

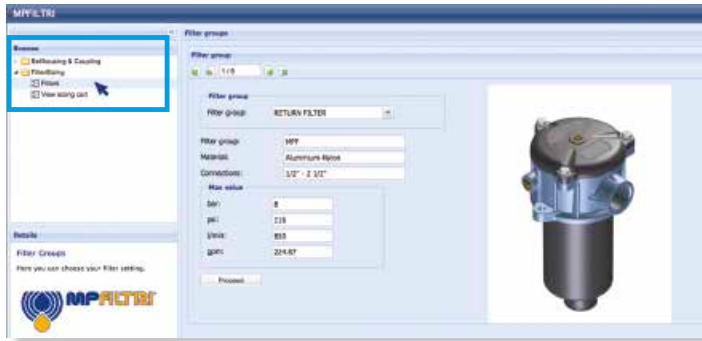
# FZB series

Maximum working pressure up to 32 Mpa (320 bar) - Flow rate up to 75 l/min





## Step 1 Select "FILTERS"



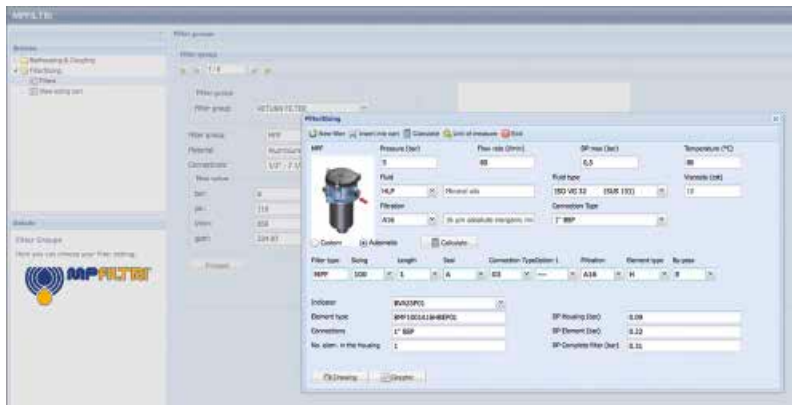
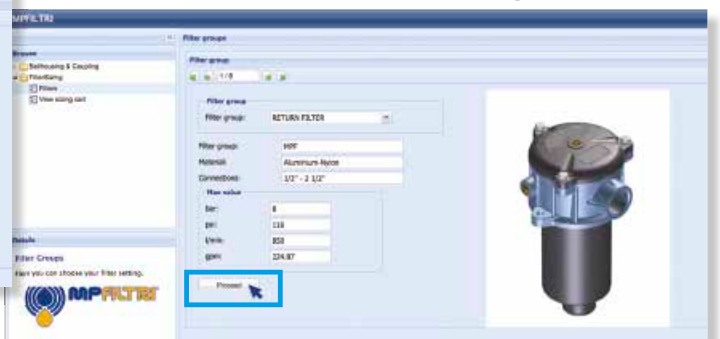
## Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



## Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



## Step 4 Push "PROCEED"



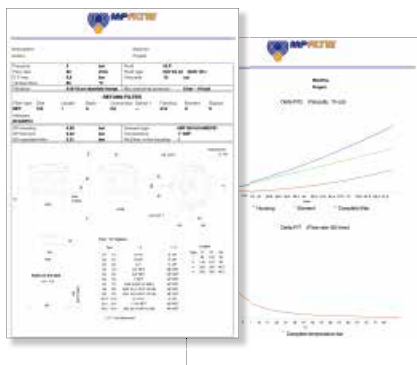
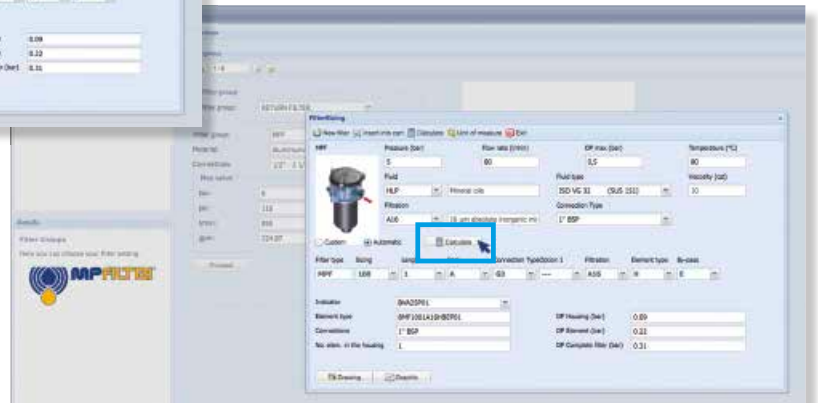
## Step 5

Insert all application data to calculate the filter size following the sequence:

- working pressure
- working flow rate
- working pressure drop
- working temperature
- fluid material and fluid type
- filtration media
- connection type

## Step 6

Push "CALCULATE" to have result; in case of any mistake, the system will advise which parameter is out of range to allow to modify/adjust the selection



## Step 7

Download PDF  Datasheet "Report.aspx" pushing the button "Drawing"

## Description

## Technical data

### Stainless steel high pressure filters

#### Manifold

**Maximum working pressure up to 32 Mpa (320 bar)**  
**Flow rate up to 75 l/min**

FZB is a range of stainless steel high pressure filter for protection of sensitive components in high pressure hydraulic systems placed in difficult environmental conditions.

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

#### Available features:

- Manifold connections up to Ø16 mm, for a maximum flow rate of 75 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
- 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:

- Off-shore equipment
- Water filtration systems
- Systems with strong or corrosive environmental conditions
- Systems with corrosive fluids

#### 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 ±10%

#### Temperature

From -50 °C to +120 °C

#### Note

FZB 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 S: 210 bar.

Element series "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 [dm<sup>3</sup>]

Filter series	Weights [kg]				Volumes [dm <sup>3</sup> ]					
	Length	1	2	3	4	Length	1	2	3	4
<b>FZB 039</b>	-	4.6	5.2	5.7	-	0.19	0.26	0.34		

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
<b>FZB 039</b>	<b>2</b>	18	23	39	44	52	18	22	37	40	48	18	22	37	40	48
	<b>3</b>	31	33	47	54	65	28	31	43	46	84	28	31	43	46	84
	<b>4</b>	38	41	56	63	71	34	36	48	62	68	34	36	48	62	68

### 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 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

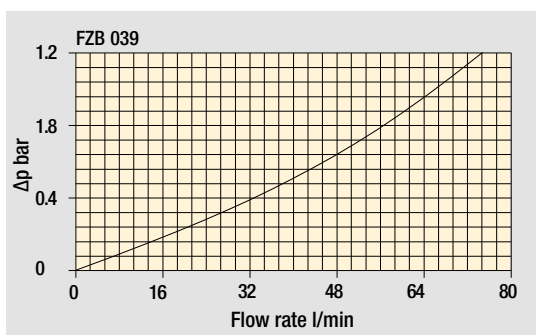
For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

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	Style T	Style D
<b>FZB 039</b>	•	•	•	•



The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

Pressure drop  
Filter housings  $\Delta p$  pressure drop

## Designation & Ordering code

### COMPLETE FILTER

Configuration example: **FZB039** | **2** | **T** | **A** | **F** | **2** | **A06** | **S** | **P01**

**Series and size**  
FZB039

**Length**  
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  
**F** MFQ

**Connections**  
F Manifold

**Connections for differential indicator**  
**1** Without  
**2** With connection on the top

**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	Valves				Execution
	S	B	T	D	
<b>R</b> 20 bar		•		•	<b>P01</b> MP Filtri standard
<b>S</b> 210 bar	•		•		<b>Pxx</b> Customized
<b>U</b> 210 bar, stainless steel filter element	•	•	•	•	

### FILTER ELEMENT

Configuration example: **HP039** | **2** | **A06** | **A** | **S** | **P01**

**Element series and size**  
HP039

**Element length**  
2 | 3 | 4

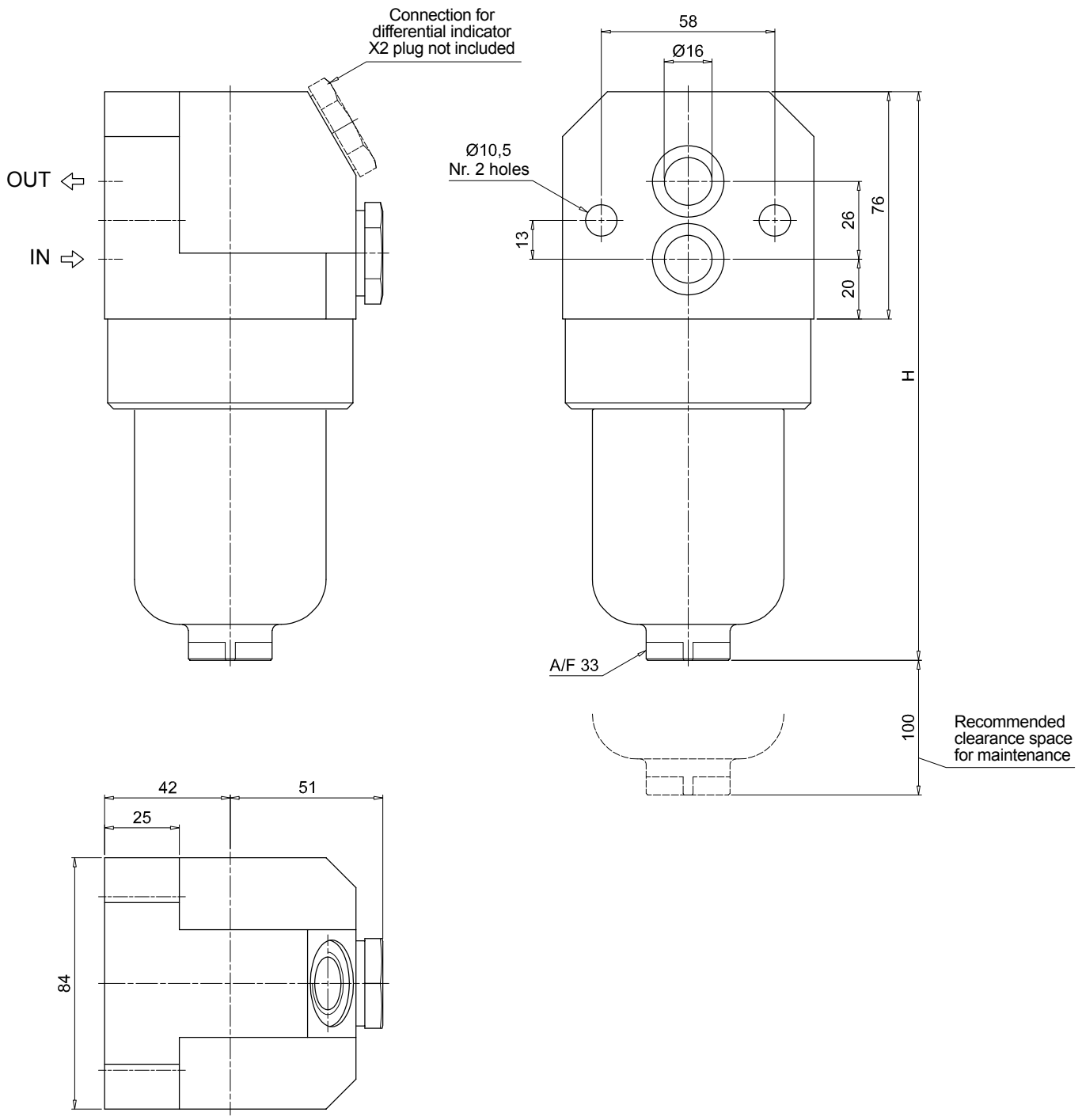
**Filtration rating (filter media)**  
**A03** Inorganic microfiber 3 µm  
**A06** Inorganic microfiber 6 µm  
**A10** Inorganic microfiber 10 µm  
**A16** Inorganic microfiber 16 µm  
**A25** Inorganic microfiber 25 µm

Seals	Element Δp	Execution
<b>V</b> FPM	<b>S</b> 210 bar	<b>Pxx</b> Customized
<b>F</b> MFQ	<b>U</b> 210 bar, stainless steel filter element	

### ACCESSORIES

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

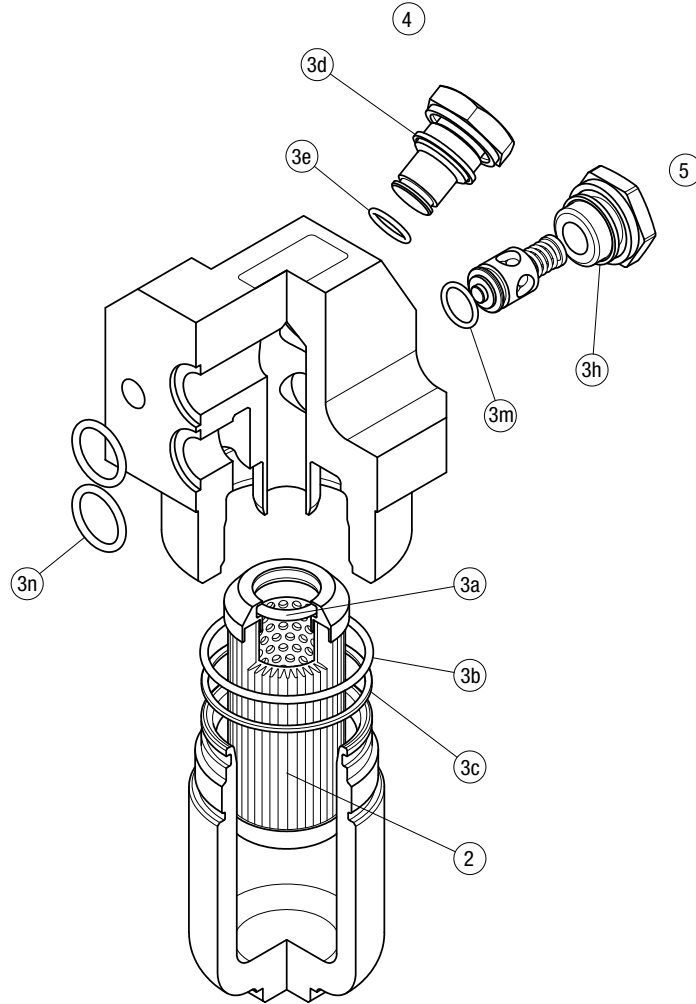
FZB039	
Filter length	H [mm]
2	190
3	233
4	277



# FZB SPARE PARTS

Order number for spare parts

## FZB 039



Item:	Q.ty: 1 pc.	Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number		Indicator connection plug		Bypass assembly / plug	
		NBR	FPM	NBR	FPM	NBR	FPM
<b>FZB 039</b>	See order table	02050647	02050648	X2H	X2V	02001286	02001295