

FZD series

Maximum working pressure up to 35 Mpa (350 bar) - Flow rate up to 90 l/min



Description

Technical data

Stainless steel high pressure filters

Duplex

Maximum working pressure up to 35 Mpa (350 bar)

Flow rate up to 90 l/min

FZD is a range of stainless steel 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 3/4", for a maximum flow rate of 90 l/min
- Fine filtration rating, to get a good cleanliness level into the system
- Balancing valve, available for FZD051, 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
- 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
- High collapse filter element "U", for use with aggressive fluids
- 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: AISI 316L
- Housing: AISI 316L
- Bypass valve: AISI 316L

Seals

- Standard NBR series A (-25 °C to +110 °C)
- Optional FPM series V (-20 °C to +120 °C)
- Optional MFQ series F (-50 °C to +120 °C)

Bypass valve

Opening pressure 6 bar \pm 10%

Temperature

From -50 °C to +120 °C

Note

FZD filters are provided for vertical mounting

Δp element type

Fluid flow through the filter element from OUT to IN

Microfibre filter elements - series R: 20 bar.

Element series "R":

- End cap: Nylon
- Core tube: Tinned Steel
- External/Internal support: Wire mesh Epox painted
- Media/Support/Pre-filter: Microfibre/Syntetic

Microfibre filter elements - series H-S: 210 bar.

Element series "H - S":

- End cap: Tinned Steel
- Core tube: Tinned Steel
- External support: Wire mesh Epox painted
- Internal support: Wire mesh Stainless Steel
- Media/Support/Pre-filter: Microfibre/Syntetic

Stainless Steel Microfibre filter elements series U: 210 bar.

Element series "U":

- End cap: Stainless Steel
- Core tube: Stainless Steel
- External support: Stainless Steel
- Internal support: Stainless Steel
- Media/Support/Pre-filter: Microfibre/Syntetic



Weights [kg] and volumes [dm³]

Filter series		Weights [kg]					Volumes [dm³]					
	Length	1	2	3	4	5	Length	1	2	3	4	4
FZD 010		-	7.9	-	-	-		-	0.10	-	-	-
FZD 021		-	9.6	9.8	10.3	-		-	0.06	0.12	0.22	-
FZD 051		-	17.4	18.0	19.0	20.3		-	0.31	0.41	0.53	0.83

Filter series	Length	Filter element design - H Series					Filter element design - U Series				
		A03	A06	A10	A16	A25	A03	A06	A10	A16	A25
FZD 010	2	4	5	7	8	11	4	5	7	8	11
	3	5	6	11	12	16	5	6	11	12	16
FZD 021	3	9	11	16	18	20	9	11	16	18	20
	4	10	12	17	19	21	10	12	17	19	21

Filter series	Length	Filter element design - R Series					Filter element design - S Series					Filter element design - U Series				
		A03	A06	A10	A16	A25	A03	A06	A10	A16	A25	A03	A06	A10	A16	A25
FZD 051	2	39	41	51	54	59	35	37	48	51	58	35	37	48	51	58
	3	45	46	54	56	61	41	43	52	54	60	41	43	52	54	60
	4	50	52	58	58	62	47	49	56	56	61	47	49	56	56	61
	5	56	57	61	62	63	53	53	57	59	63	53	53	57	59	63

Maximum flow rate for a complete stainless steel high pressure filter with a pressure drop $\Delta p = 1.5$ bar.

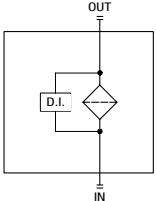
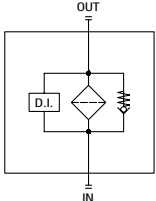
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

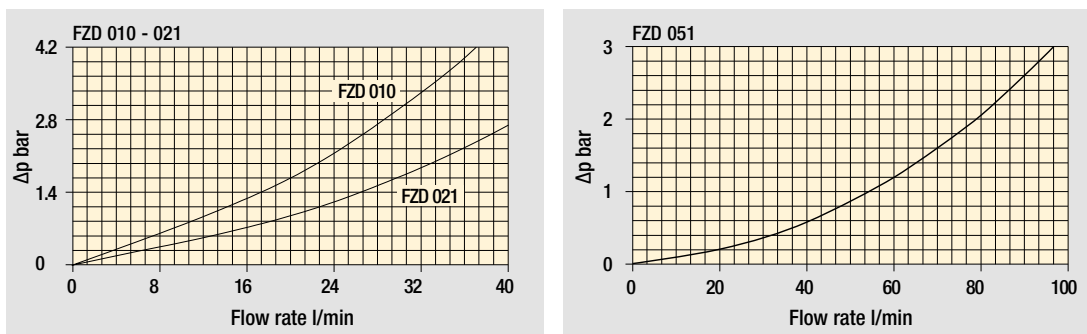
Hydraulic symbols

Filter series	Style S	Style B
FZD 010	•	
FZD 021	•	
FZD 051	•	•

Pressure drop

Filter housings Δp pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example: FZD021 4 S A G1 A06 H P01								
FZD010 FZD021											
Length											
2			•								
3				•							
4				•							
Valves											
S Without bypass											
Seals											
A NBR											
V FPM											
Connections											
FZD010											
FZD021											
G1 G 3/8"											
G2 3/8" NPT											
G3 -											
SAE 8 - 3/4" - 16 UNF											
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											
Element Δp											
H 210 bar											
U 210 bar, stainless steel filter element											
Execution											
P01 MP Filtri standard											
Pxx Customized											

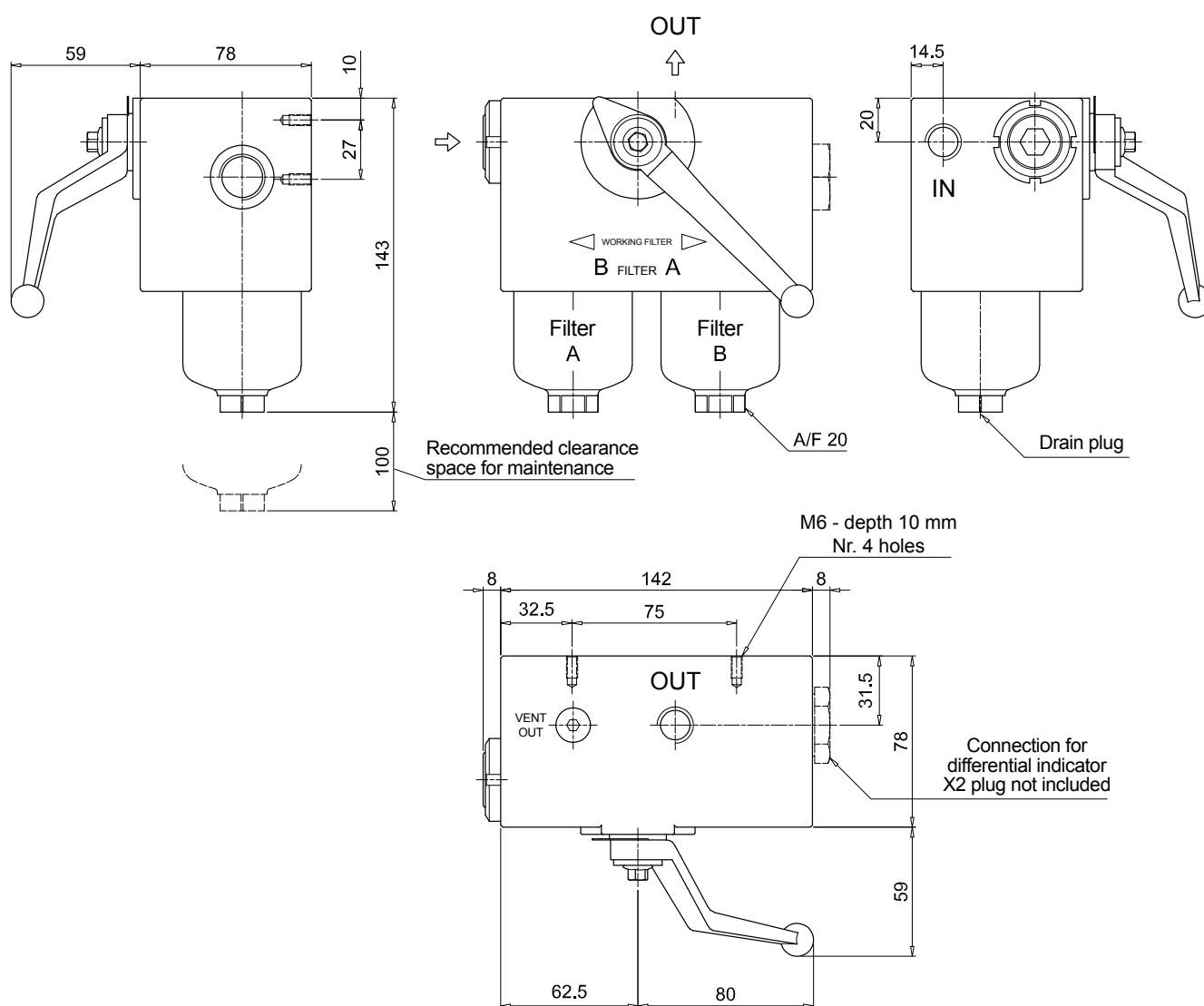
FILTER ELEMENT

Element series and size			Configuration example: HP011 4 A06 A H P01								
FZD010 FZD021											
HP010			•								
HP011				•							
Element length											
HP010											
HP011											
2			•								
3				•							
4				•							
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											
Seals											
A NBR											
V FPM											
Element Δp											
H 210 bar											
U 210 bar, stainless steel filter element											
Execution											
P01 MP Filtri standard											
Pxx Customized											

ACCESSORIES

Differential indicators		page			page
DEH Hazardous area electronic differential indicator		632	DVX Visual differential indicator		633
DEX Electrical differential indicator		633	DVY Visual differential indicator		634
DLX Electrical / visual differential indicator		633			
Additional features		page			
X2 Plug		634			

FZD010



Dimensions

