	Head: Ductile iron Bowl: Steel
Flow Capacity	160: 42 gpm (160 lpm) 250: 66 gpm (250 lpm) 400: 100 gpm (400 lpm)
Housing Pressure Rating	Max. Allowable Working Pressure: 3000 psi (207 bar) Fatigue Pressure: 3000 psi (210 bar) @ 1 million cycles Burst Pressure: 10,650 psi (735 bar)
Element Collapse Pressure Rating	BH4HC: 3045 psid (210 bar) BN4HC, W/HC: 290 psid (20 bar)
Fluid Temperature Range	14°F to 212°F (-10°C to 100°C) Consult HYDAC for applications operating below 14°F (-10°C)
Fluid Compatibility	Compatible with all hydrocarbon based, synthetic, water glycol, oil/water emulsion, and high water based fluids when the appropriate seals are selected.
Indicator Trip Pressure	$\Delta P = 36.25$ psid (2.5 bar) -10% (optional) $\Delta P = 50.75$ psid (3.5 bar) +10% (optional) $\Delta P = 72$ psid (5 bar) -10% (standard) $\Delta P = 116$ psid (8 bar) -10% (optional) [Used with non-bypass]
Bypass Valve Cracking Pressure	$\Delta P = 102$ psid (7 bar) +10%

Model Code

FMND BN/HC 250 L D F 10 C 1 . X / 12 - V -

Filter Type _____
 FMND = Inline Duplex Filter

Element Media _____
 BH/HC = Betamicon® (High Collapse) BN/HC = Betamicon® (Low Collapse)
 W/HC = Wire Mesh

Size _____
 160, 250, 400

Operating Pressure _____
 L = 3000 psi (210 bar)

Type of Changeover _____
 D = segment valve

Type and Size of Port _____
 E = 1-1/4" Threaded – SAE 20, 1-1/4" BSPP
 F = 1-1/2" Threaded – SAE 24, 1-1/2" BSPP
 K = 1-1/2" Flange-SAE-DN 38

Filtration Rating (micron) _____
 3, 6, 10, 25 = BH/HC 3, 6, 10, 25 = BN/HC 25, 50, 100, 200 = W/HC

Type of ΔP Clogging Indicator _____
 A, B, BM, C, D (Others available upon request)

Type Code _____
 1

Modification Number (the latest version is always supplied) _____

Port Configuration _____
 (omit) = SAE DN Flange
 0 = BSPP Threaded
 12 = SAE Straight Threaded

Seals _____
 (omit) = Nitrile rubber (NBR) (standard)
 V = Fluorocarbon elastomer (FKM)

Bypass Valve _____
 (omit) = no bypass (optional)
 B3.5 = 50.75 psid (3.5 bar) (optional)
 B7 = 101.5 psid (7 bar) (standard)

Supplementary Details _____
 L24, L48, L110, L220 = Lamp for D-type clogging indicator (LXX, XX = voltage)
 RL = Flow Path reversed - Right inlet/Left outlet
 SO263 = Modification of ON & W/HC elements for Skydrol or HYJET phosphate ester fluids
 SO155H = Modification of BH4HC (High Collapse) Element For Phosphate Esters
 cRUus = Electrical Indicator with underwriter's recognition
 SFREE = Element specially designed to minimize electrostatic charge generation

Replacement Element Model Code

0250 DN 010 BN4HC / V

Size _____
 0160, 0250, 0400

Type _____
 DN

Filtration Rating (micron) _____
 3, 6, 10, 25 = BH4HC
 3, 6, 10, 25 = BN4HC
 25, 50, 100, 200 = W/HC

Element Media _____
 BH/HC, BN/HC, W/HC

Supplementary Details _____
 (omit) = standard
 V = Fluorocarbon elastomer (FKM)
 SFREE = (same as above)
 SO263 = (same as above)
 SO155H = (same as above)

Clogging Indicator Model Code

VM 8 C . X / V

Indicator Prefix _____
 VM = G 1/2 3000 psi

Trip Pressure _____
 2 = 29 psid (2 bar)
 5 = 72 psid (5 bar)] (optional)
 8 = 116 psid (8 bar)

Type of Indicator _____
 A = No indicator, plugged port
 B = Pop-up indicator (auto reset)
 BM = Pop-up indicator (manual reset)
 C = Electric switch - SPDT
 D = Electric switch and LED light - SPDT

Modification Number _____

Supplementary Details _____

Seals _____
 (omit) = Nitrile rubber (NBR) (standard)
 V = Fluorocarbon elastomer (FKM)

Light Voltage (D type indicators only) _____
 L24 = 24V L110 = 110V

Thermal Lockout (VM types C, D, J, and J4 only) _____
 T100 = Lockout below 100°F

Underwriters Recognition (VM types C, D, J, and J4 only) _____
 cRUus = Electrical Indicator with underwriter's recognition
 (For additional details and options, see Section G - Clogging Indicators.)