



THE X CONCEPT FOR OUR FILTERS

Protect the performance of your system with MYclean.

Quality and efficiency are fundamental for MP Filtri:

this exclusive new filter element possesses polygon shape geometry and specific seal that ensures only original spare parts can be used - ensuring correct operation and higher system reliability.

MPFX series

with  MFX Filter Element



- **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.



The products identified as MPFX are protected by:

- Italian Patent n° 102014902261205
- Canadian Patent n° 2,937,258
- European Patent n° 3 124 092 B1
- US Patent n° 20170030384 A1

TOGETHER WITH  , AS OPTION, MPFX SERIES CAN BE PROVIDED WITH

zerospark®
THE ANTI-STATIC FILTERS

THE Z CONCEPT FOR OUR FILTERS

Zerospark® is a specialist solution designed to solve the problem of electrostatic discharge inside hydraulic filters. Caused by the electrical charge build-up due to the passage of oil through the filters, this can result in damage to filter elements, oils and circuit components. It can even cause fire hazards in environments where flammable materials are present.



MPFX series

Maximum working pressure up to 800 kPa (8 bar) - Flow rate up to 900 l/min



MPFX GENERAL INFORMATION

Description

Technical data

Return filter

Maximum working pressure up to 800 kPa (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

Filter housing materials

- Head: Aluminium

- Cover

Polyamide: MPFX 030-100-104-110

Aluminium: MPFX 181-182-184-191-192-194-400-410-450-451-750

- Bowl: Polyamide

Bypass valve

- Opening pressure 175 kPa (1.75 bar) $\pm 10\%$

- Opening pressure 300 kPa (3 bar) $\pm 10\%$

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

MPFX 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
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 450-451		3.95	4.25	4.50	-		3.70	4.60	5.40	-
MPFX 750		6.30	-	-	-		8.45	-	-	-

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
MPFX 030	1	7	10	24	29	47	84	60	66
MPFX 100-104-110	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
MPFX 181-182-184	1	127	148	235	243	278	441	285	299
	2	231	262	358	382	388	472	404	412
MPFX 191-192-194	2	261	305	489	528	546	696	583	598
MPFX 400	1	150	171	294	304	350	585	370	390
	2	237	252	454	462	589	868	619	645
	3	248	288	553	609	621	885	680	703
MPFX 410	1	146	167	277	285	325	512	341	357
	2	226	239	396	402	485	644	503	519
	3	236	269	462	497	505	653	539	553
MPFX 450-451	1	150	171	294	304	350	585	370	390
	2	237	252	454	462	589	868	619	645
	3	248	288	553	609	621	885	680	703
MPFX 750	1	392	465	623	700	769	929	804	819

Maximum flow rate for a complete return filter with a pressure drop $\Delta p = 0.5$ bar.

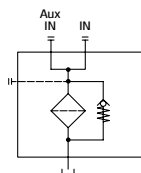
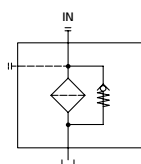
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

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

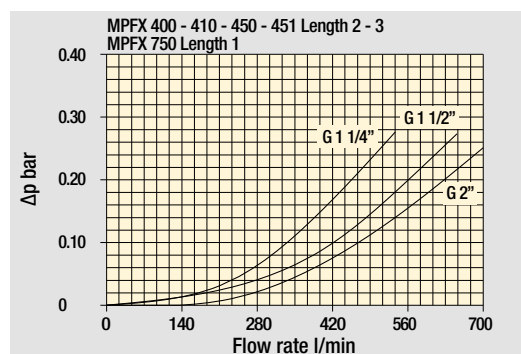
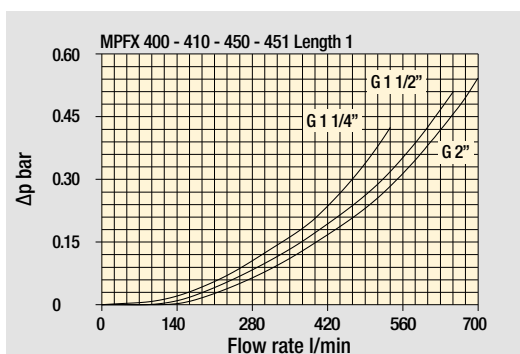
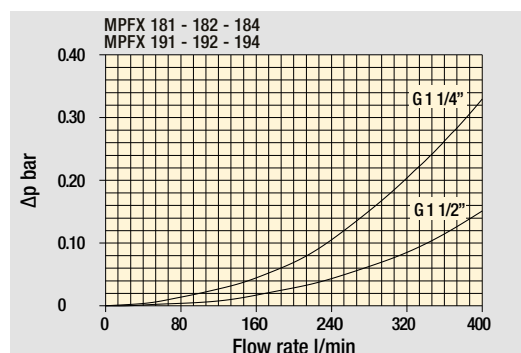
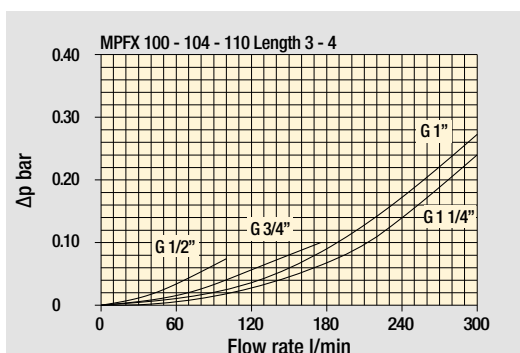
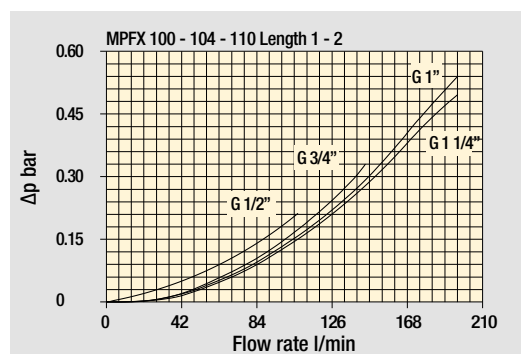
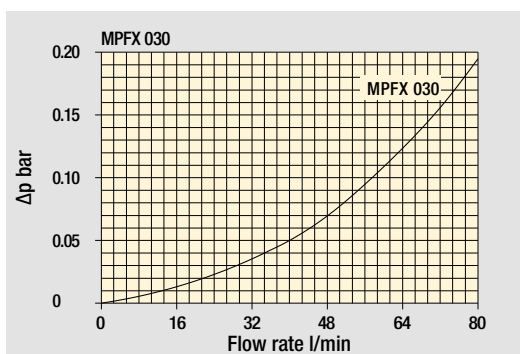
Filter series	Style 1 connection	Style 2 connections
MPFX 030	•	-
MPFX 100	•	-
MPFX 104	•	-
MPFX 110	-	•
MPFX 181	•	-
MPFX 182	-	•
MPFX 184	•	•
MPFX 191	•	-
MPFX 192	•	-
MPFX 194	•	•
MPFX 400	•	-
MPFX 410	-	•
MPFX 450	•	-
MPFX 451	-	•
MPFX 750	•	-



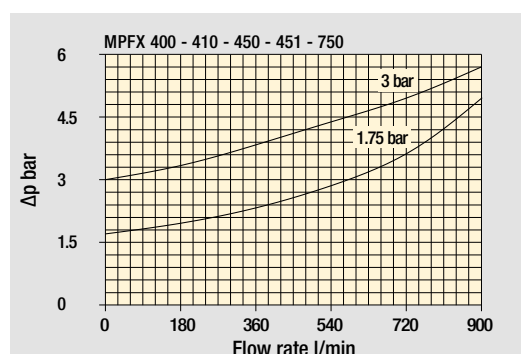
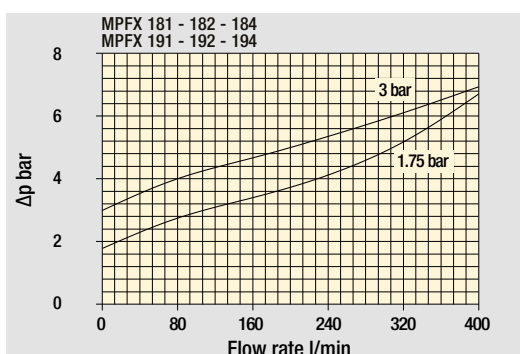
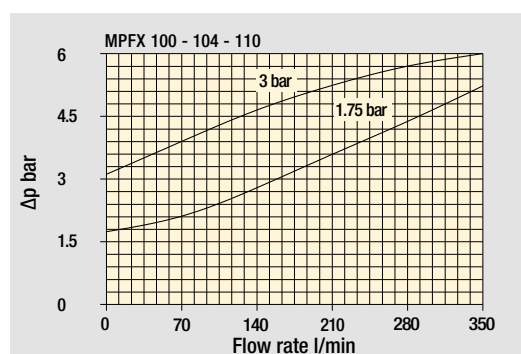
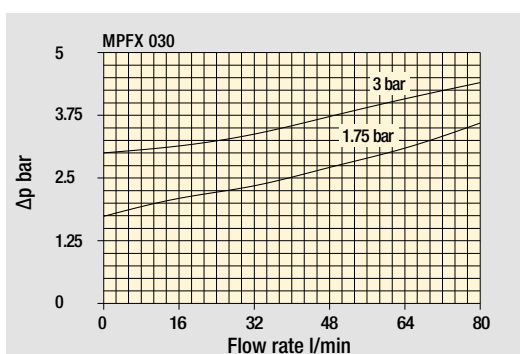
MPFX GENERAL INFORMATION

Pressure drop

Filter housings Δp pressure drop



Bypass valve pressure drop

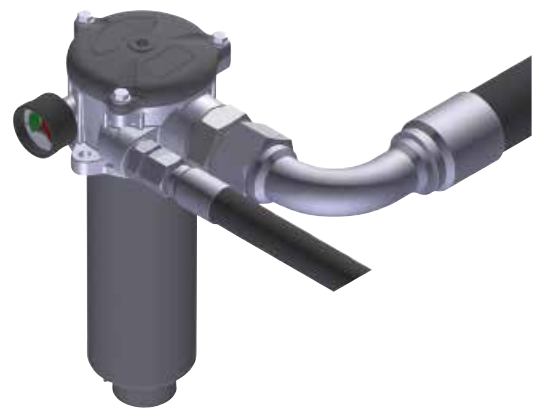


The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

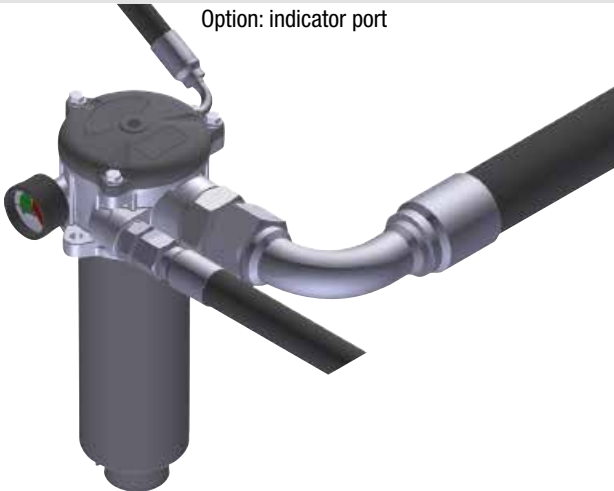
Standard - Single IN port



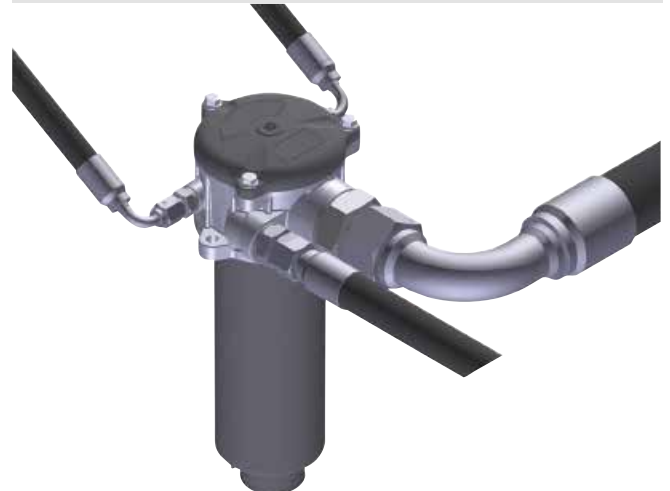
Double IN port
Option: double indicator port



Double IN port - Drain port
Option: indicator port



Double IN port - Double drain port



Designation & Ordering code

COMPLETE FILTER

Series and size	Configuration example 1:	MPFX030	1	V	G1	M25	N	B	P01
MPFX030 Filter featuring  Filter Element	Configuration example 2:	MPFX030	1	A	G4	A10	H	E	P01
Length									
1									
Seals and treatments									
A NBR									
V FPM									
W NBR head anodized									
Z FPM head anodized									
Connections									
G1 G 1/2"									
G4 1/2" NPT									
G7 SAE 8 - 3/4" - 16 UNF									
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									
M25 Wire mesh 25 µm									
M60 Wire mesh 60 µm									
M90 Wire mesh 90 µm									
P10 Resin impregnated paper 10 µm									
P25 Resin impregnated paper 25 µm									
Element Δp									
N 10 bar									
H 10 bar									
Filter media									
Axx									
Mxx									
Pxx									
Bypass valve									
E 3 bar									
B 1.75 bar									
Executions									
Base									
P01									
Pxx									
zérospark*									
Z01*									
Zxx*									
MP Filtri standard									
Customized									

* Not for Mxx filter media

FILTER ELEMENT

Element series and size	Configuration example 1:	MFEX030	1	M25	N	V	P01
MFEX030 Filter Element with  feature	Configuration example 2:	MFEX030	1	A10	H	B	E
Element length							
1							
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							
M25 Wire mesh 25 µm							
M60 Wire mesh 60 µm							
M90 Wire mesh 90 µm							
P10 Resin impregnated paper 10 µm							
P25 Resin impregnated paper 25 µm							
Element Δp							
N 10 bar							
H 10 bar							
Filter media							
Axx							
Mxx							
Pxx							
Seals							
B NBR							
V FPM							
Bypass valve							
E 3 bar							
- 1.75 bar							
Executions							
Base							
P01							
Pxx							
zérospark*							
Z01*							
Zxx*							
MP Filtri standard							
Customized							

* Not for Mxx filter media

CLOGGING INDICATORS

See page 720-721

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

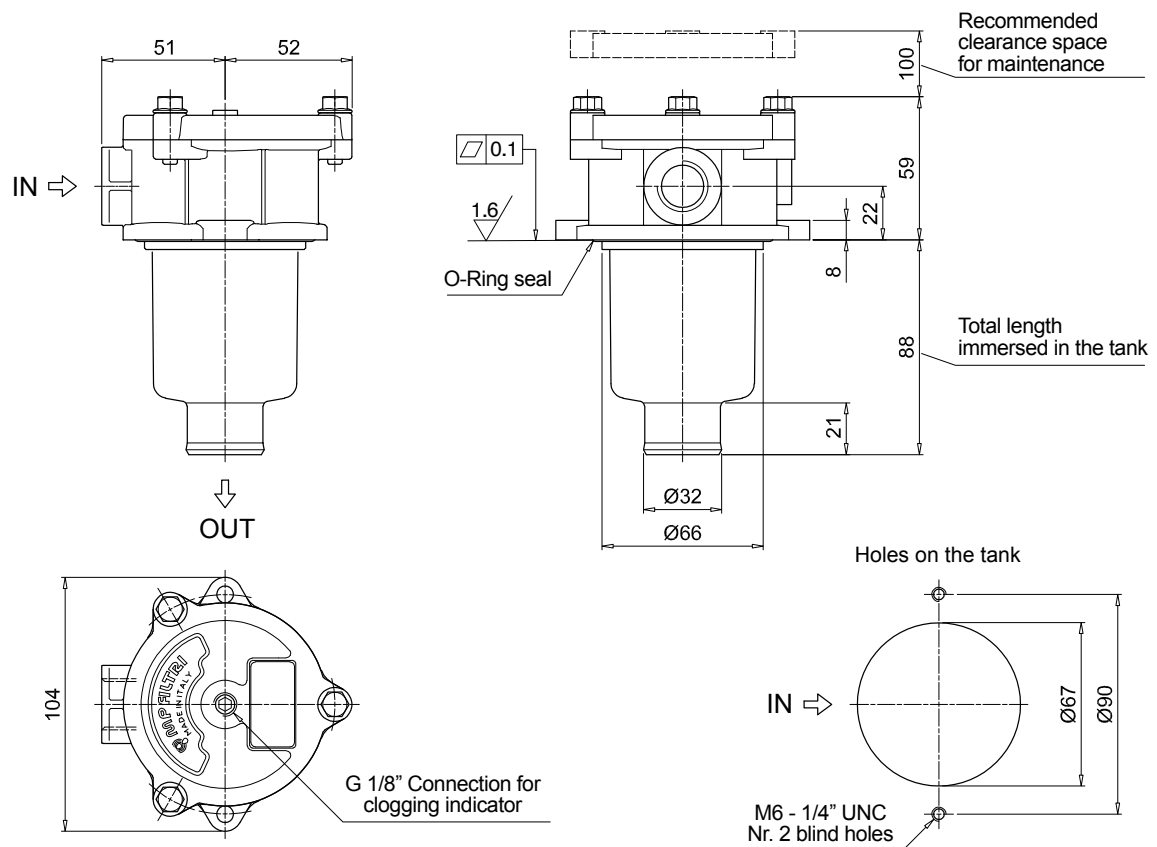
BEA Electrical pressure indicator
BEM Electrical pressure indicator
BLA Electrical / visual pressure indicator

ADDITIONAL FEATURES

See page 268

TE Extension tube
T5 Filler plug M30x1.5

MPFX030

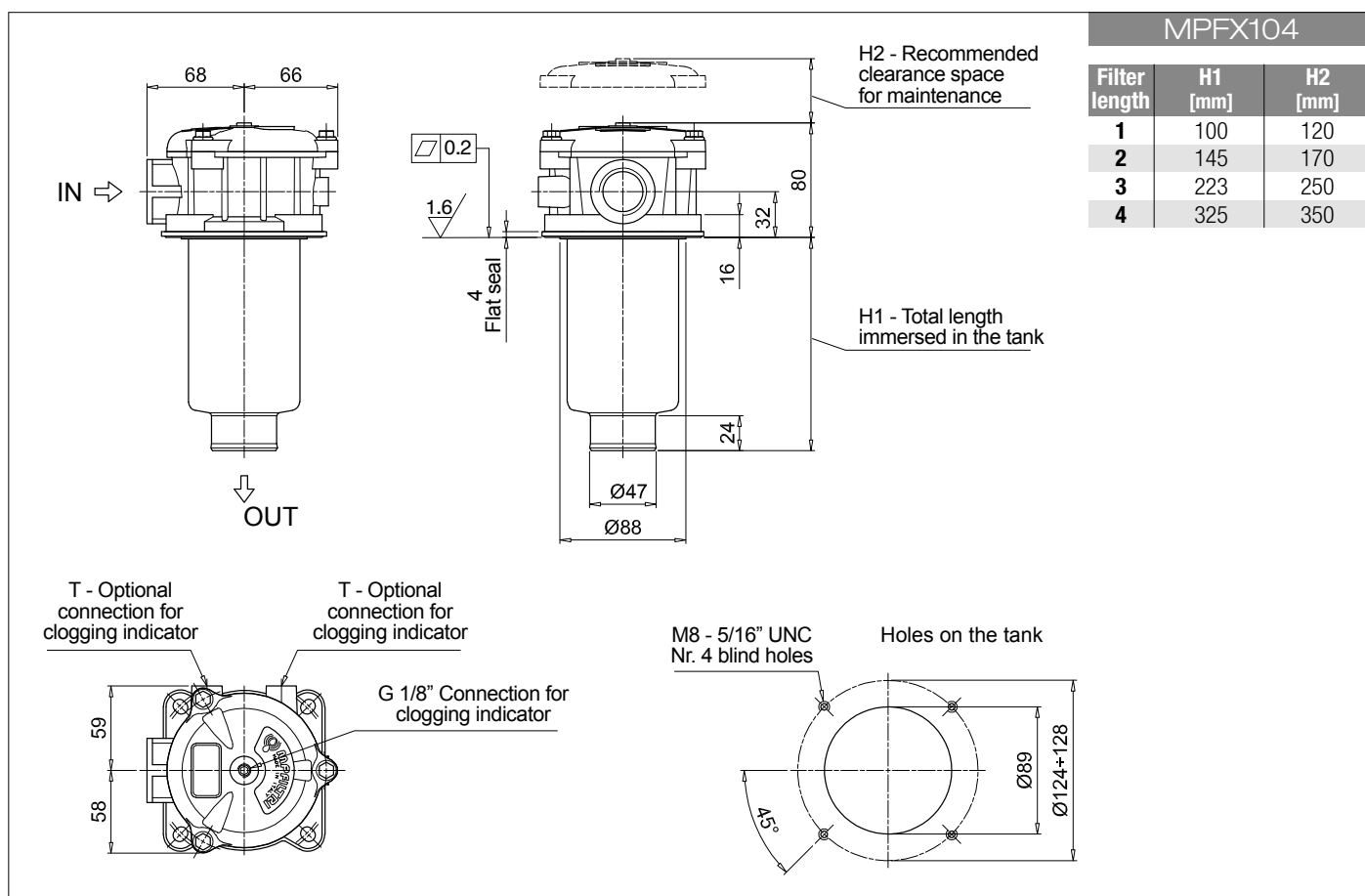
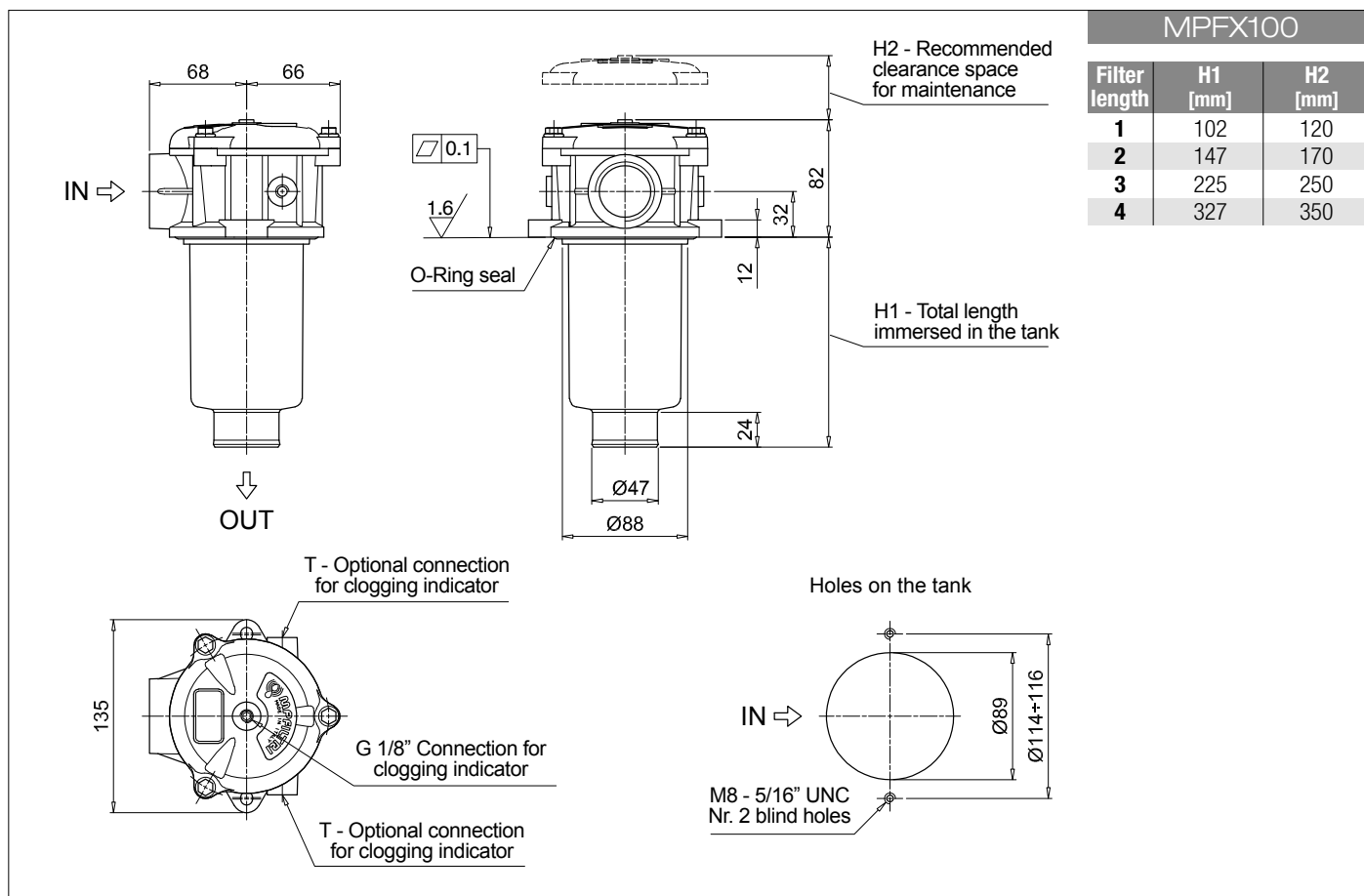


MPFX MPFX100 - MPFX104

Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example 1:									
MPFX100 MPFX104			Filter featuring  Filter Element									
			Configuration example 2:									
			MPFX104									
			2									
			W									
			G3									
			A06									
			H									
			B									
			P01									



Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example 1:		MPFX110	3	Z	G4	2	M25	H	B	P01
MPFX110 Filter featuring  Filter Element			Configuration example 2:		MPFX110	4	A	G8	1	P10	N	E	P01
Length													
1 2 3 4													
Seals and treatments													
A NBR		W NBR head anodized											
V FPM		Z FPM head anodized											
Main Connections		Aux size 1	Aux size 2	Main Connections		Aux size 1		Aux size 2					
G1 G 1/2"		G 3/8"	G 1/2"	G7 SAE 8 - 3/4" - 16 UNF		SAE 6 - 9/16" - 18 UNF		SAE 8 - 3/4" - 16 UNF					
G2 G 3/4"				G8 SAE 12 - 1 1/16" - 12 UN									
G3 G 1"				G9 SAE 16 - 1 5/16" - 12 UN									
G4 1/2" NPT		3/8" NPT	1/2" NPT	G10 G 1 1/4"		G 3/8"		G 1/2"					
G5 3/4" NPT				G11 1 1/4" NPT		3/8" NPT		1/2" NPT					
G6 1" NPT				G12 SAE 20 - 1 5/8" - 12 UN		SAE 6 - 9/16" - 18 UNF		SAE 8 - 3/4" - 16 UNF					
Aux connection - see previous table													
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										

Element Δp		Filter media		
		Axx	Mxx	Pxx
N	10 bar	-	●	●
H	10 bar	●	-	-

		Executions	
Bypass valve	Base	zerospark®	
E 3 bar	P01	Z01 *	MP Filtri standard
B 1.75 bar	Pxx	Zxx *	Customized

* Not for Mxx filter media

FILTER ELEMENT

Element series and size		Configuration example 1:		MFX100	3	M25	H	V	P01		
MFX100 Filter Element with  feature		Configuration example 2:		MFX100	4	P10	N	B	E	P01	
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	●	-	-

Seals		Bypass valve		Executions		
B	NBR	E	3 bar	Base	zerospark	
V	FPM	-	1.75 bar	P01	Z01 *	MP Filtri standard
				Pxx	Zxx *	Customized

* Not for Mxx filter media

CLOGGING INDICATORS

See page 720-721

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

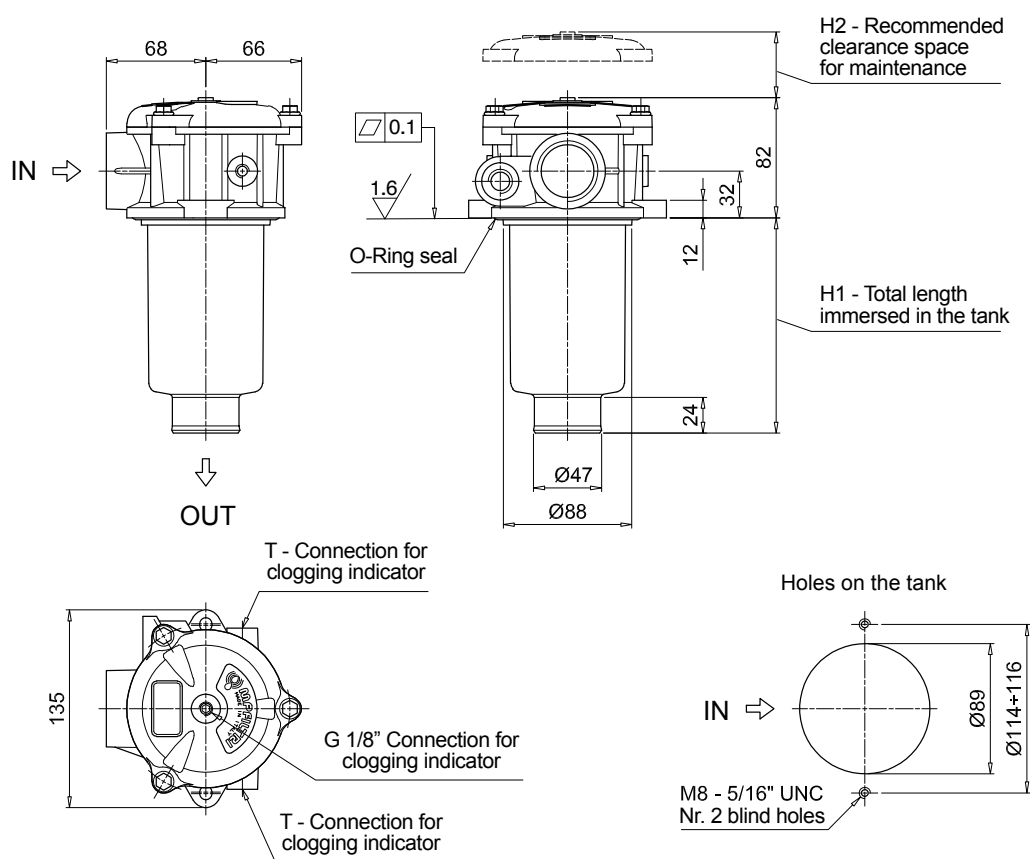
BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ADDITIONAL FEATURES

See page 268

TE	Extension tube
DFS	Diffuser with fast lock connection

T5	Filler plug M30x1.5
DPT	Dipstick



MPFX110

Filter length	H1 [mm]	H2 [mm]
1	102	120
2	147	170
3	225	250
4	327	350

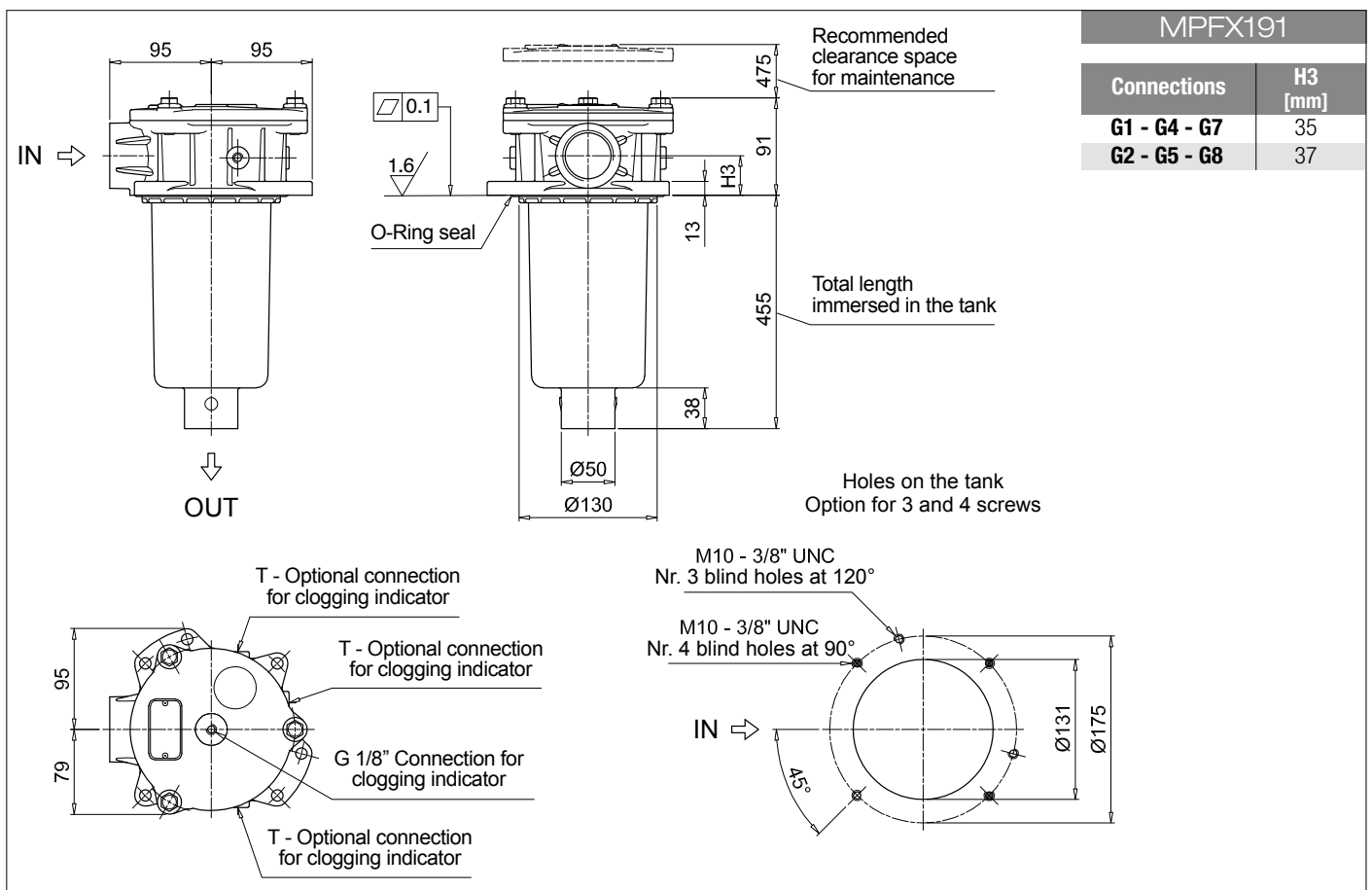
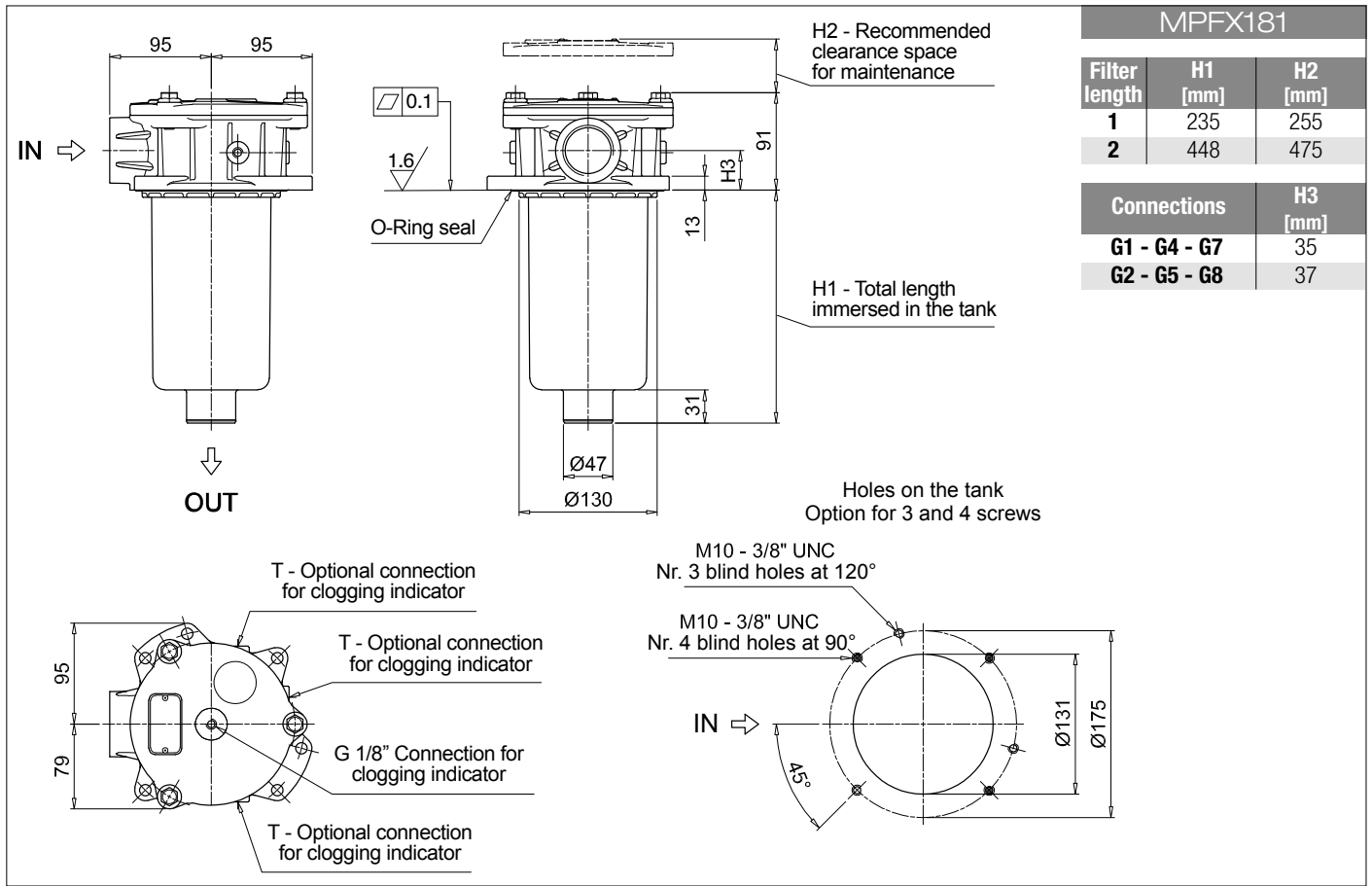
Connections	T
G1-G2-G3	G 1/8"
G4-G5-G6-G7-G8-G9	1/8" NPT
G10	G 1/8"
G11-G12	1/8" NPT

MPFX MPFX181 - MPFX191

Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example 1: MPFX181							
MPFX181 MPFX191 Filter featuring MY CLEAN Filter Element			Configuration example 2: MPFX191							
Length			Size 181		Size 191					
1			•		-					
2			•		•					
Seals and treatments										
A NBR			B NBR flat seal on head							
V FPM			D FPM flat seal on head							
W NBR head anodized			L NBR head anodized, flat seal on head							
Z FPM head anodized			M FPM head anodized, flat seal on head							
Connections										
G1 G 1 1/4"			G5 1 1/2" NPT							
G2 G 1 1/2"			G7 SAE 20 - 1 5/8" - 12 UN							
G4 1 1/4" NPT			G8 SAE 24 - 1 7/8" - 12 UN							
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			Executions				
			Axx	Mxx	Pxx	Base zerospark				
N 10 bar			-	•	•	P01 Z01* MP Filtri standard				
H 10 bar			•	-	-	Pxx Zxx* Customized				
						Bypass valve				
						E 3 bar				
						B 1.75 bar				
						* Not for Mxx filter media				



MPFX MPFX182 - MPFX192

Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example 1: MPFX182 1 A G1 1 A25 H E P01									
MPFX182 MPFX192 Filter featuring MYCLEAN Filter Element			Configuration example 2: MPFX192 2 V G4 2 P10 N B P01									
Length		Size 182	Size 192									
1		•	-									
2		•	•									
Seals and treatments												
A NBR		B NBR flat seal on head										
V FPM		D FPM flat seal on head										
W NBR head anodized		L NBR head anodized, flat seal on head										
Z FPM head anodized		M FPM head anodized, flat seal on head										
Main Connections		Aux size 1		Aux size 2								
G1 G 1 1/4"		G 1/2"		G 3/4"								
G4 1 1/4" NPT		1/2" NPT		3/4" NPT								
G7 SAE 20 - 1 5/8" - 12 UN		SAE 8 - 3/16" - 16 UNF		SAE 12 - 1 1/16" - 12 UN								
Aux connection - see previous table												
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										
Element Δp		Filter media			Executions							
N 10 bar		Axx	Mxx	Pxx	Bypass valve		Base	zerospark ²				
H 10 bar		-	•	•	E 3 bar		P01	Z01 *	MP Filtri standard			
		•	-	-	B 1.75 bar		Pxx	Zxx *	Customized			
* Not for Mxx filter media												

FILTER ELEMENT

Element series and size				Configuration example 1: MFX180						1	A25	H	B	E	P01
MFX180 Filter Element with MY CLEAN feature				Configuration example 2: MFX180						2	P10	N	V		P01
Element length															
1 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													
Element Δp		Filter media													
N 10 bar		Axx	Mxx	Pxx											
H 10 bar															
											</				

CLOGGING INDICATORS

See page 720-721

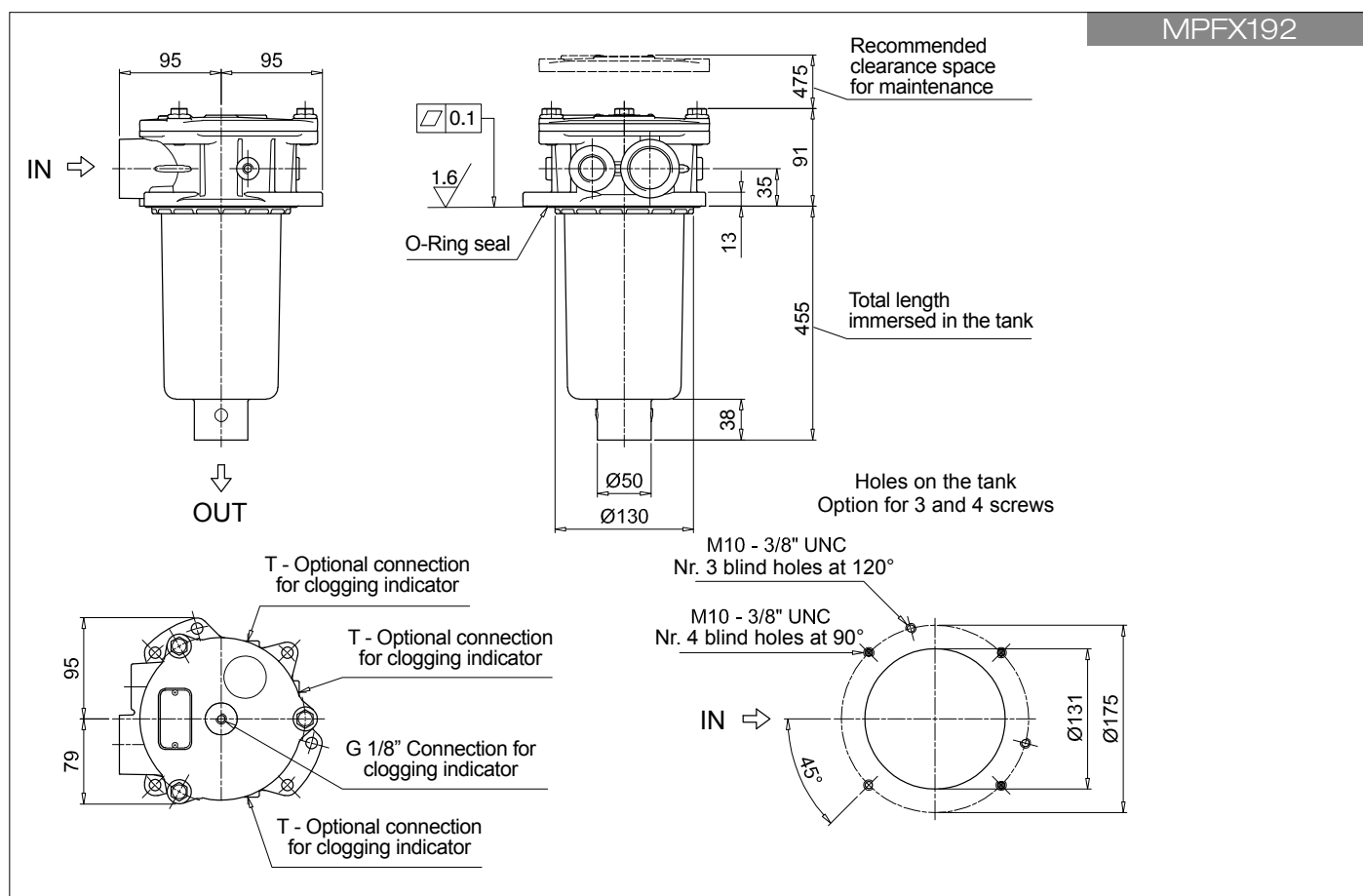
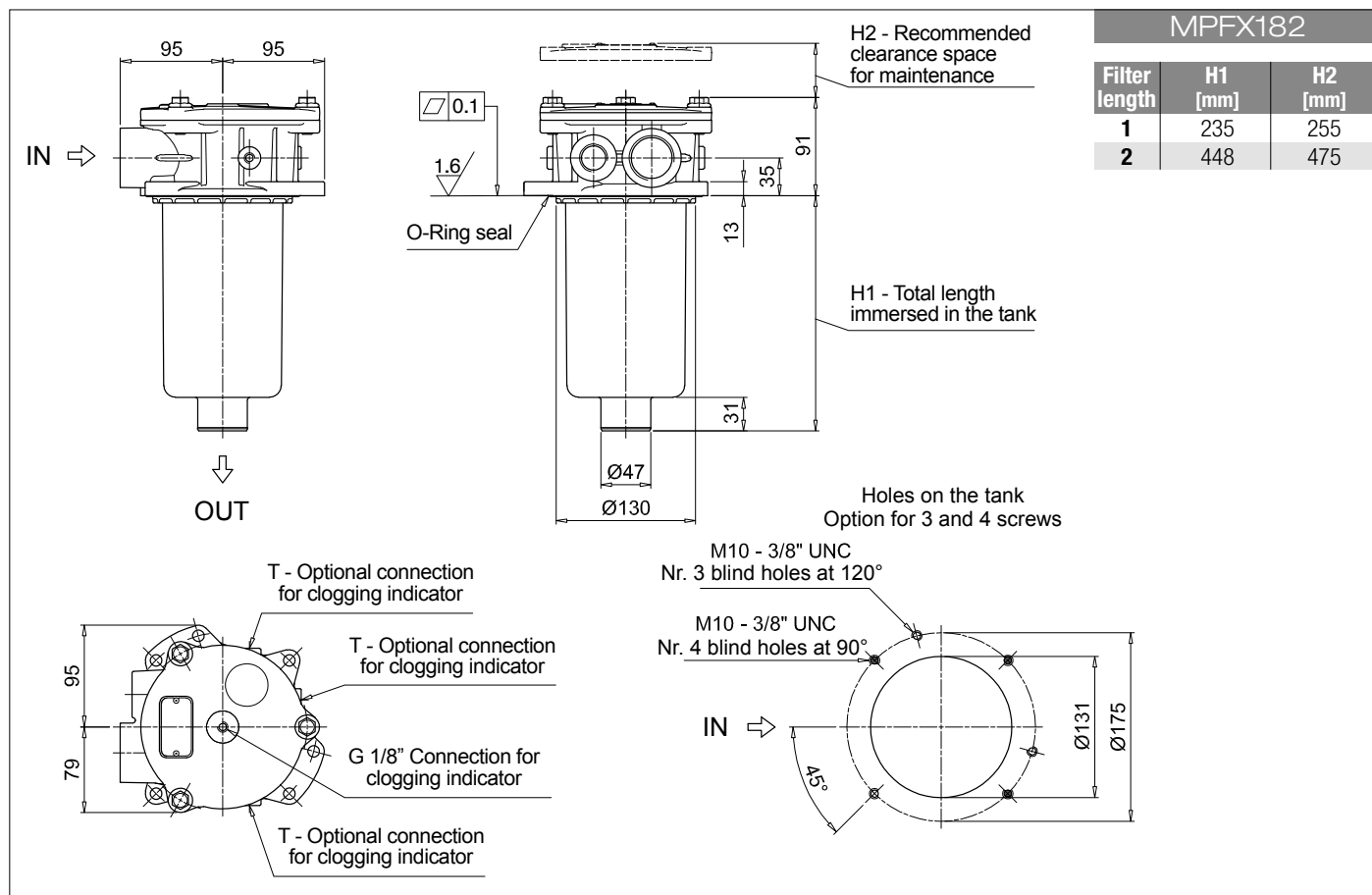
BVA Axial pressure gauge	
BVR Radial pressure gauge	
BVP Visual pressure indicator with automatic reset	
BVQ Visual pressure indicator with manual reset	

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

ADDITIONAL FEATURES

See page 268

TE Extension tube	
T5 Filler plug M30x1.5	



MPFX MPFX184 - MPFX194

Designation & Ordering code

COMPLETE FILTER

Series and size			Configuration example 1: MPFX184 1 A G1 A25 H E P01							
MPFX184 MPFX194 Filter featuring MY CLEAN Filter Element			Configuration example 2: MPFX194 2 V F3 P10 N B P01							
Length										
Size 184										
Size 194										
1										
2										
Seals and treatments										
A NBR										
W NBR head anodized										
V FPM										
Z FPM head anodized										
Main Connections										
Rear connections										
G1 G 1 1/4"										
G2 G 1 1/4"										
G4 1 1/4" NPT										
G5 1 1/4" NPT										
G7 SAE 20 - 1 5/8" - 12 UN										
G8 SAE 20 - 1 5/8" - 12 UN										
G10 SAE 24 - 1 7/8" - 12 UN										
G11 SAE 24 - 1 7/8" - 12 UN										
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										
M25 Wire mesh 25 µm										
M60 Wire mesh 60 µm										
M90 Wire mesh 90 µm										
P10 Resin impregnated paper 10 µm										
P25 Resin impregnated paper 25 µm										
Element Δp										
N 10 bar										
H 10 bar										
Filter media										
Axx										
Mxx										
Pxx										
Bypass valve										
E 3 bar										
B 1.75 bar										
Executions										
Base										
P01										
Z01*										
MP Filtri standard										
Pxx										
Zxx*										
Customized										

* Not for Mxx filter media

FILTER ELEMENT

Element series and size			Configuration example 1: MFEX180 1 A25 H B E P01							
MFEX180 Filter Element with MY CLEAN feature			Configuration example 2: MFEX180 2 P10 N V P01							
Element length										
1										
2										
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										
M25 Wire mesh 25 µm										
M60 Wire mesh 60 µm										
M90 Wire mesh 90 µm										
P10 Resin impregnated paper 10 µm										
P25 Resin impregnated paper 25 µm										
Element Δp										
N 10 bar										
H 10 bar										
Filter media										
Axx										
Mxx										
Pxx										
Seals										
B NBR										
V FPM										
Bypass valve										
E 3 bar										
- 1.75 bar										
Executions										
Base										
P01										
Z01*										
MP Filtri standard										
Pxx										
Zxx*										
Customized										

* Not for Mxx filter media

CLOGGING INDICATORS

See page 720-721

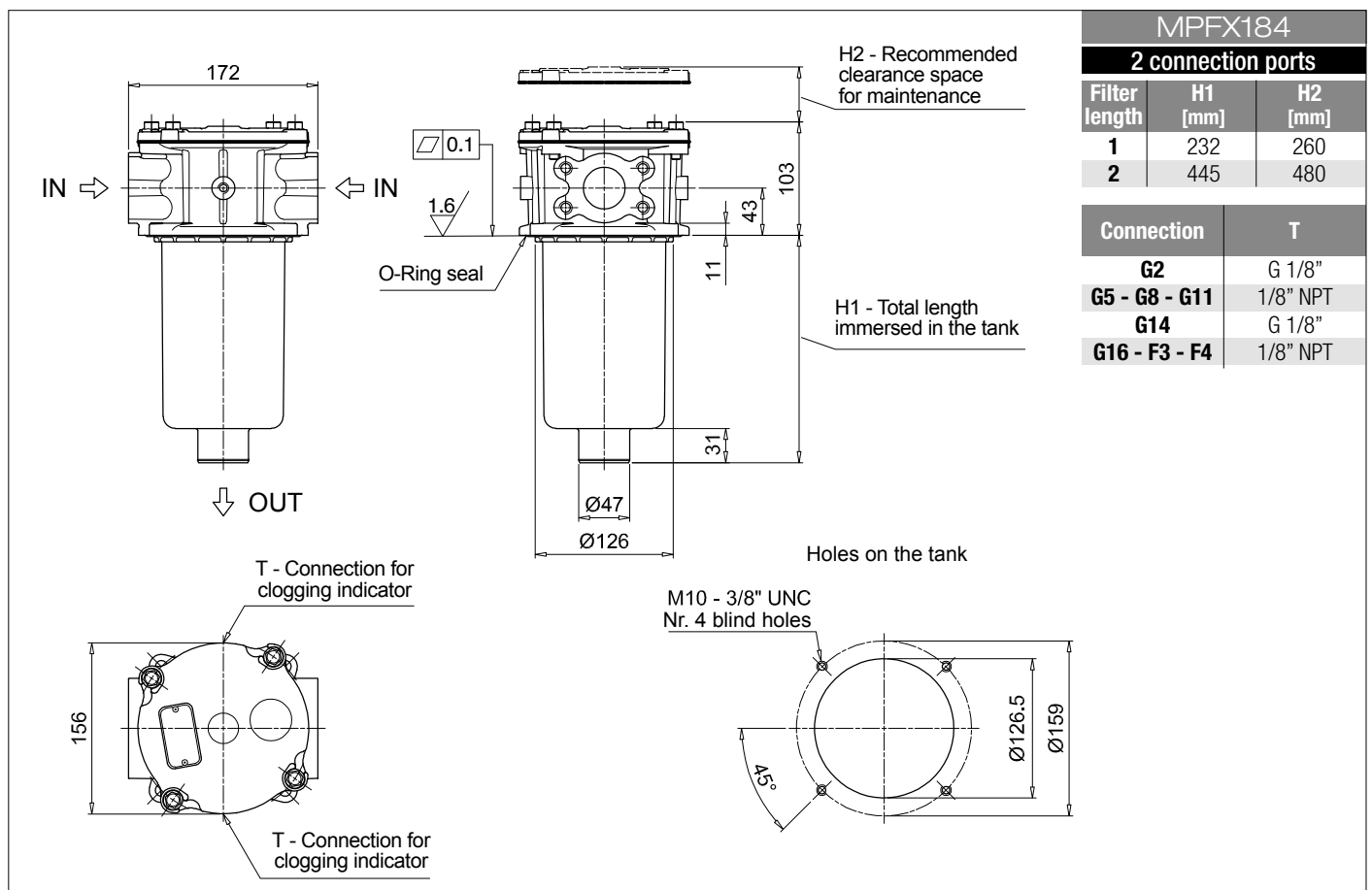
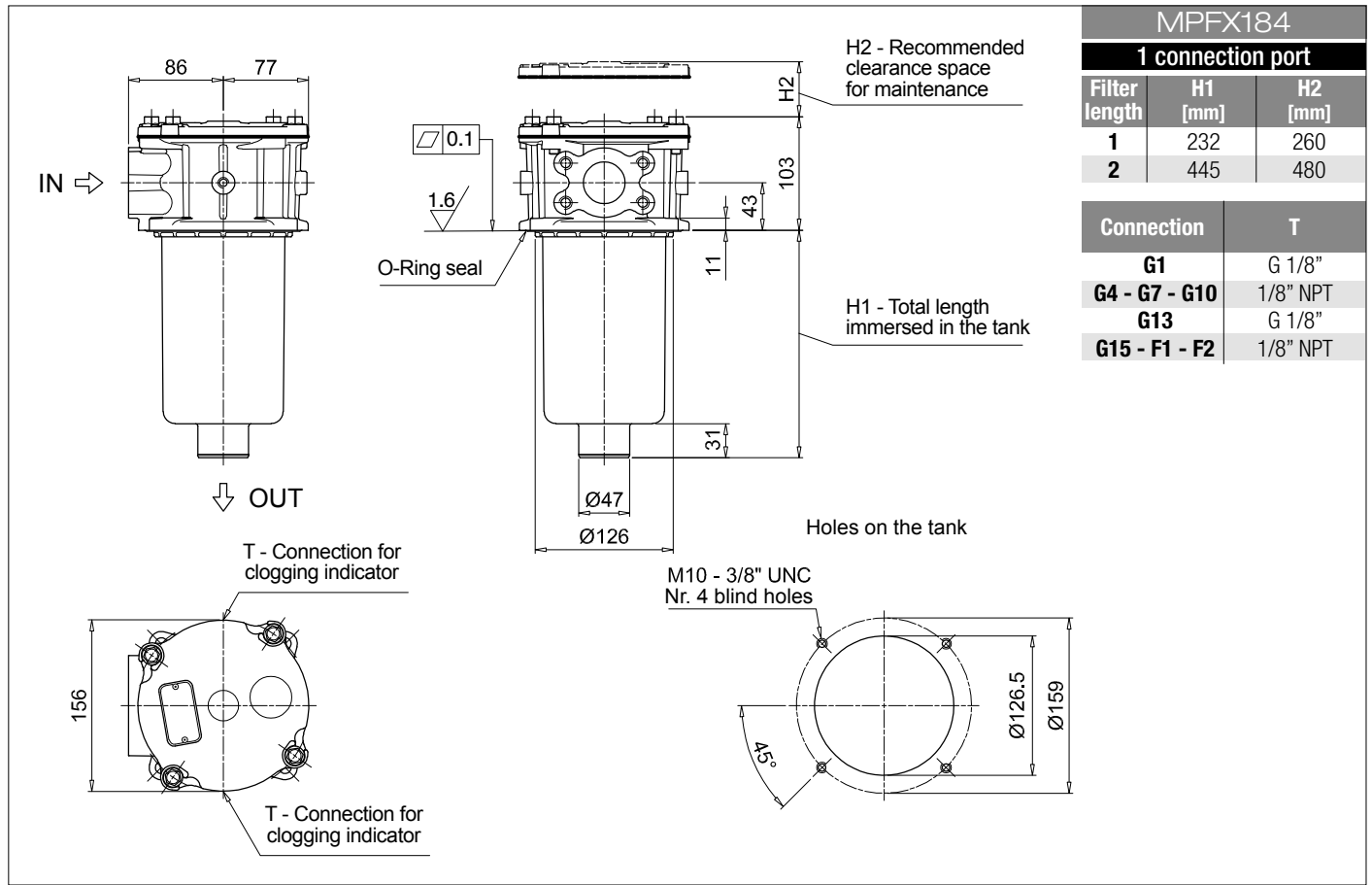
BVA	Axial pressure gauge
BVR	Radial pressure gauge
BVP	Visual pressure indicator with automatic reset
BVQ	Visual pressure indicator with manual reset

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

ADDITIONAL FEATURES

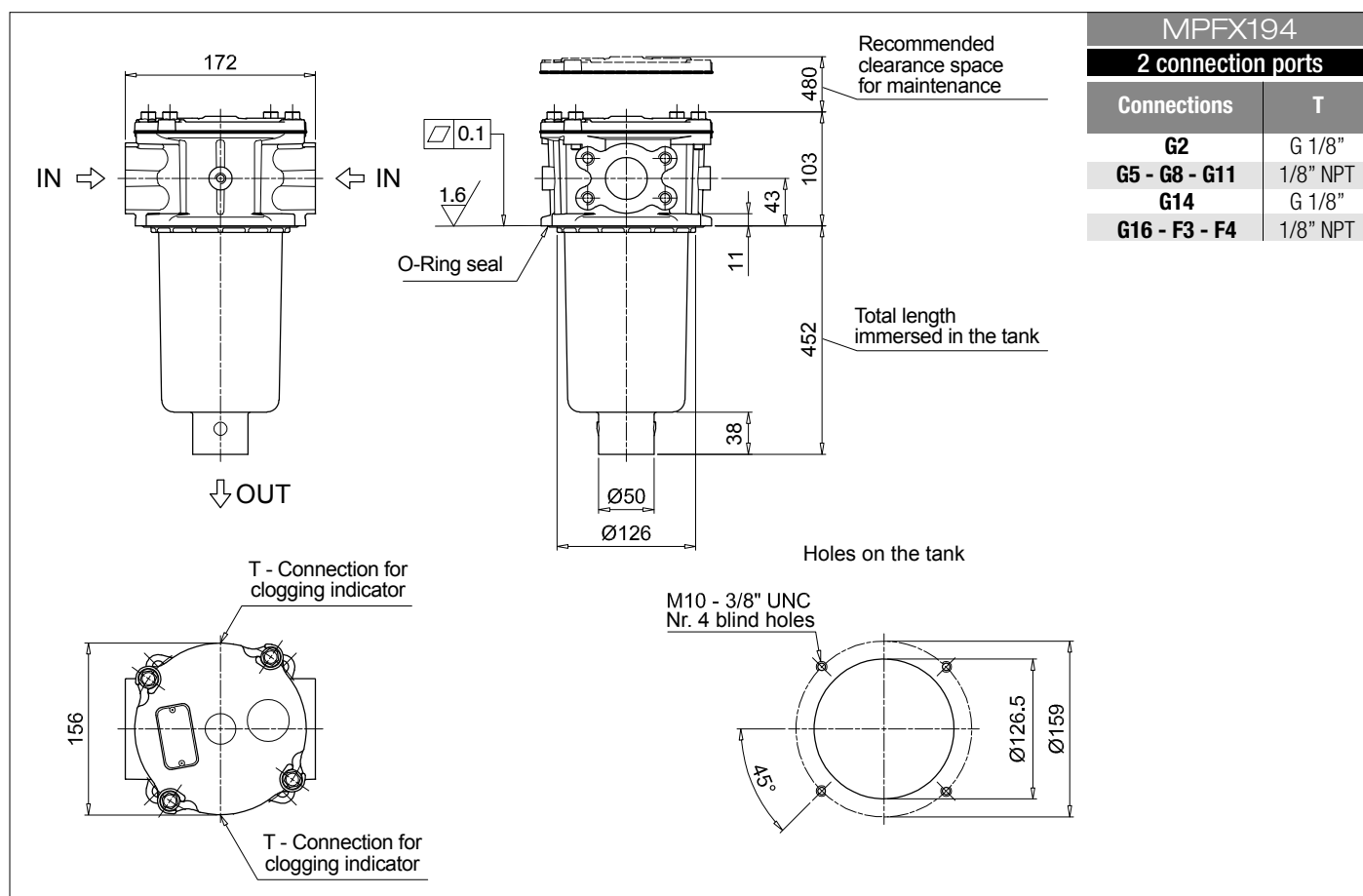
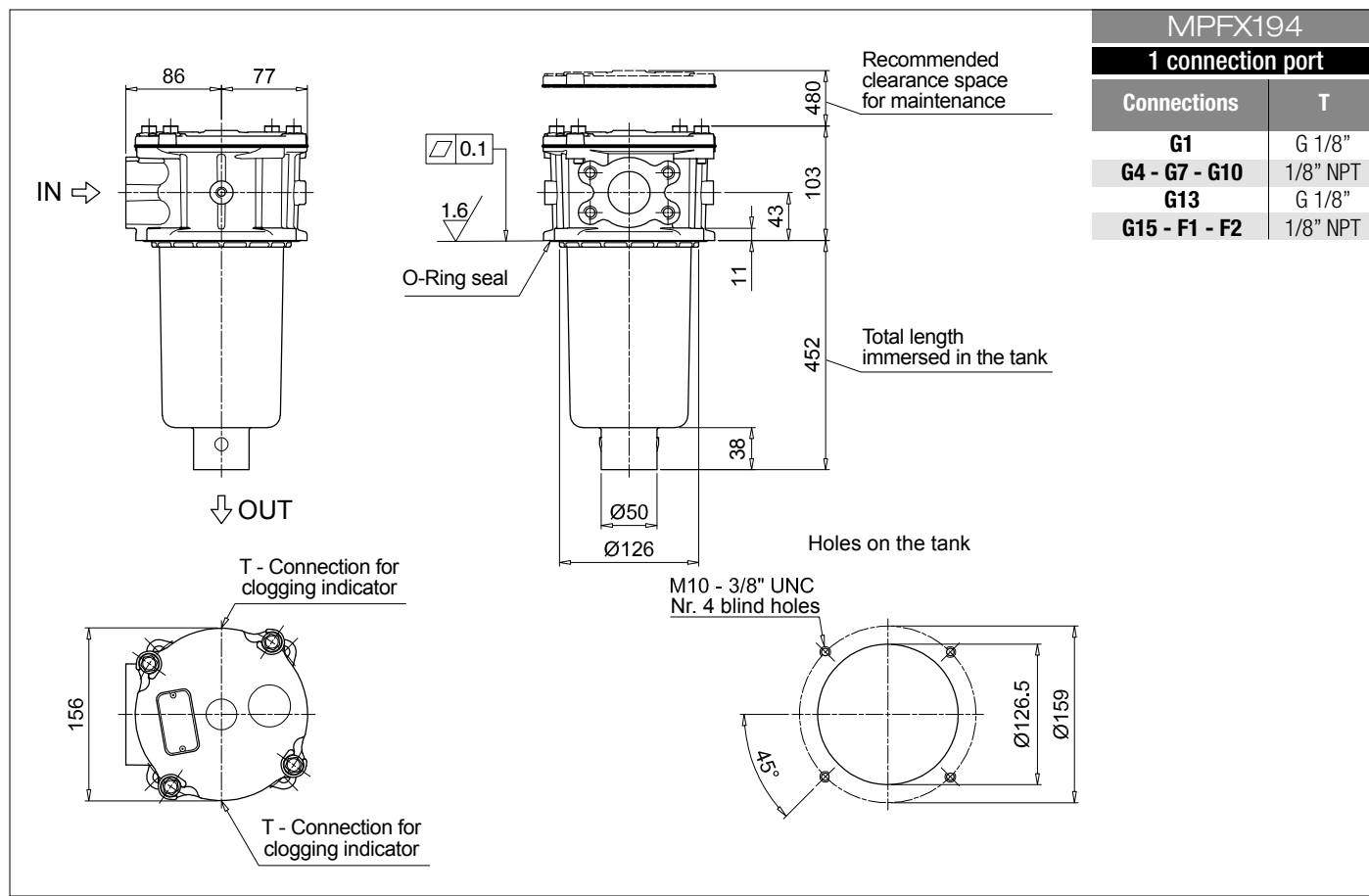
See page 268

TE	Extension tube
T5	Filler plug M30x1.5



MPFX MPFX184 - MPFX194

Dimensions



Designation & Ordering code

COMPLETE FILTER

Series and size		Configuration example 1:		MPFX400	1	A	G9	A25	H	B	P01
MPFX400 Filter featuring  Filter Element		Configuration example 2:		MPFX400	2	V	G4	P10	N	E	P01
Length											
1 2 3											
Seals and treatments											
A NBR											
V FPM											
W NBR head anodized											
Z FPM head anodized											
Connections											
G1 G 1 1/4"		G6 2" NPT									
G2 G 1 1/2"		G7 SAE 20 - 1 5/8" - 12 UN									
G3 G 2"		G8 SAE 24 - 1 7/8" - 12 UN									
G4 1 1/4" NPT		G9 SAE 32 - 2 1/2" - 12 UN									
G5 1 1/2" NPT											
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				Executions					
N 10 bar		Axx	Mxx	Pxx	Bypass valve		Base				
H 10 bar		-	•	•	E 3 bar		P01	Z01*	MP Filtri standard		
		•	-	-	B 1.75 bar		Pxx	Zxx*	Customized		
									* Not for Mxx filter media		

FILTER ELEMENT

Element series and size				Configuration example 1:		MFX400	1	A25	H	B	P01	
MFX400 Filter Element with MY CLEAN feature				Configuration example 2:		MFX400	2	P10	N	V	E	P01
Element length												
1 2 3												
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										
N 10 bar		Axx	Mxx	Pxx								
H 10 bar												
		</										

CLOGGING INDICATORS

See page 720-721

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	

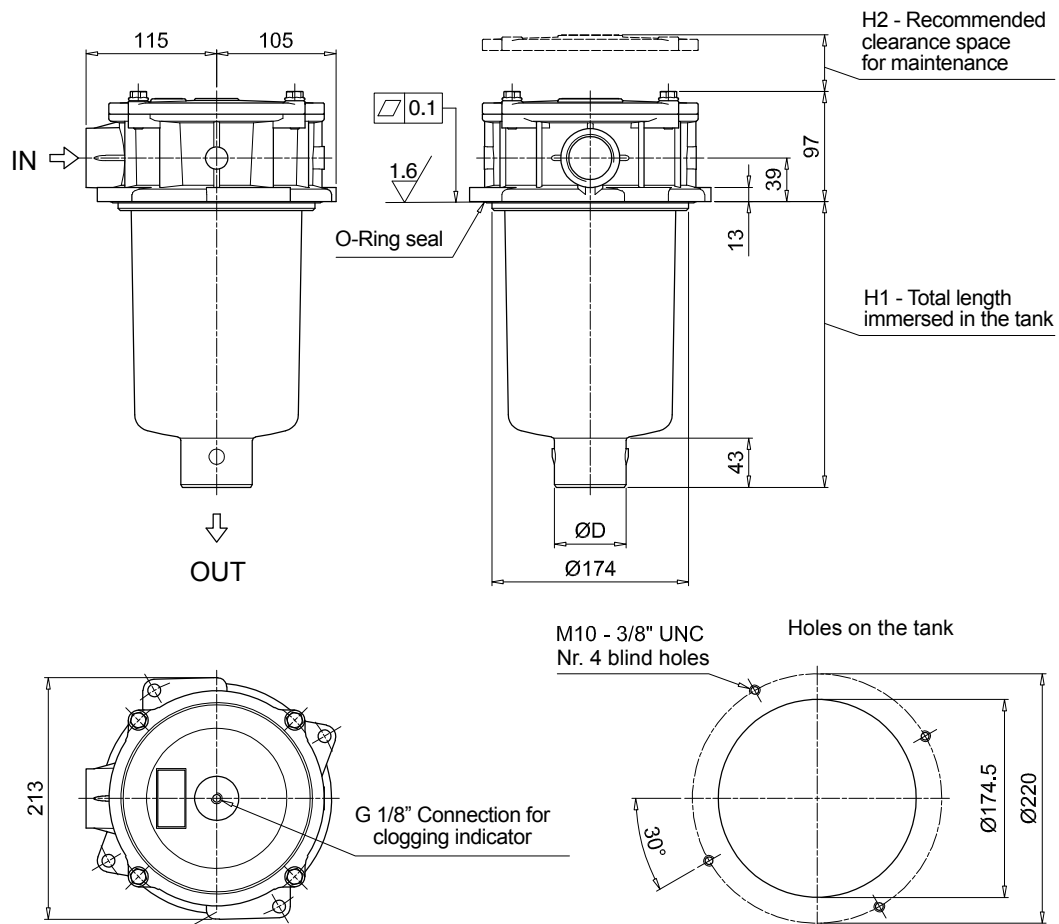
ADDITIONAL FEATURES

See page 268

TE Extension tube	
T5 Filler plug M30x1.5	

MPFX400

Filter length	H1 [mm]	H2 [mm]	D [mm]
1	187	210	50
2	252	270	63
3	300	315	63



Designation & Ordering code

COMPLETE FILTER

Series and size		Configuration example 1:		MPFX410	1	V	G4	1	P10	N	E	P01
MPFX410 Filter featuring  Filter Element		Configuration example 2:		MPFX410	1	A	G1	1	A25	H	B	P01
Length												
1 2 3												
Seals and treatments												
A NBR												
V FPM												
W NBR head anodized												
Z FPM head anodized												
Main Connections		Aux size 1										
G1 G 1 1/4"		G 1"										
G4 1 1/4" NPT		1" NPT										
G7 SAE 20 - 1 5/8" - 12 UN		SAE 16 - 1 5/16" - 12 UN										
Aux connection - see previous table												
1 Aux size 1												
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										
N 10 bar		Axx Mxx Pxx										
H 10 bar		• - -										
		Executions										
		Base  Z01* MP Filtri standard										
		Pxx Zxx* Customized										
		* Not for Mxx filter media										

FILTER ELEMENT

Element series and size		Configuration example 1:		MFX400	1	P10	N	V	E	P01
MFX400 Filter Element with  feature		Configuration example 2:		MFX400	1	A25	H	B		P01
Element length										
1 2 3										
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								
N 10 bar		Axx Mxx Pxx								
H 10 bar		• - -								
		Executions								
		Base  Z01* MP Filtri standard								
		Pxx Zxx* Customized								
		* Not for Mxx filter media								

CLOGGING INDICATORS

See page 720-721

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

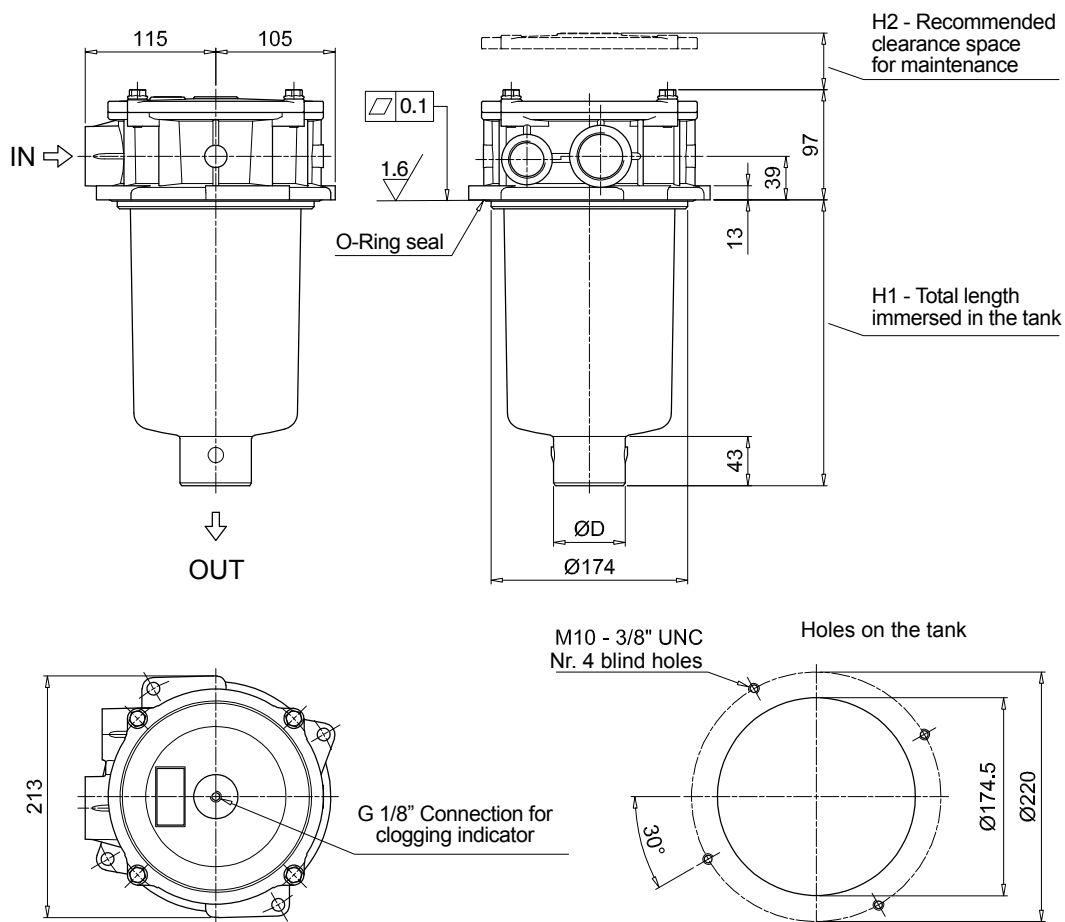
ADDITIONAL FEATURES

See page 268

TE Extension tube
T5 Filler plug M30x1.5

MPFX410

Filter length	H1 [mm]	H2 [mm]	D [mm]
1	187	210	50
2	252	270	63
3	300	315	63



MPFX MPFX450 - MPFX451 - MPFX750

Designation & Ordering code

COMPLETE FILTER

Series and size				Configuration example 1: MPFX450											
MPFX450 MPFX451 MPFX750				Configuration example 2: MPFX750											
Filter featuring  Filter Element															
Length		MPFX 450	MPFX 451	MPFX 750											
1		•	•	•											
2		•	•	-											
3		•	•	-											
Seals and treatments															
A NBR		W NBR head anodized													
V FPM		Z FPM head anodized													
Connections		Aux (only size 451)													
G1 G 2"		G 3/4"													
G4 2" NPT		3/4" NPT													
G7 SAE 32 - 2 1/2" - 12 UN		SAE 12 - 1 1/16" - 12 UN													
F1 2" SAE 3000 psi/M		G 3/4"													
F2 2" SAE 3000 psi/UNC		3/4" NPT													
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													
N 10 bar		Axx	Mxx	Pxx											
H 10 bar		•	-	-											
					Bypass valve		Executions								
					E 3 bar		Base		zerospark [®]						
					B 1.75 bar		P01		Z01 *		MP Filtri standard				
							Pxx		Zxx *		Customized				
												* Not for Mxx filter media			

* Not for Mxx filter media

FILTER ELEMENT

Element series and size				Configuration example 1: MFX400 1 A25 H B P01							
MFX400 MFX750 Filter Element with MY CLEAN feature				Configuration example 2: MFX750 1 P10 N V E P01							
Element length		MPFX 450	MPFX 451	MPFX 750							
1		•	•	•							
2		•	•	-							
3		•	•	-							
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	•	-	-							
		Seals		Bypass valve		Executions					
		B NBR		E 3 bar		Base zerospark					
		V FPM		- 1.75 bar		P01 Z01 * MP Filtri standard					
						Pxx Zxx * Customized					
* Not for Mxx filter media											

* Not for Mxx filter media

CLOGGING INDICATORS

See page 720-721

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

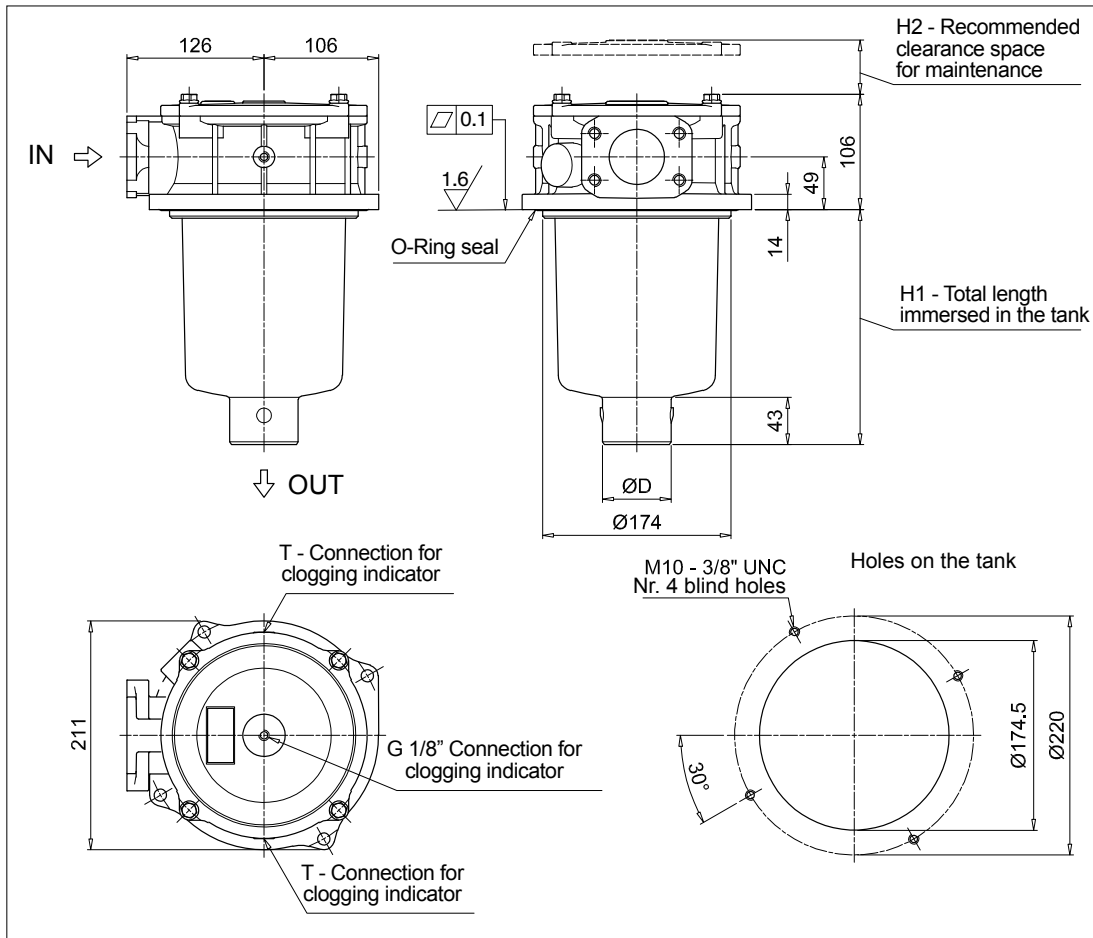
BEA	Electrical pressure indicator
BEM	Electrical pressure indicator
BLA	Electrical / visual pressure indicator

ADDITIONAL FEATURES

See page 268

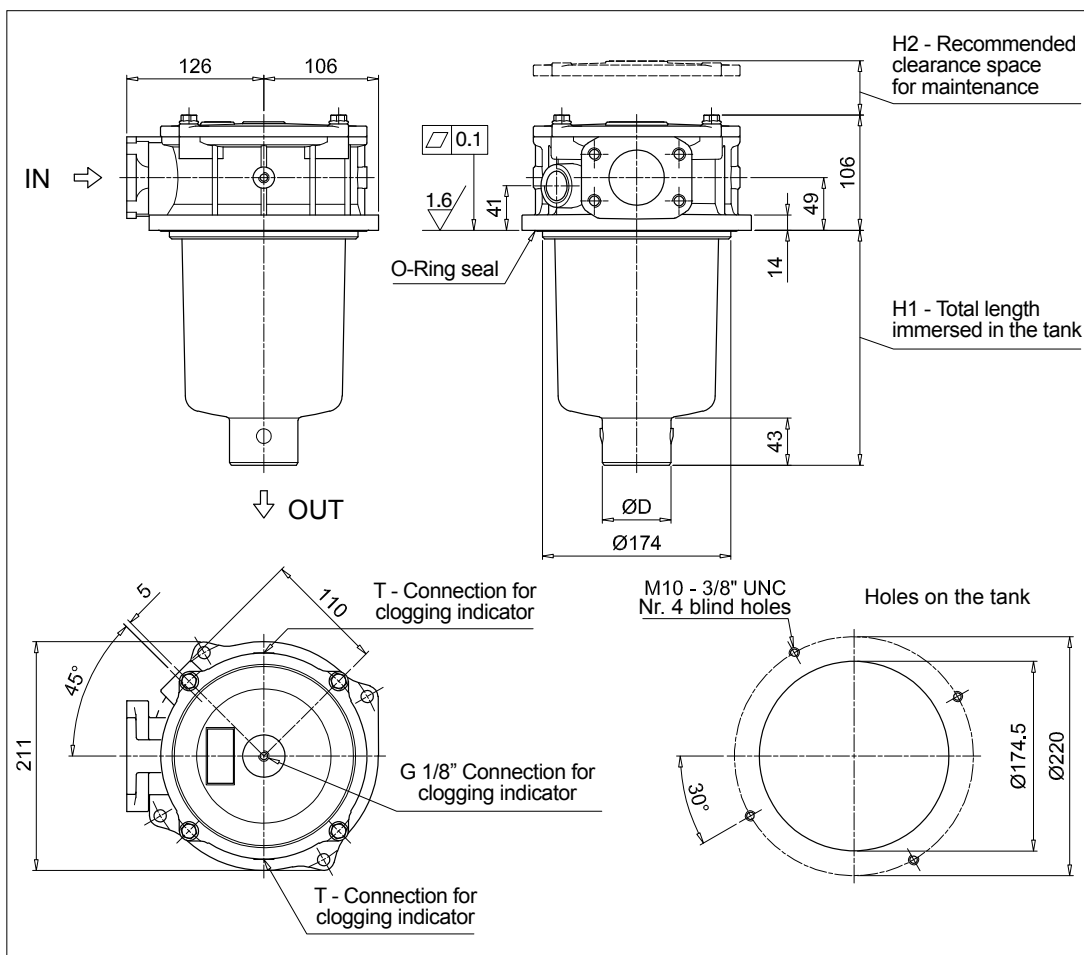
TE	Extension tube
-----------	----------------

T5	Filler plug M30x1.5
-----------	---------------------



MPFX450			
Filter length	H1 [mm]	H2 [mm]	D [mm]
1	187	210	50
2	252	270	63
3	300	315	63

Connections	T
G1	G 1/8"
G4 - G7	1/8" NPT
F1	G 1/8"
F2	1/8" NPT



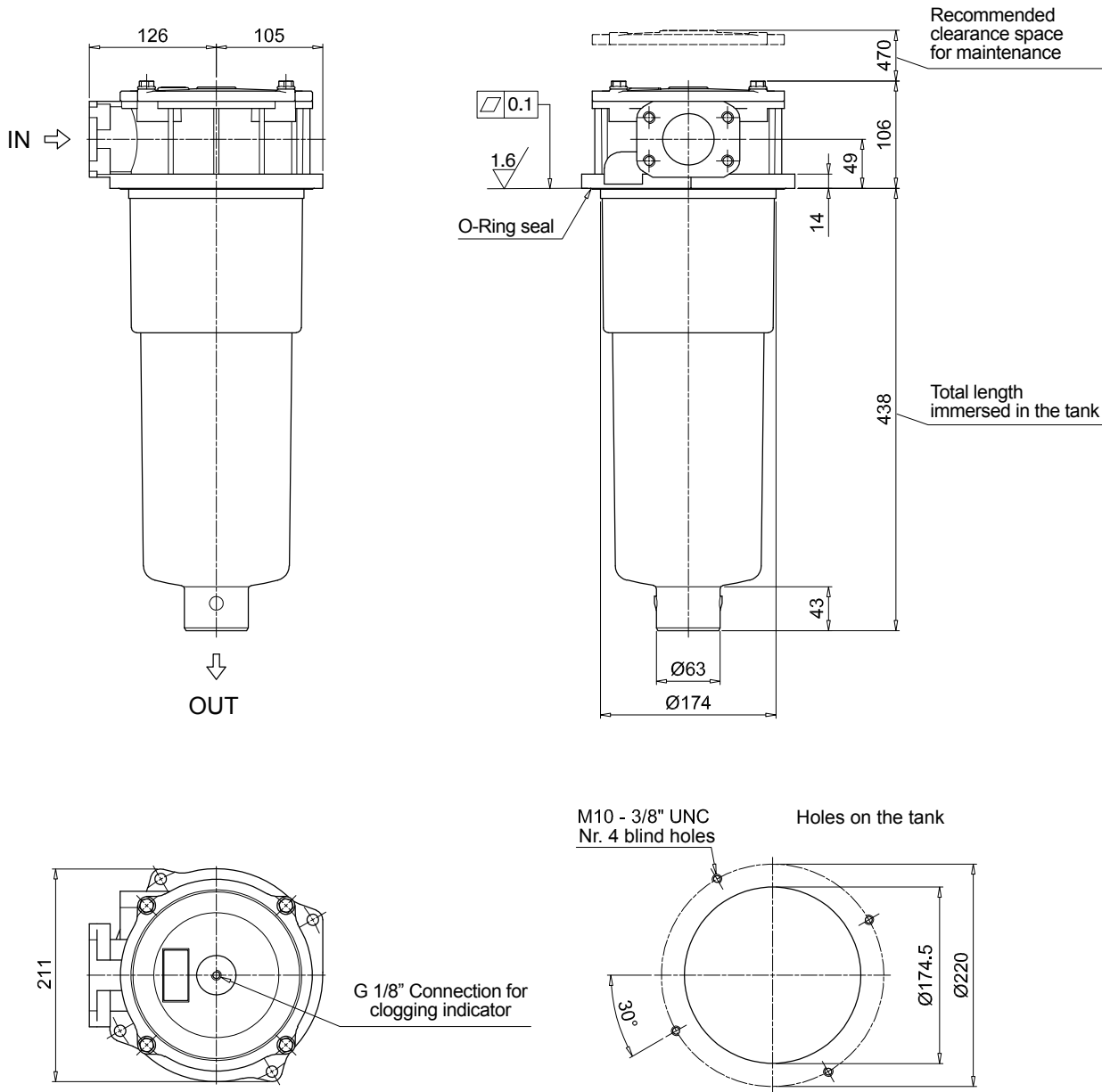
MPFX451			
Filter length	H1 [mm]	H2 [mm]	D [mm]
1	187	210	50
2	252	270	63
3	300	315	63

Connections	T
G1	G 1/8"
G4 - G7	1/8" NPT
F1	G 1/8"
F2	1/8" NPT

MPFX MPFX450 - MPFX451 - MPFX750

Dimensions

MPFX750



MPFX 100

MPFX 181

O-RING SEAL

Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
	2	3 (3a ÷ 3d)	
Filter series	Filter element	Seal Kit code number NBR	Seal Kit code number FPM
MPFX 030	See order table	02050675	02050676
MPFX 100-110		02050677	02050678
MPFX 181-182		02050681	02050682
MPFX 184		02050685	02050686
MPFX 191-192		02050683	02050684
MPFX 194		02050687	02050688
MPFX 400-410		02050695	02050696
MPFX 450-451		02050697	02050698
MPFX 750		02050699	02050700

MPFX 104

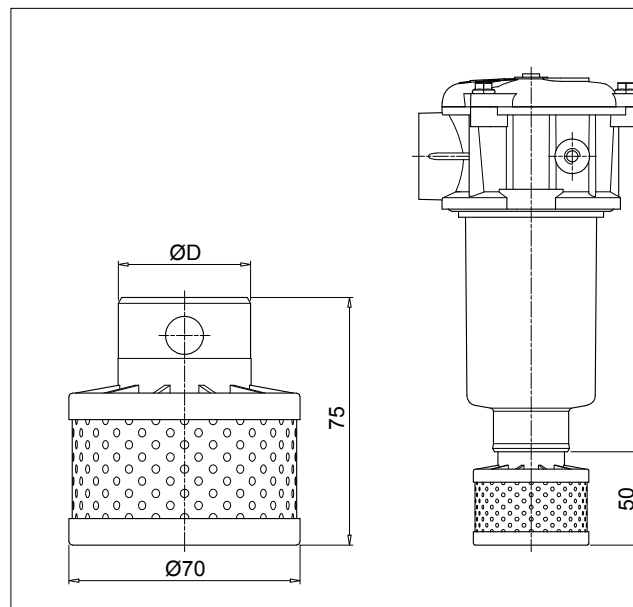
MPFX 181

FLAT SEAL

Item:	Q.ty: 1 pc.	Q.ty: 1 pc.	
	2	3 (3a ÷ 3d)	
Filter series	Filter element	Seal Kit code number NBR	Seal Kit code number FPM
MPFX 104	See order table	02050679	02050680
MPFX 181-182		02050691	02050692
MPFX 191-192		02050691	02050692

Accessories

DIFFUSER WITH FAST LOCK CONNECTION

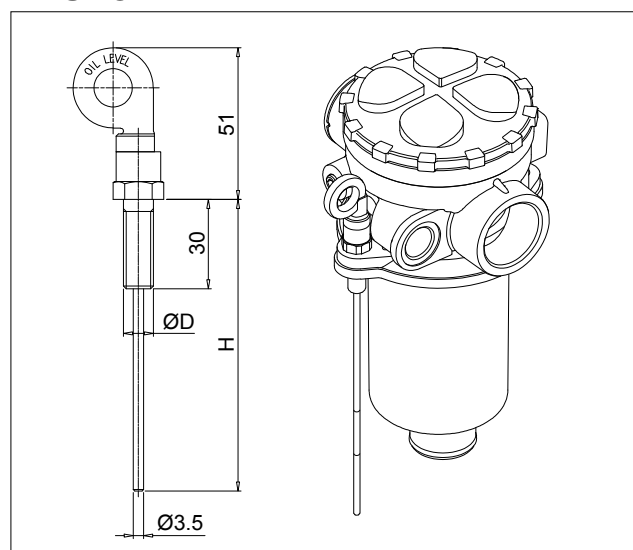


Configuration example: **DFS** **32** **A** **075**

Series	Size	Ø D [mm]	Version	Length
DFS	32	32	A Standard	075 Standard
	40	40		

Filter series	Filter size	Filter Length	DFS32	DFS40		
MPF	100	104	110	1	•	
		2	•	-		
		3	-	•		
		4	-	•		
MPFX	100	104	110	1	•	
		2	-	•		
		3	-	•		
		4	-	•		
MPT	110	114	116	120	1	•
		2	•	-		
		3	-	•		
		4	-	•		
MPTX	110	114	116	120	1	•
		2	-	•		
		3	-	•		
		4	-	•		

DIPSTICK



Materials

- Screw: phosphatized steel
- Stick: phosphatized steel
- Handle: Polyamide

Technical data

Working temperature: from -25 °C to +110 °C

Configuration example: **DPT** **20** **M10** **A** **P01**

Series	Length	H [mm]
DPT	15	134
	20	184
	25	234
	30	284
	35	334

Seals

A	NBR
V	FPM

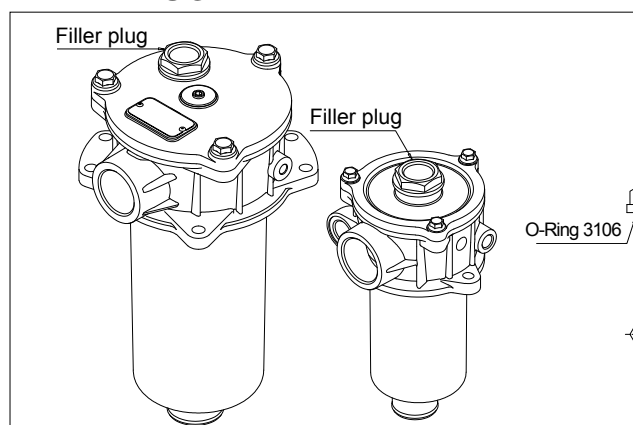
Fastening

M8	Fastening with screws Ø D = M8
M10	Fastening with screws Ø D = M10

Execution

P01	MP Filtri standard
Pxx	Customized

FILLER PLUG



Materials

- Body: Polyamide
- Seal: NBR

Technical data

Tightening torque: 15 N·m

O-Ring 3106

M30x1.5

A/F 34

For any further information, please, contact our commercial dept.

POLYAMIDE EXTENSION TUBE

H1 - Total length immersed in the tank

Conf. example: **TE** **40** **A** **250**

Series	TE
Size	Ø D [mm]
25	25
32	32
40	40
51	51
62	62

Material
A Polyamide

Length	H [mm]	25-32-40	51-62
200	200	•	•
250	250	•	-
300	300	•	•
350	350	•	-
400	400	•	•
450	450	•	-
500	500	•	•
600	600	-	•

COMPATIBILITY TABLE																		
Filter series	Filter size				Filter length	TE25	TE32	TE40	TE51	TE62	Tube length							
											200	250	300	350	400	450	500	600
MPF	30				1	•	-	-	-	-	266	316	366	416	466	516	566	-
MPF	100	104	110	1	-	•	-	-	-	-	275	325	375	425	475	525	575	-
				2	-	-	-	-	-	-	322	372	422	472	522	572	622	-
				3	-	-	•	-	-	-	400	450	500	550	600	650	700	-
				4	-	-	-	-	-	-	502	552	602	652	702	752	802	-
MPFX	100	104	110	1	-	-	•	-	-	-	277	327	377	427	477	527	577	-
				2	-	-	-	-	-	-	322	372	422	472	522	572	622	-
				3	-	-	-	-	-	-	400	450	500	550	600	650	700	-
				4	-	-	-	-	-	-	502	552	602	652	702	752	802	-
MPF	181	182	184	1	-	-	•	-	-	-	410	460	510	560	610	660	710	-
				2	-	-	-	-	-	-	623	673	723	773	823	873	923	-
MPFX	191	192	194	2	-	-	-	-	•	-	620	-	720	-	820	-	920	1020
	400	410	450	1	-	-	-	-	•	-	352	-	452	-	552	-	652	752
				2	-	-	-	-	-	•	411	-	511	-	611	-	711	811
				3	-	-	-	-	-	•	459	-	559	-	659	-	759	859
MPT	750				1	-	-	-	-	•	597	-	697	-	797	-	897	997
	025	027		1	-	•	-	-	-	-	278	328	378	428	478	528	578	-
				2	-	-	-	-	-	-	342	392	442	492	542	592	642	-
				3	-	-	-	-	-	-	380	430	480	530	580	630	680	-
MPT	110	114	116	120	1	-	•	-	-	-	273	323	373	423	473	523	573	-
					2	-	-	-	-	-	320	370	420	470	520	570	620	-
					3	-	-	•	-	-	396	446	496	546	596	646	696	-
					4	-	-	-	-	-	498	548	598	648	698	748	798	-
MPTX	110	114	116	120	1	-	-	•	-	-	273	323	373	423	473	523	573	-
					2	-	-	-	-	-	318	368	418	468	518	568	618	-
					3	-	-	-	-	-	396	446	496	546	596	646	696	-
					4	-	-	-	-	-	498	548	598	648	698	748	798	-

STEEL EXTENSION TUBE

Configuration example:

MPF191 2 A F1 A10 H B S60

Length	H1 [mm]
S30	300
S35	350
S40	400
S45	450
S50	500
S60	600
S70	700
S80	800
S90	900

COMPATIBILITY TABLE						
					Ø D [mm]	
Filter series	Filter size				Filter length	
MPF	191	192	194		2	• -
					1	• -
	400	410	450	451	2	- •
					3	
		750			1	- •

Designation & Ordering code

BAROMETRIC (PRESSURE) INDICATORS

Series				Configuration example 1: BEA A 15 H A 41 P01 EX									
BE Electrical pressure indicator				Configuration example 2: BL A 20 H A 71 P01									
BL Electrical/Visual pressure indicator				Configuration example 3: BV R 14 P01									
BV Visual pressure indicator				Configuration example 4: BV P 20 H P01									
Type	BE	BL	BV										
A Standard type	•	•	A Axial connection pressure gauge										
M With wired electrical connection	•	-	R Radial connection pressure gauge										
T With thermal switch	•	-	P Visual indicator with automatic reset										
			Q Visual indicator with manual reset										
Pressure setting	BEA-BEM	BET	BLA	BVA-BVR	BVP-BVQ								
14 1.4 bar	-	-	-	•	-								
15 1.5 bar	•	-	•	-	•								
20 2.0 bar	•	•	•	-	•								
25 2.5 bar	-	•	-	•	-								
Seals	BE	BLA	BVA-BVR	BVP-BVQ									
H HNBR	•	•	-	•									
Thermostat	BEA-BEM	BET	BLA										
A Without thermostat	•	-	•										
F With thermostat	-	•	-										
Electrical connections					BEA	BEM	BET	BL					
10 Connection AMP Superseal series 1,5					-	-	•	-					
30 Connection Deutsch DT-04-2-P					-	-	•	-					
41 Connection via four-core cable					-	•	-	-					
50 Connection EN 175301-803					•	-	-	-					
51 Connection EN 175301-803, transparent base with lamps 24 Vdc					-	-	-	•					
52 Connection EN 175301-803, transparent base with lamps 110 Vdc					-	-	-	•					
53 Connection EN 175301-803, transparent base with lamps 230 Vac					-	-	-	•					
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc					-	-	-	•					
Option													
P01 MP Filtri standard													
Pxx Customized													
Certifications					BEA	BEM-BET	BL	BV					
Without					•	•	•	•					
EX ATEX certification					•	-	-	-					
UL UL certification					•	-	-	-					

DIFFERENTIAL PRESSURE INDICATORS

Series
DE Electrical differential pressure indicator
DL Electrical/Visual differential pressure indicator
DT Electrical differential pressure indicator
DV Visual differential pressure indicator

Configuration example 1:	DE	M	20	H	F	50	P01
Configuration example 2:	DE	U	50	V	A	50	P01
Configuration example 3:	DL	E	20	V	A	71	P01
Configuration example 4:	DT	A	20	H	F	70	P01
Configuration example 5:	DV	M	20	V			P01

Type	DE	DL	DT
A Standard type	•	•	•
M With wired electrical connection	•	-	-
U Standard type 210 bar, UL certified	•	-	-
E For high power supply	-	•	-
S Compact version	•	-	-

DV
A With automatic reset
M With manual reset
S With automatic reset

Pressure setting	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
12 1.2 bar	-	-	-	•	-	-	-	-	•
20 2.0 bar	•	•	•	-	•	•	•	•	-
25 2.5 bar	-	-	-	•	-	-	-	-	•

Seals	DEA	DEM	DEU	DES	DL	DT	DVA	DVM	DVS
H HNBR	•	•	-	•	•	•	•	•	•
V FPM	•	•	•	-	•	•	•	•	-

Thermostat	DEA	DEM	DEU	DES	DLA	DLE	DT
A Without thermostat	•	•	•	•	•	•	-
F With thermostat	-	•	-	-	-	•	•

Electrical connections	DEA	DEM	DEU	DES	DLA	DLE	DT
10 Connection AMP Superseal series 1.5	-	•	-	•	-	-	-
20 Connection AMP Timer Junior	-	•	-	-	-	-	-
30 Connection Deutsch DT-04-2-P	-	•	-	•	-	-	-
35 Connection Deutsch DT-04-3-P	-	•	-	-	-	-	-
50 Connection EN 175301-803	•	-	•	-	-	•	-
51 Connection EN 175301-803, transparent base with lamps 24 Vdc	-	-	-	-	•	-	-
52 Connection EN 175301-803, transparent base with lamps 110 Vdc	-	-	-	-	•	-	-
70 Connection IEC 61076-2-101 D (M12)	-	-	-	-	-	-	•
71 Connection IEC 61076-2-101 D (M12), black base with lamps 24 Vdc	-	-	-	-	•	-	-
80 Connection Stud #10-32 UNF	-	-	-	•	-	-	-

Option
P01 MP Filtri standard
Pxx Customized

Certifications	DEU	OTHERS
Without	-	•
UL UL certification	•	-

PLUGS

Series
T2 Plug
T4 Plug

Seals	T2	T4
A NBR	-	•
H HNBR	•	-
V FPM	•	-

Configuration example	T2	H
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