MPTX series

Maximum working pressure up to 800 kPa (8 bar) - Flow rate up to 300 l/min



MYCLEAN

THE NEW FILTER CONCEPT

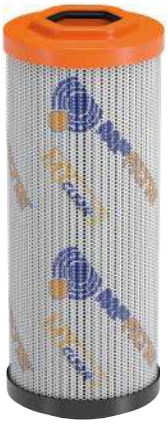
MPFX
MPTX
MFBX
MFX
series

NEW FILTER ELEMENT WITH EXCLUSIVE INTERFACE CONNECTION

- **Protects the machine from improper use of non-original products.**
- **Safety of constant quality protection & reliability**

With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil due to the use of originals filter elements.





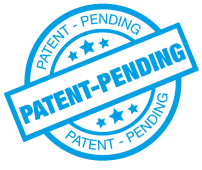
Filter element featuring our UNIQUE end cap with polygonal design.



UNIQUE polygonal spigot fitting within the filter bowl.

The products identified as MPFX, MPTX, MFBX and MFX are protected by Italian Patent n° 102015000040473 and by one or more of the following patent applications:

European Patent Pending: n° 16181725.9
US Patent Pending: n° 15/224,337
Canadian Patent Pending: n° 2,937,258



MPTX GENERAL INFORMATION

Description

Return filter

Maximum working pressure up to 800 kPa (8 bar)
Flow rate up to 300 l/min

MPTX is a range of return filters with integrated breather filter, 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 1 1/4", for a maximum flow rate of 300 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, 4 or 6 fixing holes for installation, to meet any reservoir surface flatness and roughness
- O-ring or Flat seal, to meet any reservoir surface flatness and roughness
- Screw-in cover with a special shape, to allow the filter element replacement without the use of specific tools
- 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)
- Integrated breather filter, to clean the air that moves into the reservoir as result of the oil level fluctuation
- Integrated breather filter with pressurization valve, to clean the air that moves into the reservoir as result of the oil level fluctuation and to guarantee the pressurization into the reservoir
- 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: Nylon
- Bowl: Nylon

Bypass valve
- Opening pressure 175 kPa (1.75 bar) ±10%
- Opening pressure 300 kPa (3 bar) ±10%

Δp element type
- Microfiber filter elements - series H: 10 bar
- Fluid flow through the filter element from OUT to IN

Seals
- Standard NBR series A
- Optional FPM series V

Temperature
From -25 °C to +110 °C

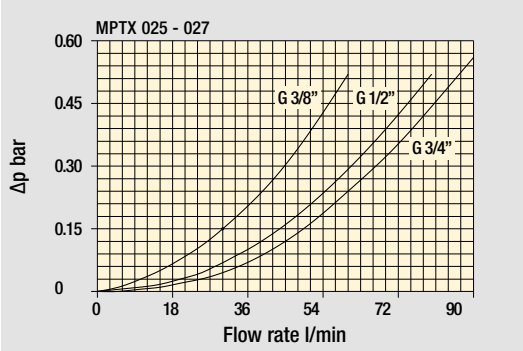
Note
MPTX filters are provided for vertical mounting

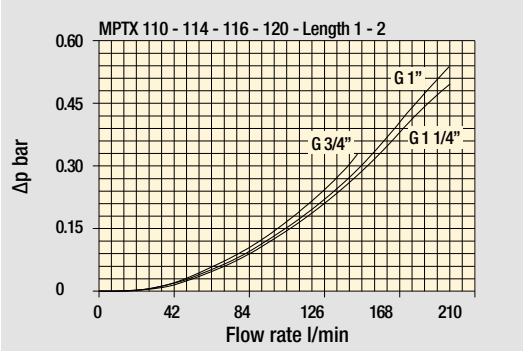


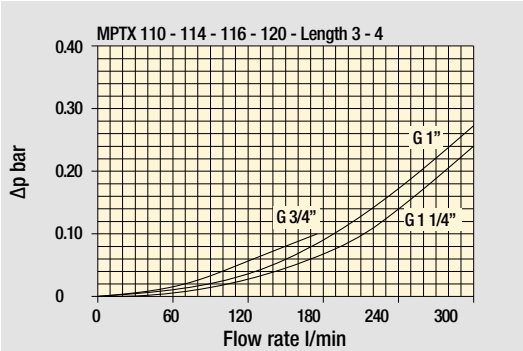
Weights [kg] and volumes [dm³]

Filter series	Weights [kg]					Volumes [dm³]				
	Length	1	2	3	4	Length	1	2	3	4
MPTX 025		0.41	0.45	0.50	-		0.24	0.35	0.42	-
MPTX 027		0.44	0.48	0.55	-		0.24	0.35	0.42	-
MPTX 110		1.00	1.05	1.15	1.40		0.72	0.93	1.28	1.74
MPTX 114		1.10	1.15	1.25	1.50		0.72	0.93	1.28	1.74
MPTX 116		1.10	1.15	1.25	1.50		0.72	0.93	1.28	1.74
MPTX 120		1.00	1.05	1.15	1.40		0.72	0.93	1.28	1.74

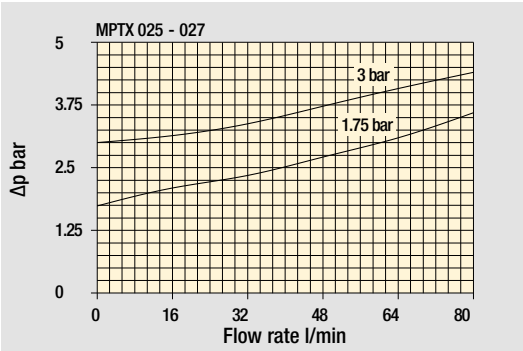
Filter housings Δp pressure drop

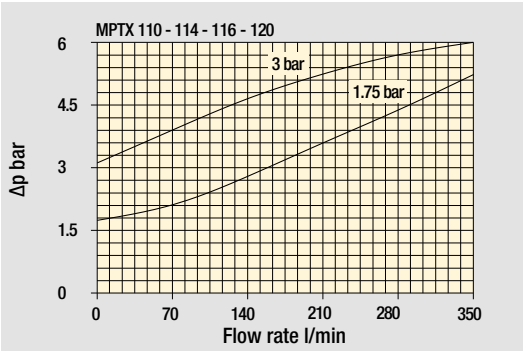




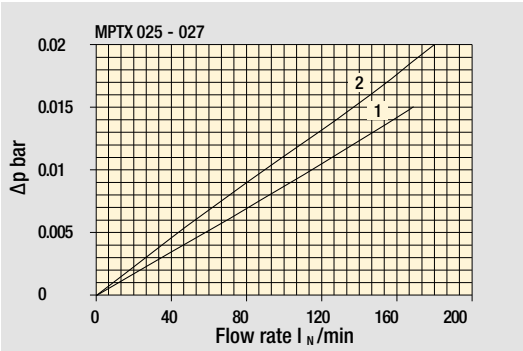


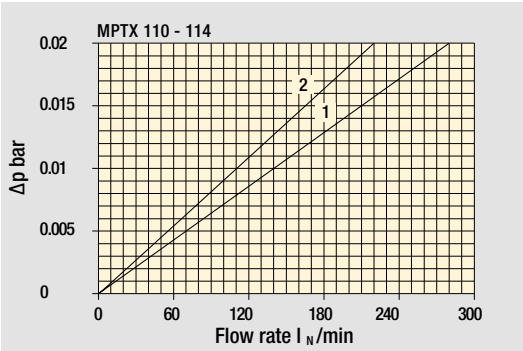
Bypass valve pressure drop





Air breather pressure drop





1 C With air breather 10 µm

2 D With anti-splash and SAP50 10 µm

The curves are plotted using mineral oil with density of 0.86 kg/dm^3 in compliance with ISO 3968.
Δp varies proportionally with density.

MPTX GENERAL INFORMATION

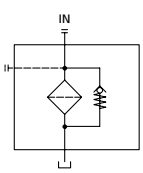
Flow rates [l/min]

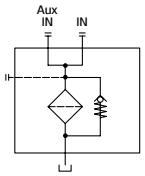
Filter series	Length	Filter element design - H series					Filter element design - N series		
		A03	A06	A10	A16	A25	M25 M60 M90	P10	P25
MPTX 025-027	**1**	7	10	23	28	42	59	51	54
	2	17	20	45	48	56	72	64	67
	3	21	24	50	55	59	76	74	75
MPTX 110-120 114-116	**1**	18	20	53	56	65	153	87	96
	2	28	38	65	75	95	158	111	123
	3	48	55	125	135	169	289	224	251
	4	79	89	180	185	198	306	264	289

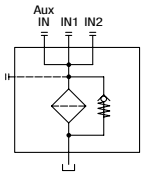
Maximum flow rate for a complete return filter with a pressure drop Δp = 0.5 bar.
The reference fluid has a kinematic viscosity of 30 mm^2/s (cSt) and a density of 0.86 kg/dm^3.
For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.
Please, contact our Sales Department for further additional information.

Hydraulic symbols

Filter series	Style 1 connection	Style 2 connections	Style 3 connections
MPTX 025	•		
MPTX 027	•		
MPTX 110		•	
MPTX 114	•		
MPTX 116	•		
MPTX 120			•







MPTX 025 -027		
Air breather port plugged Indicator port	Air breather standard Indicator port	Anti-splash air breather & pressurized Double indicator port
		

Multiport - Multifunction

MPTX 110	
Standard - Single IN Port	Double IN Port - Double indicator port
	
Double IN Port Option: double drain port	Double IN Port - Indicator port Option: drain port
	

MPTX 120
Triple IN port Option: double drain port


MPTX MPTX110

Designation & Ordering code

COMPLETE FILTER

Configuration example 1:	MPTX110	1	S	A	G1	0	A06	E	P01
Configuration example 2:	MPTX110	3	P	V	G4	1	M25	B	P01

Series and size

MPTX110 Filter element with private spigot

Length

1 | **2** | **3** | **4**

Air breather

S	Without air breather
C	With air breather 10 µm
D	With anti-splash and air breather SAP050 10 µm
P	With anti-splash and air breather SAP050 10 µm, pressurization 0.5 bar

Seals and treatments		Filtration rating Axx	Mxx	Pxx
A	NBR	•	•	•
V	FPM	•	•	•
W	NBR head anodized	•	•	
Z	FPM head anodized	•	•	

filter element compatible with fluids HFA-HFB-HFC

Main Connections		Aux size 1	Aux size 2
G1	G 3/4"	G 3/8"	G 1/2"
G2	G 1"		
G3	G 1 1/4"		
G4	3/4" NPT	3/8" NPT	1/2" NPT
G5	1" NPT		

Main Connections		Aux size 1	Aux size 2
G6	1 1/4" NPT	3/8" NPT	1/2" NPT
G7	SAE 12 - 1 1/16" - 12 UN	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF
G8	SAE 16 - 1 5/16" - 12 UN		
G9	SAE 20 - 1 5/8" - 12 UN		

Aux connection - see previous table

0 Not machined **1** Aux size 1 **2** Aux size 2

Filtration rating (filter media)

A03	Inorganic microfiber 3 µm	**M25**	Wire mesh 25 µm
A06	Inorganic microfiber 6 µm	**M60**	Wire mesh 60 µm
A10	Inorganic microfiber 10 µm	**M90**	Wire mesh 90 µm
A16	Inorganic microfiber 16 µm	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

Bypass valve

E	3 bar
B	1.75 bar

Execution

P01	MP Filtri standard
Pxx	Customized

FILTER ELEMENT

Configuration example 1:	MFX100	1	A06	H	B	E	P01
Configuration example 2:	MFX100	3	M25	N	V		P01

Element series and size

MFX100 Filter element with private spigot

Element length

1 | **2** | **3** | **4**

Filtration rating (filter media)

A03	Inorganic microfiber 3 µm	**M25**	Wire mesh 25 µm
A06	Inorganic microfiber 6 µm	**M60**	Wire mesh 60 µm
A10	Inorganic microfiber 10 µm	**M90**	Wire mesh 90 µm
A16	Inorganic microfiber 16 µm	**P10**	Resin impregnated paper 10 µm
A25	Inorganic microfiber 25 µm	**P25**	Resin impregnated paper 25 µm

Element Δp		Filter media Axx	Mxx	Pxx
N	10 bar		•	•
H	10 bar	•		
W	10 bar, compatible with fluids HFA, HFB and HFC	•	•	

Seals

B	NBR
V	FPM

Bypass valve

E	3 bar
	1.75 bar

Execution

P01	MP Filtri standard
Pxx	Customized

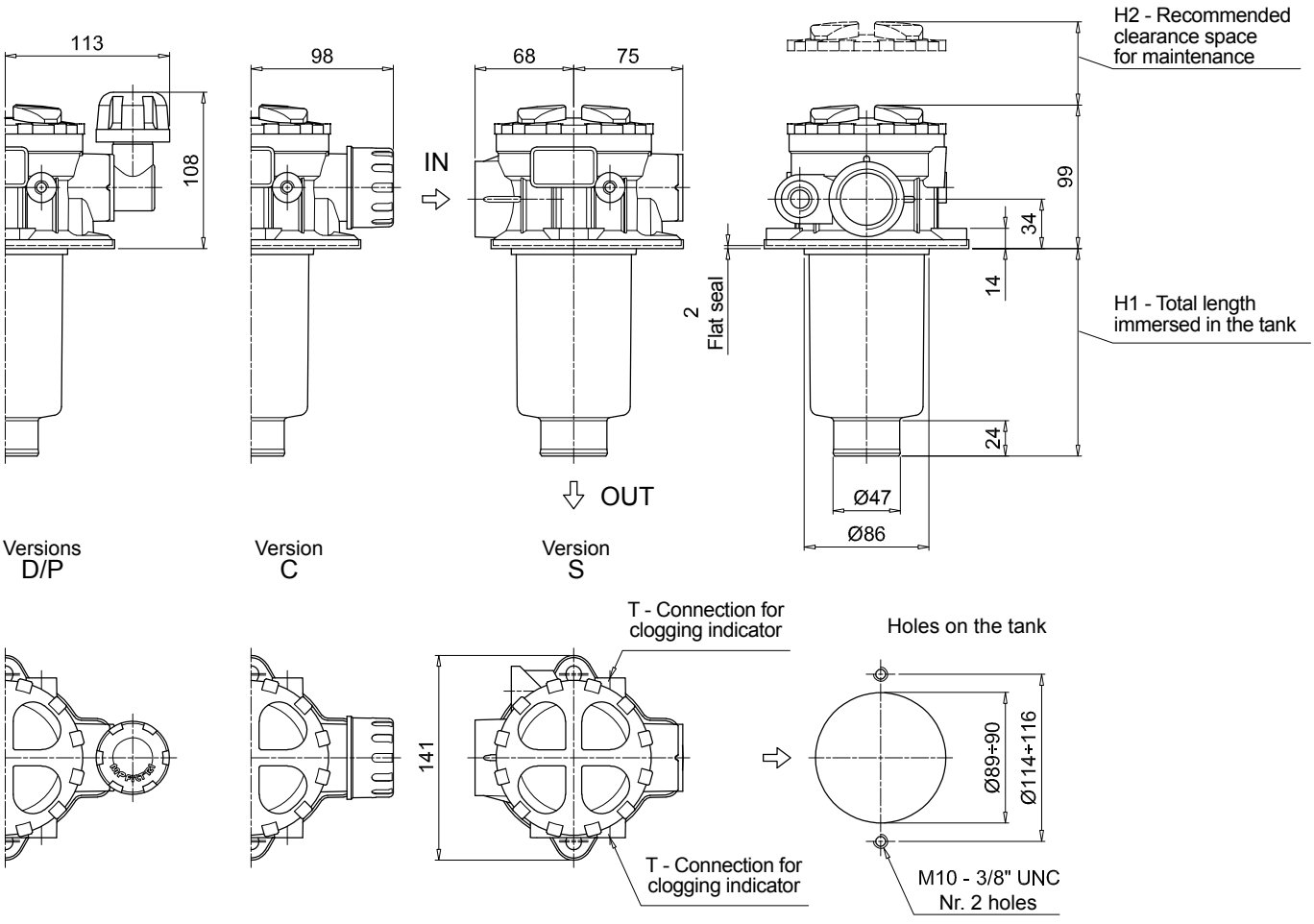
ACCESSORIES

Indicators		page
BVA	Axial pressure gauge	240
BVR	Radial pressure gauge	240
BVP	Visual pressure indicator with automatic reset	241
BVQ	Visual pressure indicator with manual reset	241
BEA	Electrical pressure indicator	239
BEM	Electrical pressure indicator	239
BLA	Electrical / visual pressure indicator	239-240

Additional features		page
TE	Extension tube	248
DFS	Diffuser with fast lock connection	249
DPT	Dipstick	249

MPTX110		
Filter length	**H1 [mm]**	**H2 [mm]**
1	99	120
2	144	170
3	222	250
4	324	350

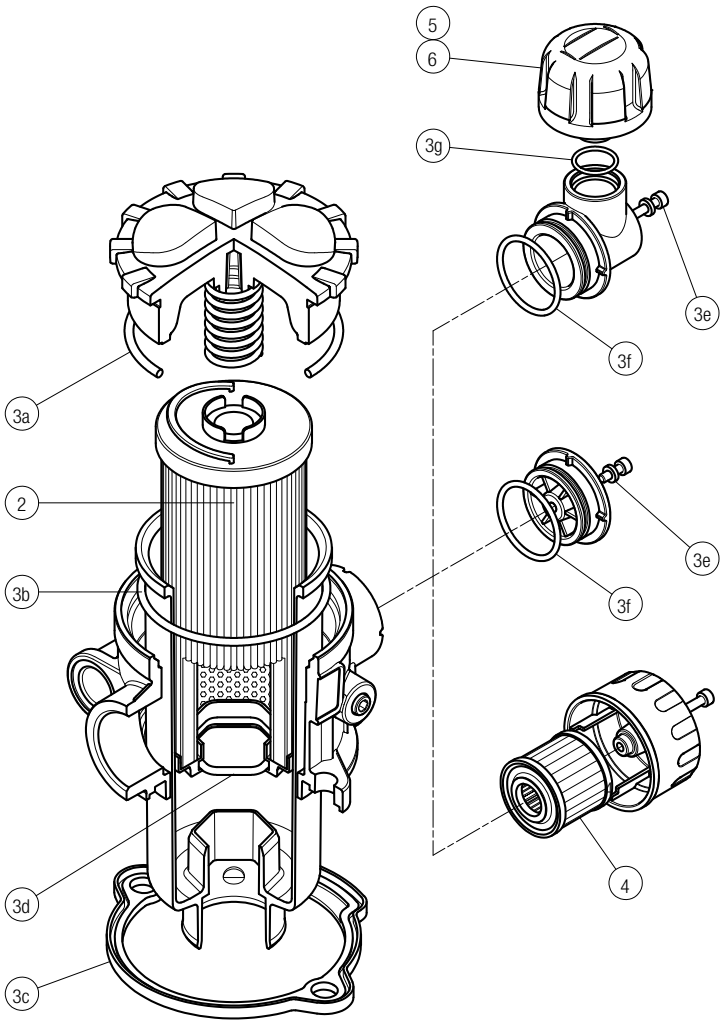
Connections	T
G1-G2-G3	G 1/8"
G4-G5-G6-G7-G8-G9	1/8" NPT



MPTX SPARE PARTS

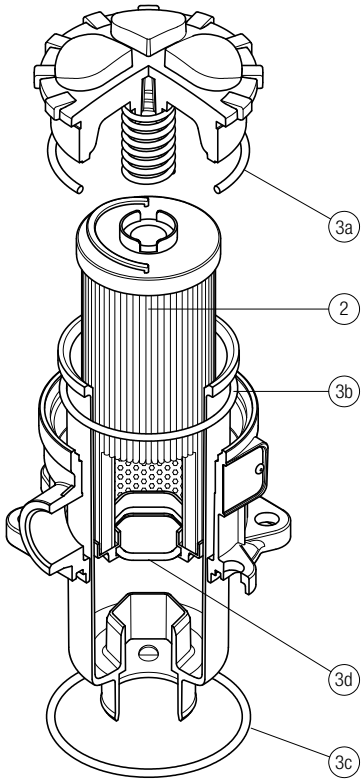
Order number for spare parts

MPTX 025 - 027 - 110



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3g)		Q.ty: 1 pc. 4	Q.ty: 1 pc. 5	Q.ty: 1 pc. 6
Filter series	**Filter element**	**Seal Kit code number**		**Air breather filter element - version:**		
		NBR	**FPM**	**C**	**D**	**P**
MPTX 025	See order table	02050701	02050702	10 µm A3L03	10 µm SAP50G3L03A0P01	10 µm SAP50G3L03A1P01
MPTX 027		02050703	02050704	10 µm A3L03	10 µm SAP50G3L03A0P01	10 µm SAP50G3L03A1P01
MPTX 110		02050709	02050710	10 µm A5L03	10 µm SAP50G3L03A0P01	10 µm SAP50G3L03A1P01

MPTX 116



Item:	Q.ty: 1 pc. 2	Q.ty: 1 pc. 3 (3a ÷ 3d)	
Filter series	**Filter element**	**Seal Kit code number**	
		NBR	**FPM**
MPTX 116	See order table	02050737	02050738