

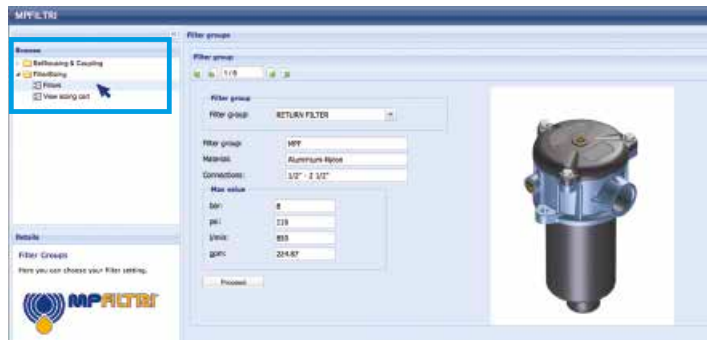
FZP series

Maximum working pressure up to 42 Mpa (420 bar) - Flow rate up to 160 l/min

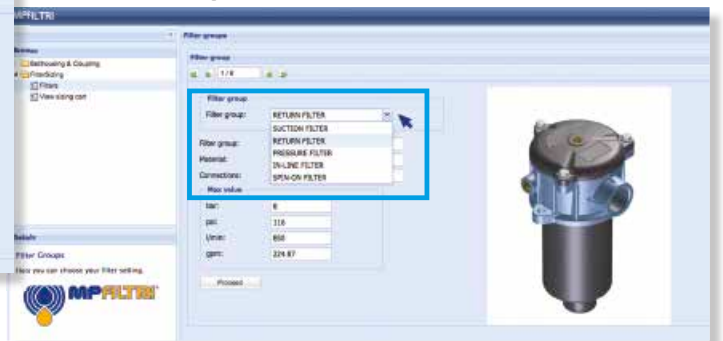


TYPICAL FILTER SIZING Selection Software

Step 1 Select "FILTERS"



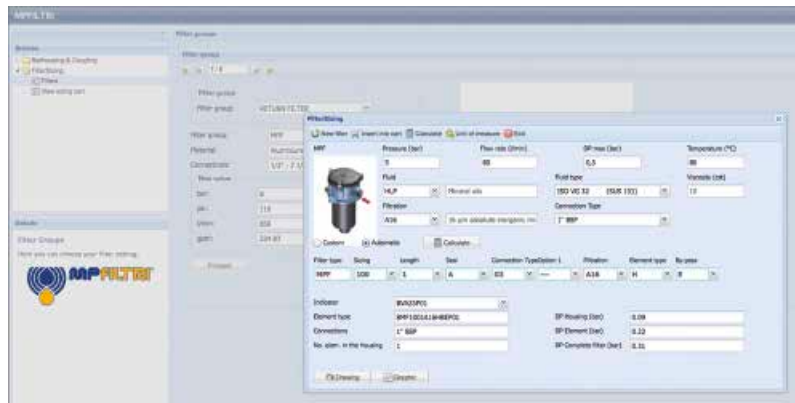
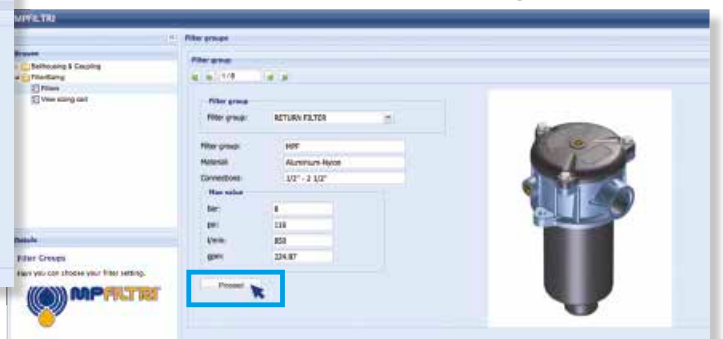
Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



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 advice 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

In-line

Maximum working pressure up to 42 Mpa (420 bar)
Flow rate up to 160 l/min

FZP 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 lines of the system through the hydraulic fittings.

Available features:

- 1 1/4" female threaded connections, for a maximum flow rate of 150 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 \pm 10%

Temperature

From -50 °C to +120 °C

Note

FZP 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 [dm³]

Filter series	Weights [kg]				Volumes [dm ³]					
	Length	1	2	3	4	Length	1	2	3	4
FZP 039	-	-	4.5	5.1	5.6	-	-	0.19	0.26	0.34
FZP 136	8.3	8.3	10.2	11.5	-	0.45	0.78	1.00	-	-

Filter series	Length	Filter element design - R Series					Filter element design - S-U Series				
		A03	A06	A10	A16	A25	A03	A06	A10	A16	A25
FZP 039	2	19	25	43	50	59	19	23	41	45	55
	3	34	37	53	62	74	31	34	48	52	66
	4	42	46	63	72	81	38	41	55	71	78
FZP 136	1	63	67	102	108	136	47	53	87	89	127
	2	95	100	122	123	159	81	95	113	115	138
	3	122	124	148	150	160	106	116	135	141	151

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.

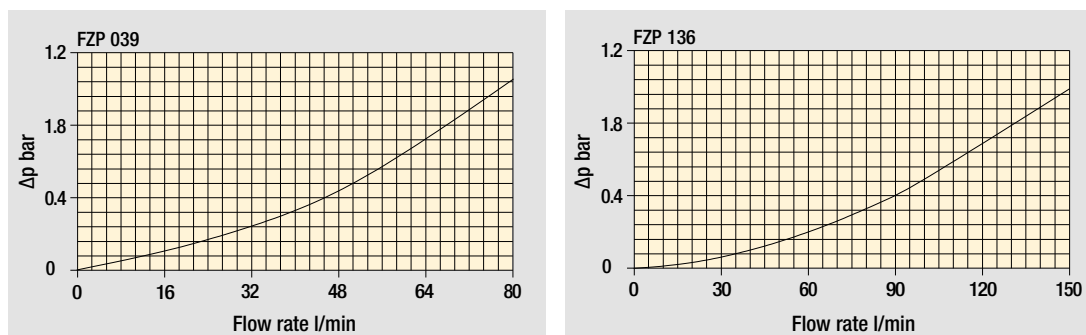
You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

Hydraulic symbols

Filter series	Style S	Style B	Style T	Style D	Style V	Style Z
FZP 039	•	•	•	•	•	•
FZP 136	•	•	•	•	•	•

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: FZP039	2	B	F	B	2	A03	U	P01
FZP039									
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									
V With reverse flow, without bypass									
Z With reverse flow, with bypass 6 bar									
Seals									
A NBR									
V FPM									
F MFQ									
Connections									
A G 1/2"									
B 1/2" NPT									
C SAE 8 - 3/4" - 16 UNF									
Connections for differential indicators									
1 Without									
2 With connection									
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	V	Z	
R 20 bar		•		•		•	P01 MP Filtri standard
S 210 bar	•		•		•		Pxx Customized
U 210 bar, stainless steel filter element	•	•	•	•	•	•	

FILTER ELEMENT

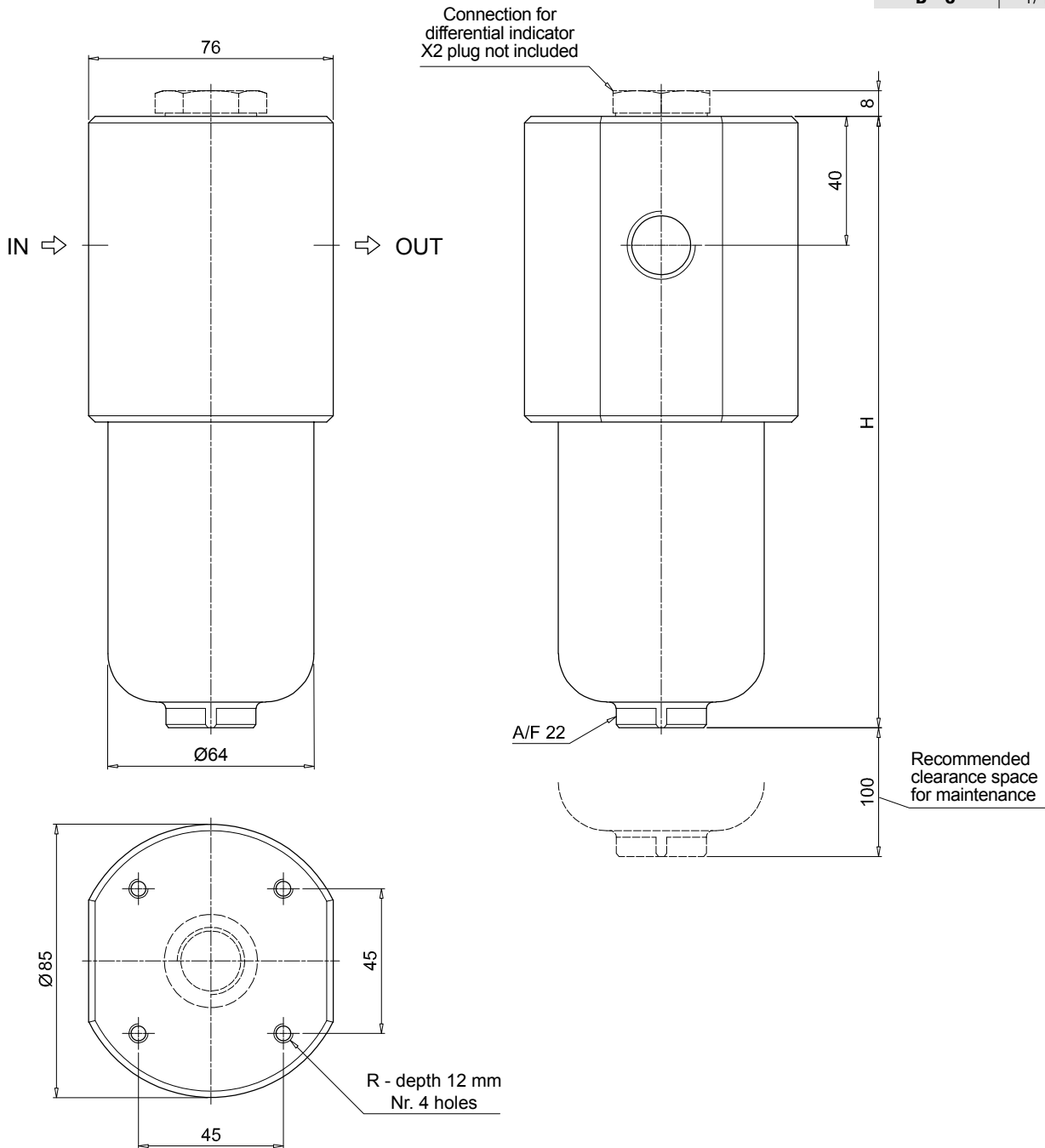
Element series and size	Configuration example: HP039	2	A03	F	U	P01
HP039						
Element length						
2 3 4						
Filtration rating (filter media)						
A03 Inorganic microfiber 3 µm						
A06 Inorganic microfiber 6 µm						
A10 Inorganic microfiber 10 µm						
A16 Inorganic microfiber 16 µm						
A25 Inorganic microfiber 25 µm						

Seals	Element Δp	Valves						Execution
		S	B	T	D	V	Z	
A NBR	R 20 bar		•		•		•	P01 MP Filtri standard
V FPM	S 210 bar	•		•		•		Pxx Customized
F MFQ	U 210 bar, stainless steel filter element	•	•	•	•	•	•	

ACCESSORIES

Differential indicators	page		page
DEH Hazardous area electronic differential indicator	642	DVX Visual differential indicator	643
DEX Electrical differential indicator	643	DVY Visual differential indicator	644
DLX Electrical / visual differential indicator	643		
Additional features	page		
X2 Plug	644		

FZP039	
Filter length	H [mm]
2	179
3	222
4	266
Connections	R
A	M6
B - C	1/4" UNC



Designation & Ordering code

COMPLETE FILTER

Series and size	Configuration example: FZP136 1 B A B 6 A03 R P01										
FZP136											
Length	1	2	3								
Valves	S Without bypass B With bypass 6 bar										
Seals	A NBR V FPM F MFQ										
Connections	A G 3/4" B 3/4" NPT C SAE 12 - 1 1/16" - 12 UN D G 1" E 1" NPT F SAE 16 - 1 5/16" - 12 UN G G 1 1/4" H 1 1/4" NPT I SAE 20 - 1 5/8" - 12 UN										
Connections for differential indicators	1 Without 6 With two connections on both sides										
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				
R 20 bar					S	B	P01 MP Filtri standard				
S 210 bar							Pxx Customized				
U 210 bar, stainless steel filter element											

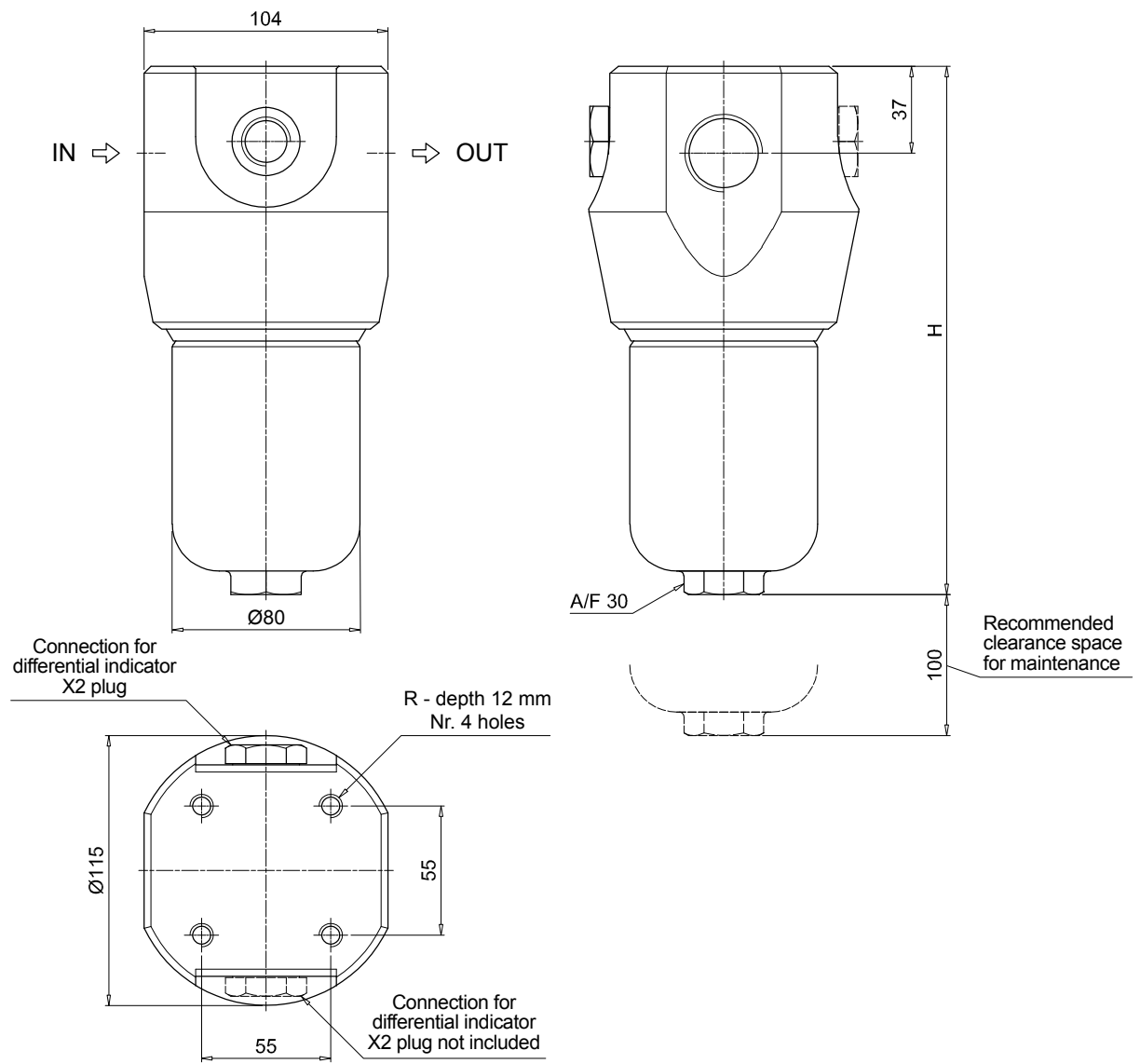
FILTER ELEMENT

Element series and size	Configuration example: HP135 1 A03 A R P01					
HP135						
Element length	1	2	3			
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			Valves		Execution	
A NBR			S	B	P01 MP Filtri standard	
V FPM					Pxx Customized	
F MFQ						
Element Δp						
R 20 bar						
S 210 bar						
U 210 bar, stainless steel filter element						

ACCESSORIES

Differential indicators	page	page
DEH Hazardous area electronic differential indicator	642	DVX Visual differential indicator 643
DEX Electrical differential indicator	643	DVY Visual differential indicator 644
DLX Electrical / visual differential indicator	643	
Additional features	page	
X2 Plug	644	

FZP136	
Filter length	H [mm]
1	222
2	335
3	410
Connections	R
A	M10
B - C	3/8" UNC
D	M10
E - F	3/8" UNC
G	M10
H - I	3/8" UNC



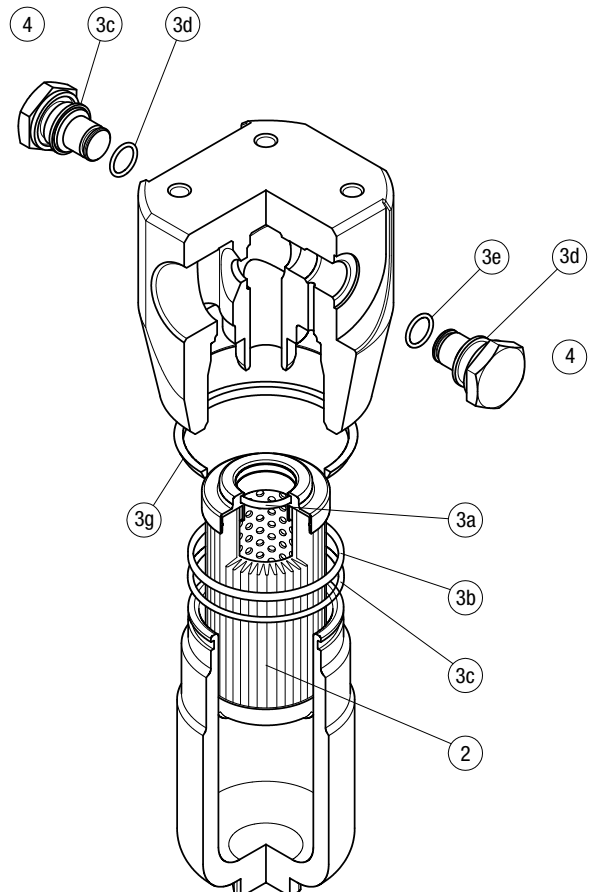
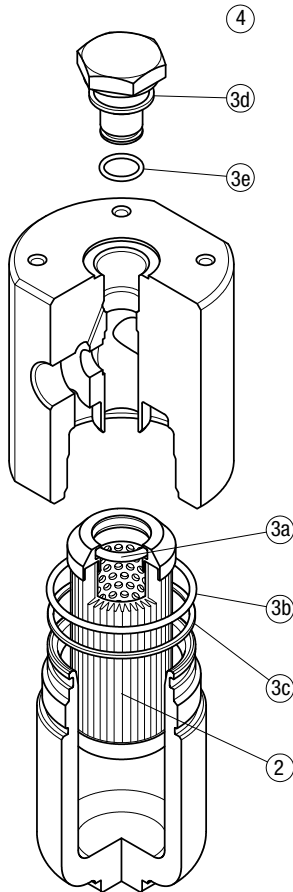
The position of the X2 plug is reversible

FZP SPARE PARTS

Order number for spare parts

FZP 039

FZP 136



Item:	Q.ty: 1 pc.		Q.ty: 1 pc.		Q.ty: 1 pc.	
Filter series	Filter element	Seal Kit code number		Indicator connection plug		
FZP 039	See order table	NBR	FPM	NBR	FPM	
		02050299	02050300	X2H	X2V	
FZP 136		02050636	02050637			