

FHD series

Maximum working pressure up to 35 MPa (350 bar) - Flow rate up to 345 l/min



High Pressure filters

Duplex

Maximum working pressure up to 35 MPa (350 bar)

Flow rate up to 345 l/min

FHD is a range of high pressure duplex filter with integrated changeover function to allow the filter element replacement without the system shut-down.

They are directly connected to the lines of the system through the hydraulic fittings.

Available features:

- Female threaded connections up to 1 1/4" and flanged connections up to 1 1/2", for a maximum flow rate of 345 l/min
- Fine filtration rating, to get a good cleanliness level into the system
- Balancing valve integrated in the changeover lever, to equalize the housing pressure before the switch
- Bypass valve, to relieve excessive pressure drop across the filter media
- Vent ports, to avoid air trapped into the filter going into the system
- Drain ports, to remove the fluid from the housing prior the maintenance work
- 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
- Low collapse filter element with external support "R", for filter element protection against the back pressure caused by the check valve or the reverse flow in filters provided with the bypass valve
- High collapse filter element with external support "S", for filter element protection against the back pressure caused by the check valve or the reverse flow in filters not provided with the bypass valve
- Visual, electrical and electronic differential clogging indicators

Common applications:

- System where shut-down causes high costs
- System where shut-down causes safety issues

Filter housing materials

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

Pressure

- Test pressure: 52.5 MPa (525 bar)
- Burst pressure: 105 MPa (1050 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 35 MPa (350 bar)

Bypass valve

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

Δp element type

- Microfibre filter elements - series N: 20 bar
- Microfibre filter elements - series R: 20 bar (not available for FHD 021)
- Microfibre filter elements - series H: 210 bar (only for FHD 021)
- Microfibre filter elements - series S: 210 bar (not available for FHD 021)
- 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

In-line Inlet/Outlet 90°

Note

FHD 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
FHD 021	-	8.0	9.0	9.9	-	-	-	0.06	0.12	0.22	-	-
FHD 051	-	16.9	17.5	18.5	19.8	-	-	0.31	0.41	0.53	0.83	-
FHD 326	43.0	50.0	54.0	-	-	-	0.88	1.60	2.37	-	-	-
FHD 333	-	74.0	79.0	98.0	-	-	-	1.75	2.52	3.35	-	-

FHD FHD051 - FHD326 - FHD333

Designation & Ordering code

COMPLETE FILTER

Series and size Configuration example: **FHD326** | **3** | **S** | **A** | **G1** | **M25** | **N** | **P01**

FHD051 | **FHD326** | **FHD333**

Length	FHD051	FHD326	FHD333
1		•	
2	•	•	•
3	•	•	•
4	•		•
5	•		

Valves

S Without bypass

B With bypass 6 bar

Seals

A NBR

V FPM

Connections	FHD051	FHD326	FHD333
G1	G 3/4"	G 1 1/4"	-
G2	3/4" NPT	1 1/4" NPT	-
G3	G 1/2"	SAE 20 - 1 5/8" - 12 UN	-
G4	1/2" NPT	-	-
G5	SAE 8 - 3/4" - 16 UNF	-	-
G6	SAE 12 - 1 1/16" - 12 UN	-	-
F1	-	-	1 1/2" 6000 psi/M
F2	-	-	1 1/2" 6000 psi/UNC

Filtration rating (filter media)

A03	Inorganic microfiber	3 µm
A06	Inorganic microfiber	6 µm
A10	Inorganic microfiber	10 µm
A16	Inorganic microfiber	16 µm
A25	Inorganic microfiber	25 µm
M25	Wire mesh	25 µm

Element Δp	Filtration rating		Execution
	Axx	M25	
N 20 bar		•	P01 MP Filtri standard
R 20 bar	•	•	Pxx Customized
S 210 bar	•	•	

FILTER ELEMENT

Element series and size Configuration example: **HP320** | **3** | **M25** | **A** | **N** | **P01**

HP050 | **HP320**

Element length	HP050	HP320
1		•
2	•	•
3	•	•
4	•	•
5	•	

Filtration rating (filter media)

A03	Inorganic microfiber	3 µm
A06	Inorganic microfiber	6 µm
A10	Inorganic microfiber	10 µm
A16	Inorganic microfiber	16 µm
A25	Inorganic microfiber	25 µm
M25	Wire mesh	25 µm

Seals	Element Δp	Filtration rating		Execution
		Axx	M25	
A NBR	N 20 bar		•	P01 MP Filtri standard
V FPM	R 20 bar	•	•	Pxx Customized
	S 210 bar	•	•	

ACCESSORIES

Differential indicators	page	Differential indicators	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

FHD051			
Filter length	H [mm]		
2	253		
3	295		
4	343		
5	465		
Connections	R		
G1	M6		
G2	1/4" UNC		
G3	M6		
G4-G5-G6	1/4" UNC		
Valves	L [mm]	L1 [mm]	M [mm]
S	168	138	84
B	182.5	152.5	98.5

