

FZX series

Maximum working pressure up to 100 Mpa (1000 bar) - Flow rate up to 10 l/min



INSTALLATION, SERVICE AND MAINTENANCE MANUAL AND SAFETY INSTRUCTIONS



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Description

Technical data

Filters for potentially explosive atmosphere

In-line

Maximum working pressure up to 100 Mpa (1000 bar)

Flow rate up to 10 l/min

FZX 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:

- 1/2" female threaded connections, for a maximum flow rate of 10 l/min
- Fine filtration rating, to get a good cleanliness level into the system
- High collapse filter element "H", for use with filters not provided with bypass valve
- High collapse filter element "U", for use with aggressive fluids

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

Bypass valve

Opening pressure 6 bar $\pm$ 10%

Pressure

- Test pressure: 150 MPa (1500 bar)
- Min. Burst pressure: 300 MPa (3000 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 100 MPa (1000 bar)

Filter element features

Filter FZX		Filter element HP	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	High Δp	H	210 bar
	High Δp with stainless steel components	U	210 bar
Please see ordering code tables to check element Δp series availability based on filter features.			
Flow direction through the filter element:			
From OUT to IN			
Filter element components materials	Δp Series		
	H	U	
End cap	Tinned Steel	Stainless steel	
Core tube	Tinned Steel	Stainless steel	
External support	Wire mesh epoxy painted	Stainless steel	
Internal support	Stainless steel	Stainless steel	
Pre-filter	Synthetic	Synthetic	

Temperature

Seals	Ambient Temperature	Max fluid Temperature	Temperature Class	Max surface temperature
NBR	-15 °C ÷ +80 °C	+80 °C	T6	T85 °C
FPM / MFQ	-15 °C ÷ +80 °C	+80 °C	T6	T85 °C
	-15 °C ÷ +95 °C	+95 °C	T5	T100 °C
	-15 °C ÷ +110 °C	+110 °C	T4	T115 °C

Seals

- Standard NBR series A
- Optional FPM series V
- Optional MFQ series F

Note

FZX filters are provided for vertical mounting

Filter with:

NBR seal in configuration **zerospark+**



II 3G Ex h IIC T6 Gc X
II 3D Ex h IIIC T85°C Dc X

FPM / MFQ seal in configuration **zerospark+**



II 3G Ex h IIC T6... T4 Gc X
II 3D Ex h IIIC T85°C...T115°C Dc X

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]				Volumes [dm³]					
	Length	1	2	3	4	Length	1	2	3	4
FZX 011		-	-	6.5	-		-	-	0.15	-

Flow rates [l/min]

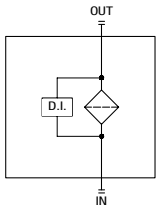
Filter series	Length	Filter element design - H-U Series				
		A03	A06	A10	A16	A25
FZX 011	3	1.57	1.63	1.73	1.74	1.77

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.

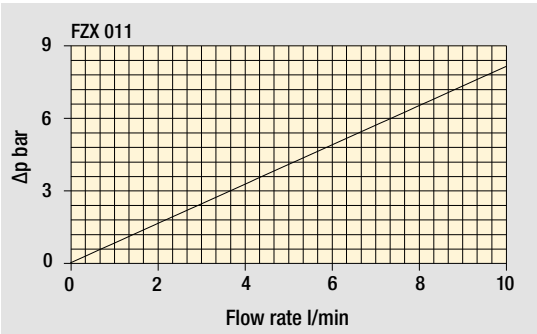
Hydraulic diagram

Filter series	Style S
FZX 011	•



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.

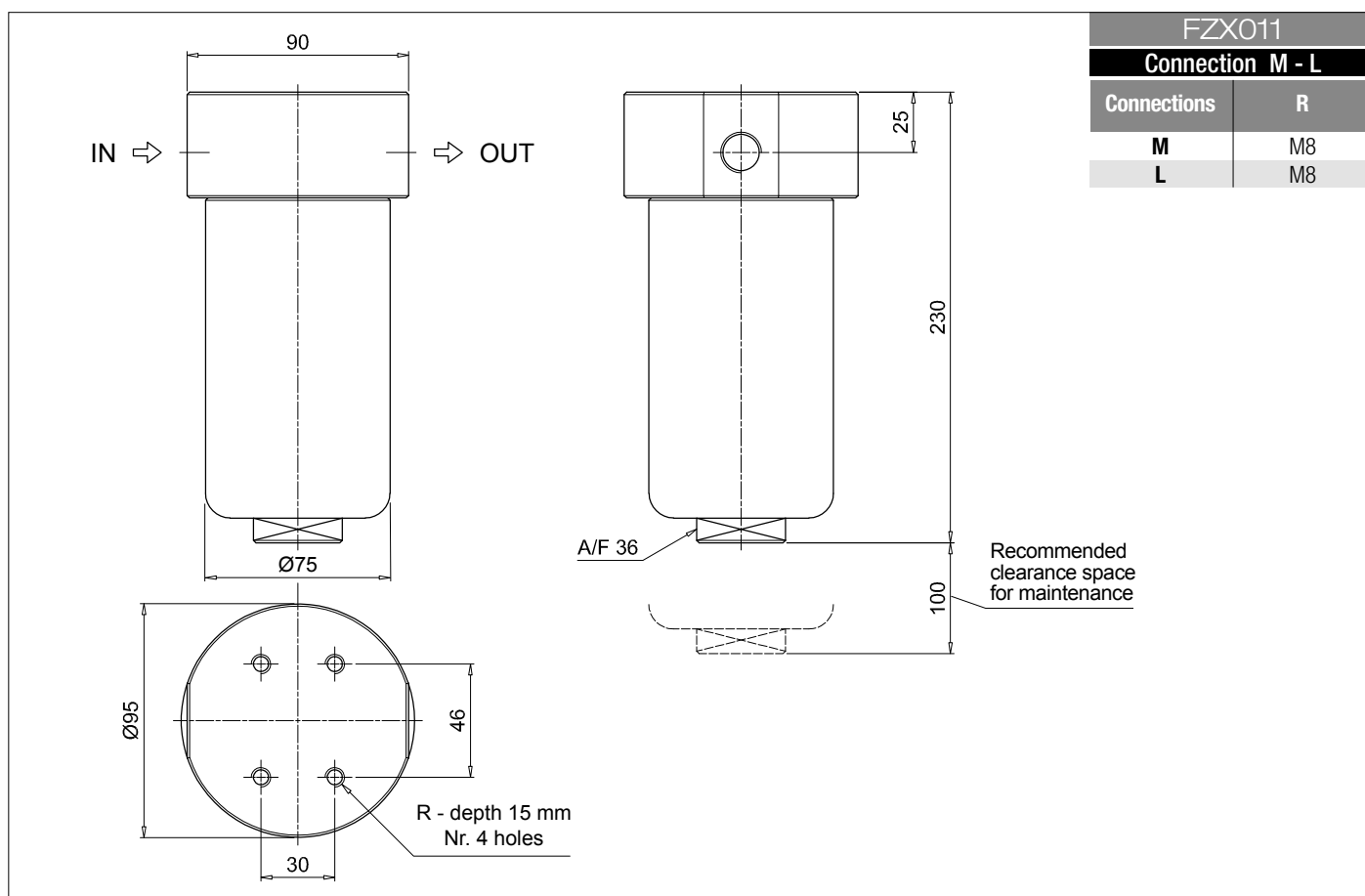
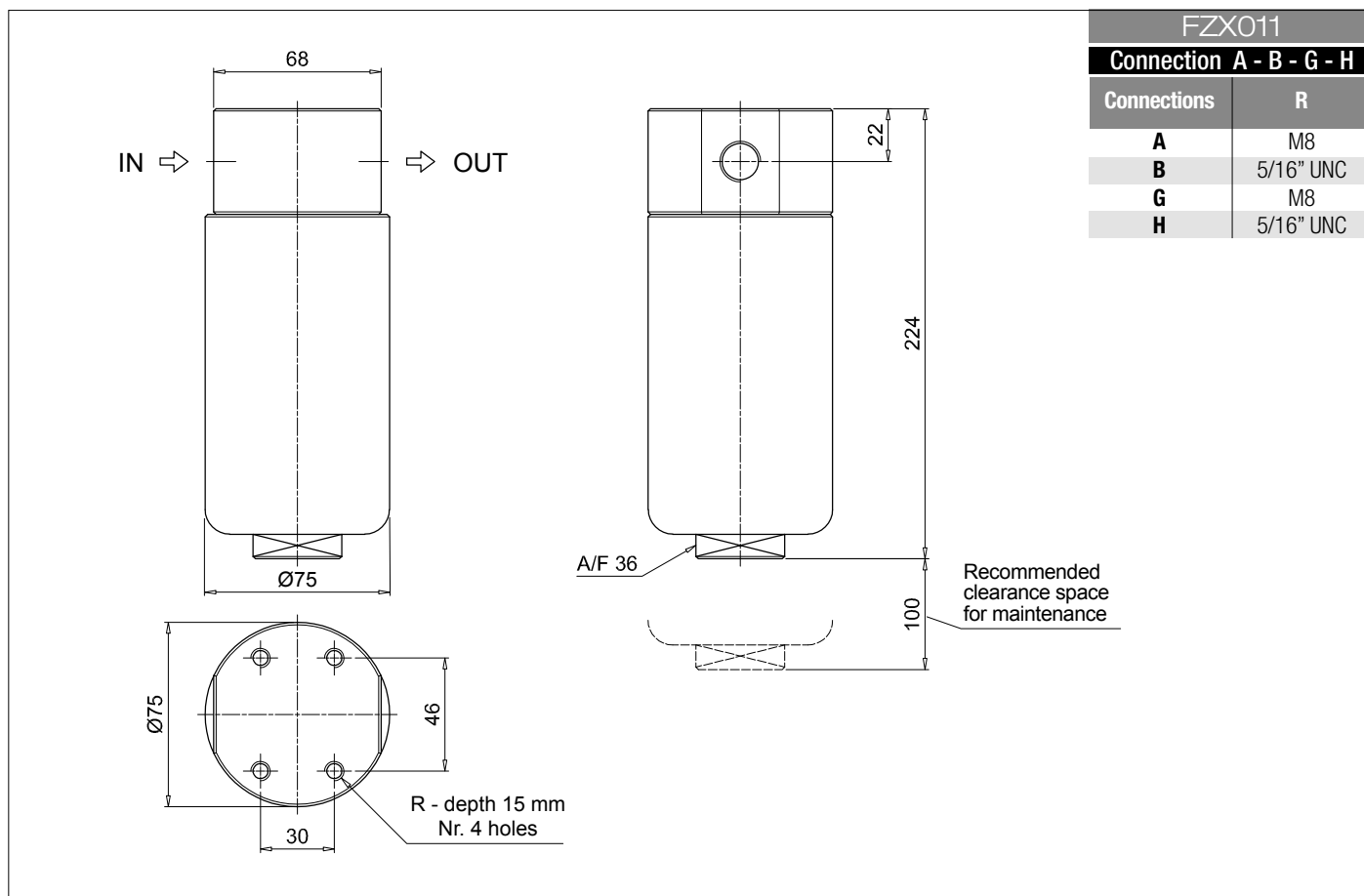
Designation & Ordering code

COMPLETE FILTER

Filter series and size	Configuration example:	FZX011	3	S	V	B	1	A03	U	Z01	EX
FZX011											
Filter length											
3											
Bypass valve											
S Without bypass											
Seals											
A NBR											
V FPM											
F MFQ											
Connections											
700 bar											
A G 1/4"											
B 1/4" NPT											
G G 1/2"											
H 1/2" NPT"											
Autoclave 1000 bar											
M 9/16" - 18 UNF											
L 3/4" - 14 NPS											
Connection for differential pressure indicator											
1 Without 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											
H 210 bar											
U 210 bar, stainless steel filter element											
Execution											
zerospark®											
Z01 MP Filtri standard											
Zxx Customized											
Certifications											
EX ATEX certifications											

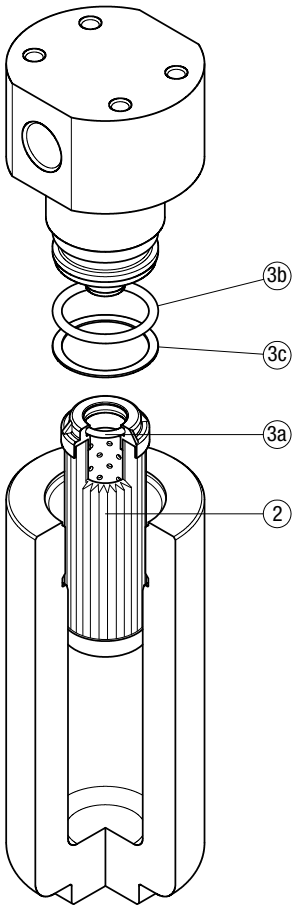
FILTER ELEMENT

Element series and size	Example:	HP011	3	A03	V	U	Z01
HP011							
Element length							
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							
A NBR							
V FPM							
F MFQ							
Element Δp							
H 210 bar							
U 210 bar, stainless steel filter element							
Execution							
zerospark®							
Z01 MP Filtri standard							
Zxx Customized							



Order number for spare parts

FZX 011



Q.ty: 1 pc.		Q.ty: 1 pc.	
Item:	2	3	(3a ÷ 3c)
Filter series	Filter element	Seal Kit code number	
		NBR	FPM
FZX 011	See order table	02050643	02050644