

FHB series

Maximum working pressure up to 32 MPa (320 bar) - Flow rate up to 485 l/min



High Pressure filters

Manifold

Maximum working pressure up to 32 MPa (320 bar)

Flow rate up to 485 l/min

FHB 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 side of the manifold, through the proper flanged interface.

Available features:

- Manifold connections up to Ø30 mm, for a maximum flow rate of 485 l/min
- 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 or mobile machines

Filter housing materials

- Head: Phosphatized cast iron
- Housing: Phosphatized steel
- Bypass valve: Steel
- Check valve: Steel

Pressure

- Working pressure: 32 MPa (320 bar)
- 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
- Microfibre filter elements - series H: 210 bar (not available for FHB050)
- Microfibre filter elements - series S: 210 bar (only for FHB050)
- Wire mesh filter elements - series N: 20 bar
- 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

FHB 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
FHB 050		2.61	2.98	3.39	3.86	5.04		0.21	0.30	0.40	0.52	0.81
FHB 065		3.33	3.69	4.90	-	-		0.20	0.27	0.49	-	-
FHB 135		6.61	8.21	9.21	-	-		0.40	0.73	0.94	-	-
FHB 320		12.95	15.08	17.37	26.77	-		0.91	1.63	2.40	3.59	-

FHB FHB065 - FHB135 - FHB320

Designation & Ordering code

COMPLETE FILTER

Series and size				Configuration example: FHB320 4 S A F1 A06 H P01						
FHB065 FHB135 FHB320										
Length	FHB065	FHB135	FHB320							
1	•	•	•							
2	•	•	•							
3	•	•	•							
4			•							
Valves										
S	Without bypass									
B	With bypass 6 bar									
T	With check valve, without bypass									
D	With check valve, with bypass 6 bar									
Seals										
A	NBR									
V	FPM									
Connections										
F1	Manifold									
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	Valves			
	S	B	T	D
N 20 bar		•		•
H 210 bar	•		•	

Execution				
	1	2	3	4
P01 MP Filtri standard	•	•	•	•
P02 Maintenance from the bottom of the housing				•
Pxx Customized				

FILTER ELEMENT

Element series and size				Configuration example: HP320 4 A06 A H P01						
HP065 HP135 HP320										
Element length	HP065	HP135	HP320							
1	•	•	•							
2	•	•	•							
3	•	•	•							
4			•							
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	
N	20 bar
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

FHB065

Filter length	H [mm]
1	194
2	225
3	327

