

FHM series

Maximum working pressure up to 32 MPa (320 bar) - Flow rate up to 450 l/min



Description

Technical data

High Pressure filters

Manifold

Maximum working pressure up to 32 MPa (320 bar)

Flow rate up to 450 l/min

FHM is a range of high pressure filter for protection of sensitive components in high pressure hydraulic systems in the mobile machines.

They are directly connected to the top of the manifold, through the proper flanged interface.

Available features:

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- Manifold connections up to Ø30 mm, for a maximum flow rate of 450 l/min
- ISO 4401 CETOP 3 and CETOP 5 interface, for direct mounting on the CETOP valves
- Fine filtration rating, to get a good cleanliness level into the system
- Bypass valve, to relieve excessive pressure drop across the filter media
- Check valve, to protect the system against reverse flow
- Low collapse filter element "N", for use with filters provided with bypass valve
- High collapse filter element "H", for use with filters not provided with bypass valve
- High collapse filter element with external support "S", for filter element protection against the back pressure caused by the check valve in filters not provided with the bypass valve
- Visual, electrical and electronic differential clogging indicators

Common applications:

Delivery lines, in any high pressure industrial equipment

Filter housing materials

- Head
Phosphatized cast iron: FHM 006-007-010
Phosphatized steel: FHM 050-065-135-320-500
- Housing: Phosphatized steel
- Bypass valve: Steel
- Check valve: Steel

Pressure

- Test pressure: 48 MPa (480 bar)
- Burst pressure: 96 MPa (960 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 32 MPa (320 bar)

Bypass valve

- Opening pressure 600 kPa (6 bar) ±10%
- Other opening pressures on request.

Δp element type

- Microfibre filter elements - series N: 20 bar
(not available for FHM 006, FHM 007 and FHM 010)
- Microfibre filter elements - series H: 210 bar
(not available for FHM 050 and FHM 500)
- Microfibre filter elements - series S: 210 bar
(only for FHM 050 and FHM 500)
- Wire mesh filter elements - series H: 210 bar
(only for FHM 006, FHM 007 and FHM 010)
- Fluid flow through the filter element from OUT to IN

Seals

- Standard NBR series A
- Optional FPM series V

Temperature

From -25 °C to +110 °C

Connections

Manifold mounting

Note

FHM filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

Filter series	Weights [kg]					Volumes [dm ³]						
	Length	1	2	3	4	5	Length	1	2	3	4	5
FHM 006		2.17	-	-	-	-		0.12	-	-	-	-
FHM 007		-	4.74	5.95	-	-		-	0.30	0.50	-	-
FHM 010		-	4.74	5.95	-	-		-	0.30	0.50	-	-
FHM 050		5.31	5.68	6.09	6.56	7.74		0.29	0.38	0.48	0.60	0.89
FHM 065		5.47	5.83	7.04	-	-		0.27	0.34	0.56	-	-
FHM 135		8.78	10.38	11.43	-	-		0.49	0.82	1.03	-	-
FHM 320		19.80	21.93	24.22	26.70	-		1.04	1.76	2.53	3.36	-
FHM 500		35.00	39.17	42.69	54.70	60.50		1.63	2.35	2.96	5.11	6.44

Designation & Ordering code

COMPLETE FILTER

Series and size				Configuration example: FHM010 2 S V G1 A03 H P01						
FHM006	FHM007	FHM010								
FHM006 FHM007 FHM010										
Length	FHM006	FHM007	FHM010							
1	•									
2		•	•							
3		•	•							
Valves										
S Without bypass										
Seals										
A NBR										
V FPM										
Connections										
G1 Manifold side "A"										
G2 Manifold side "B"										
Filtration rating (filter media)										
A03 Inorganic microfiber	3 µm	A16 Inorganic microfiber	16 µm							
A06 Inorganic microfiber	6 µm	A25 Inorganic microfiber	25 µm							
A10 Inorganic microfiber	10 µm	M25 Wire mesh	25 µm							
							Element Δp	H 210 bar		
							Execution	P01 MP Filtri standard		
								Pxx Customized		

FILTER ELEMENT

Element series and size				Configuration example: HP065 2 A03 A H P01						
HP011	HP065									
HP011 HP065										
Element length	HP011	HP065								
2		•	•							
3	•	•	•							
Filtration rating (filter media)										
A03 Inorganic microfiber	3 µm	A16 Inorganic microfiber	16 µm							
A06 Inorganic microfiber	6 µm	A25 Inorganic microfiber	25 µm							
A10 Inorganic microfiber	10 µm	M25 Wire mesh	25 µm							
							Seals	A NBR		
								V FPM		
							Element Δp	H 210 bar		
							Execution	P01 MP Filtri standard		
								Pxx Customized		

ACCESSORIES

Differential indicators	page		page
DEA Electrical differential indicator	567	DLE Electrical / visual differential indicator	570
DEH Hazardous area electronic differential indicator	567-568	DTA Electronic differential indicator	571
DEM Electrical differential indicator	568-569	DVA Visual differential indicator	571
DLA Electrical / visual differential indicator	569-570	DVM Visual differential indicator	571
Additional features	page		
T2 Plug	572		

