

# FHB series

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



## Description

## Technical data

### 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 [dm<sup>3</sup>]

Filter series	Weights [kg]					Volumes [dm <sup>3</sup> ]						
	Length	1	2	3	4	5	Length	1	2	3	4	5
<b>FHB 050</b>		2.61	2.98	3.39	3.86	5.04		0.21	0.30	0.40	0.52	0.81
<b>FHB 065</b>		3.33	3.69	4.90	-	-		0.20	0.27	0.49	-	-
<b>FHB 135</b>		6.61	8.21	9.21	-	-		0.40	0.73	0.94	-	-
<b>FHB 320</b>		12.95	15.08	17.37	26.77	-		0.91	1.63	2.40	3.59	-

### COMPLETE FILTER

Series and size <b>FHB050</b>	Configuration example: <b>FHB050</b>	<b>2</b>	<b>T</b>	<b>A</b>	<b>F1</b>	<b>A06</b>	<b>S</b>	<b>P01</b>
Length <b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>   <b>5</b>								
Valves <b>S</b> Without bypass <b>B</b> With bypass 6 bar <b>T</b> With check valve, without bypass <b>D</b> With check valve, with bypass 6 bar								
Seals <b>A</b> NBR <b>V</b> FPM								
Connections <b>F1</b> Manifold								
Filtration rating (filter media)								
<b>A03</b> Inorganic microfiber 3 µm	<b>A16</b> Inorganic microfiber 16 µm							
<b>A06</b> Inorganic microfiber 6 µm	<b>A25</b> Inorganic microfiber 25 µm							
<b>A10</b> Inorganic microfiber 10 µm	<b>M25</b> Wire mesh 25 µm							
			Valves				Execution	
			Element Δp	S	B	T	D	<b>P01</b> MP Filtri standard
			<b>N</b> 20 bar		•		•	<b>Pxx</b> Customized
			<b>S</b> 210 bar	•		•		

### FILTER ELEMENT

Element series and size <b>HP050</b>	Configuration example: <b>HP050</b>	<b>2</b>	<b>A06</b>	<b>A</b>	<b>S</b>	<b>P01</b>		
Element length <b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>   <b>5</b>								
Filtration rating (filter media)								
<b>A03</b> Inorganic microfiber 3 µm	<b>A16</b> Inorganic microfiber 16 µm							
<b>A06</b> Inorganic microfiber 6 µm	<b>A25</b> Inorganic microfiber 25 µm							
<b>A10</b> Inorganic microfiber 10 µm	<b>M25</b> Wire mesh 25 µm							
			Seals		Element Δp		Execution	
			<b>A</b> NBR	<b>N</b> 20 bar	<b>P01</b> MP Filtri standard			
			<b>V</b> FPM	<b>S</b> 210 bar	<b>Pxx</b> Customized			

### ACCESSORIES

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

FHB050	
Filter length	H [mm]
1	185
2	222
3	264
4	312
5	434

