

Description

Return filter

Maximum working pressure up to 0.8 MPa (8 bar)
Flow rate up to 900 l/min

MPFX is a range of return filters for protection of the reservoir against the system contamination.

They are directly fixed to the reservoir, in immersed or semi-immersed position.

The filter output must be always immersed into the fluid to avoid aeration or foam generation into the reservoir.

Available features:

- Female threaded connections up to 2" and flanged connections up to 2", for a maximum flow rate of 900 l/min
- Multiple connections, to connect several return lines or drains
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve integrated into the filter element, to relieve excessive pressure drop across the filter media
- 2, 3 or 4 fixing holes for installation, to suit a variety of reservoir surfaces
- O-ring or Flat Seal to suit a variety of reservoir surfaces
- Oil dipstick, to easily check the level of the fluid into the reservoir (sold as separate item)
- Extension tube, to be used in deep reservoirs (sold as separate item)
- Diffuser, to reduce the risk of aeration, foaming and noise (sold as separate item)
- Filler plug, to fill cleaned fluid into the tank without an additional connection
- Visual, electrical and electronic clogging indicators
- MYclean interface connection, to protect the product against non-original spare parts
- External protective wrap, to optimize the flow through the element and to save the element efficiency against non-proper handling

Common applications:

- Light Industrial equipment
- Mobile application

Technical data

Filter housing materials

- Head: Aluminium
- Cover: Polyamide: MPFX 030-100-104-110
Aluminium: MPFX 181-182-184-191-192-194
400-410-450-750
- Bowl: Polyamide

Pressure

- Test pressure: 1.2 MPa (12 bar)
- Min. Burst pressure: 2.4 MPa (24 bar)
- Pulse pressure fatigue test: 1 000 000 cycles with pressure from 0 to 0.8 MPa (8 bar)

Bypass valve

- Opening pressure 0.175 MPa (1.75 bar) $\pm 10\%$
- Opening pressure 0.3 MPa (3 bar) $\pm 10\%$

Filter element features

Filter MPFX		Filter element MFX	
Δp Element type			
Element media	Construction	Δp Series	Δp
A - Microfiber	Standard	D	10 bar
M - Wire mesh	Standard	D	10 bar
P - Paper	Standard	D	10 bar
<i>Please see ordering code tables to check element Δp series availability based on filter features.</i>			
Flow direction through the filter element:			
From OUT to IN			

Seals

- Standard NBR series A or W
- Optional FPM series V or Z

Temperature

From -25 °C to +110 °C

Note

MPFX filters are provided for vertical mounting

Weights [kg] and volumes [dm³]

Filter series	Weights [kg]					Volumes [dm³]				
	Length	10	20	30	40	Length	10	20	30	40
MPFX 030		0.40	-	-	-		0.29	-	-	-
MPFX 100		0.61	0.64	0.67	0.74		0.64	0.85	1.20	1.65
MPFX 104		0.82	0.96	1.02	1.25		0.64	0.85	1.20	1.65
MPFX 110		0.64	0.68	0.71	0.78		-	-	-	-
MPFX 181		2.20	3.00	-	-		2.50	4.00	-	-
MPFX 182		2.30	3.10	-	-		2.50	4.00	-	-
MPFX 184		2.55	3.45	-	-		2.65	4.45	-	-
MPFX 191		-	3.00	-	-		-	4.25	-	-
MPFX 192		-	3.10	-	-		-	4.25	-	-
MPFX 194		-	3.45	-	-		-	4.45	-	-
MPFX 400		3.35	3.65	3.90	-		3.70	4.60	5.40	-
MPFX 410		3.55	3.85	4.10	-		3.70	4.60	5.40	-
MPFX 450		3.95	4.25	4.50	-		3.70	4.60	5.40	-
MPFX 750		6.30	-	-	-		8.45	-	-	-

Designation & Ordering code

COMPLETE FILTER

Series	Example: MPFX	030	10	Z0010	D	A	30	FS008	0	1T	NN	P01	NN
MPFX	Filter featuring MYCLEAN Filter Element												
Size													
030													
Length													
10													
Filtration rating (filter media)													
MYCLEAN	A0003	Inorganic microfiber	3 µm	zerospark	Z0003	Antistatic in. microf.	3 µm						
	A0006	Inorganic microfiber	6 µm		Z0006	Antistatic in. microf.	6 µm						
	A0010	Inorganic microfiber	10 µm		Z0010	Antistatic in. microf.	10 µm						
	A0016	Inorganic microfiber	16 µm		Z0016	Antistatic in. microf.	16 µm						
	A0025	Inorganic microfiber	25 µm		Z0025	Antistatic in. microf.	25 µm						
	M0025	Wire mesh	25 µm										
	M0060	Wire mesh	60 µm										
	M0090	Wire mesh	90 µm										
	P0010	Resin impregnated paper	10 µm										
	P0025	Resin impregnated paper	25 µm										
				Element Δp									
				D		10 bar							
Seals and treatments				A0xxx	M0xxx	P0xxx	Z0xxx						
A	NBR												
V	FPM												
W	NBR with filter and components surface treatment												
Z	FPM with filter and components surface treatment												
Bypass													
17	With bypass 1.75 bar												
30	With bypass 3.0 bar												
Connections													
FG012	G 1/2"	FN012	1/2" NPT	FS008	SAE 8 - 3/4" - 16 UNF								
Additional connections													
0	Without additional connections												
Connections for clogging indicators													
1T	With top indicator connection, with metal plug												
Additional features													
NN	Without additional features												
Execution													
P01	Standard catalogue item												
Certificates													
NN	None												

CLOGGING INDICATORS

See pages 776-777

BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ACCESSORIES

See page 270

TE	Polyamide extension tube
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FILTER ELEMENT

Series	Example: MFX 030 10 Z0010 D A 30 NN P01 NN										
MFX Filter element with MYCLEAN feature											
Size											
030											
Length											
10											
Filtration rating (filter media)											
MYCLEAN	A0003	Inorganic microfiber	3 µm	z	Z0003	Antistatic in. microf.	3 µm				
	A0006	Inorganic microfiber	6 µm		Z0006	Antistatic in. microf.	6 µm				
	A0010	Inorganic microfiber	10 µm		Z0010	Antistatic in. microf.	10 µm				
	A0016	Inorganic microfiber	16 µm		Z0016	Antistatic in. microf.	16 µm				
	A0025	Inorganic microfiber	25 µm		Z0025	Antistatic in. microf.	25 µm				
	M0025	Wire mesh	25 µm								
	M0060	Wire mesh	60 µm								
	M0090	Wire mesh	90 µm								
	P0010	Resin impregnated paper	10 µm								
	P0025	Resin impregnated paper	25 µm								
Element Δp											
D 10 bar											
Seals and treatments											
A NBR											
V FPM											
Bypass											
17 With bypass 1.75 bar											
30 With bypass 3.0 bar											
Additional features											
NN Without additional features											
Execution											
P01 Standard catalogue item											
Certificates											
NN None											

