

# MPFX series

Maximum working pressure up to 800 kPa (8 bar) - Flow rate up to 750 l/min



# FILTER SIZING

## INDEX

	Page
CALCULATION	23
CORRECTIVE FACTOR	24

**THE CORRECT FILTER SIZING HAVE TO BE BASED ON THE TOTAL PRESSURE DROP DEPENDING BY THE APPLICATION.**

FOR EXAMPLE, THE MAXIMUM TOTAL PRESSURE DROP ALLOWED BY A NEW AND CLEAN RETURN FILTER HAVE TO BE IN THE RANGE 0.4 ÷ 0.6 bar.

The pressure drop calculation is performed by adding together the value of the housing with the value of the filter element. The pressure drop  $\Delta pc$  of the housing is proportional to the fluid density ( $kg/dm^3$ ); all the graphs in the catalogue are referred to mineral oil with density of  $0.86 kg/dm^3$ .

The filter element pressure drop  $\Delta pe$  is proportional to its viscosity ( $mm^2/s$ ), the corrective factor Y have to be used in case of an oil viscosity different than  $30 mm^2/s$  (cSt).

**Sizing data for single filter element, head at top**

$\Delta pc$  = Filter housing pressure drop [bar]

$\Delta pe$  = Filter element pressure drop [bar]

Y = Corrective factor Y (see correspondent table), depending on the filter type, on the filter element size, on the filter element length and on the filter media

Q = flow rate (l/min)

V1 reference oil viscosity =  $30 mm^2/s$  (cSt)

V2 = operating oil viscosity in  $mm^2/s$  (cSt)

**Filter element pressure drop calculation with an oil viscosity different than  $30 mm^2/s$  (cSt)**

$\Delta pe = Y : 1000 \times Q \times (V2:V1)$

$\Delta p Tot. = \Delta pc + \Delta pe$

**Verification formula**

$\Delta p Tot. \leq \Delta p max allowed$

**Maximum total pressure drop ( $\Delta p max$ ) allowed by a new and clean filter**

Application	Range (bar)
Suction filters	0.08 ÷ 0.10
Return filters	0.4 ÷ 0.6
	0.4 ÷ 0.6 return lines
	0.3 ÷ 0.5 lubrication lines
Low & Medium Pressure filters	0.3 ÷ 0.4 off-line in power systems
	0.1 ÷ 0.3 off-line in test benches
	0.4 ÷ 0.6 over-boost
High Pressure filters	0.8 ÷ 1.5
Stainless Steel filters	0.8 ÷ 1.5

**Generic filter calculation example**

Application data:

Tank top return filter

Pressure Pmax = 10 bar

Flow rate Q = 120 l/min

Viscosity V2 =  $46 mm^2/s$  (cSt)

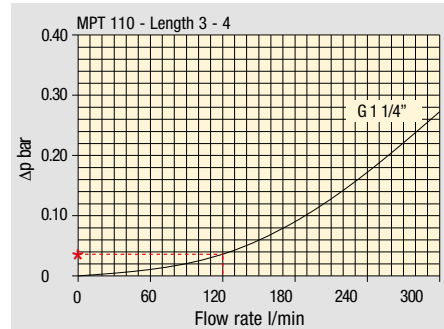
Oil density =  $0.86 kg/dm^3$

Required filtration efficiency =  $25 \mu m$  with absolute filtration

With bypass valve and G 1 1/4" inlet connection

Calculation:

$\Delta pc = 0.03 bar$  (see graphic below)



Filter housings  $\Delta p$  pressure drop. The curves are plotted using mineral oil with density of  $0.86 kg/dm^3$  in compliance with ISO 3968.  $\Delta p$  varies proportionally with density.

$\Delta pe = (2.00 : 1000) \times 120 \times (46 : 30) = 0.37 bar$

Filter element	Absolute filtration H Series					Nominal filtration N Series		
	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
Type								
Return filters								
MF 020	74.00	50.08	20.00	16.00	9.00	6.43	5.51	4.40
	2	29.20	24.12	8.00	7.22	5.00	3.33	2.85
	3	22.00	19.00	6.56	5.33	4.33	1.68	1.44
MF 030	74.00	50.08	20.00	16.00	9.00	6.43	5.51	3.40
MFX 030	1	28.20	24.40	8.67	8.17	6.88	4.62	3.96
	2	17.33	12.50	6.86	5.70	4.00	3.05	2.47
	3	10.25	9.00	3.65	3.33	2.50	1.63	1.32
	4	6.10	5.40	2.30	2.20	2.00	1.19	0.96
MF 100								
MFX 100								

$\Delta p Tot. = 0.03 + 0.37 = 0.4 bar$

The selection is correct because the total pressure drop value is inside the admissible range for top tank return filters.

In case the allowed max total pressure drop is not verified, it is necessary to repeat the calculation changing the filter length/size.

# FILTER SIZING Corrective factor

Corrective factor Y to be used for the filter element pressure drop calculation. The values depend to the filter size and length and to the filter media.  
Reference oil viscosity 30 mm<sup>2</sup>/s

## Return filters

Filter element	Absolute filtration H Series					Nominal filtration N Series			
	Type	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
MF 020	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	4.40
	2	29.20	24.12	8.00	7.22	5.00	3.33	2.85	2.00
	3	22.00	19.00	6.56	5.33	4.33	1.68	1.44	1.30
MF 030 MFX 030	1	74.00	50.08	20.00	16.00	9.00	6.43	5.51	3.40
MF 100 MFX 100	1	28.20	24.40	8.67	8.17	6.88	4.62	3.96	1.25
	2	17.33	12.50	6.86	5.70	4.00	3.05	2.47	1.10
	3	10.25	9.00	3.65	3.33	2.50	1.63	1.32	0.96
	4	6.10	5.40	2.30	2.20	2.00	1.19	0.96	0.82
MF 180 MFX 180	1	3.67	3.05	1.64	1.56	1.24	1.18	1.06	0.26
	2	1.69	1.37	0.68	0.54	0.51	0.43	0.39	0.12
MF 190 MFX 190	2	1.69	1.37	0.60	0.49	0.44	0.35	0.31	0.11
MF 400 MFX 400	1	3.20	2.75	1.39	1.33	1.06	0.96	0.87	0.22
	2	2.00	1.87	0.88	0.85	0.55	0.49	0.45	0.13
	3	1.90	1.60	0.63	0.51	0.49	0.39	0.35	0.11
MF 750 MFX 750	1	1.08	0.84	0.49	0.36	0.26	0.21	0.19	0.06
MLX 250	2	3.00	3.04	1.46	1.25	1.17	-	-	M25
									0.20
MLX 660	2	1.29	1.26	0.52	0.44	0.38	-	-	M25
									0.10
CU 025		78.00	48.00	28.00	24.00	9.33	9.33	8.51	1.25
CU 040		25.88	20.88	10.44	10.00	3.78	3.78	3.30	1.25
CU 100		15.20	14.53	5.14	4.95	2.00	2.00	0.17	1.10
CU 250		3.25	2.55	1.55	1.35	0.71	0.71	0.59	0.25
CU 630		1.96	1.68	0.85	0.72	0.42	0.42	0.36	0.09
CU 850		1.06	0.84	0.42	0.33	0.17	0.17	0.13	0.04
MR 100	1	19.00	17.00	6.90	6.30	4.60	2.94	2.52	1.60
	2	11.70	10.80	4.40	4.30	3.00	2.94	2.52	1.37
	3	7.80	6.87	3.70	3.10	2.70	2.14	1.84	1.34
	4	5.50	4.97	2.60	2.40	2.18	1.72	1.47	1.34
	5	4.20	3.84	2.36	2.15	1.90	1.60	1.37	1.34
MR 250	1	5.35	4.85	2.32	1.92	1.50	1.38	1.20	0.15
	2	4.00	3.28	1.44	1.10	1.07	0.96	0.83	0.13
	3	2.60	2.20	1.08	1.00	0.86	0.77	0.64	0.12
	4	1.84	1.56	0.68	0.56	0.44	0.37	0.23	0.11
MR 630	1	3.10	2.48	1.32	1.14	0.92	0.83	0.73	0.09
	2	2.06	1.92	0.82	0.76	0.38	0.33	0.27	0.08
	3	1.48	1.30	0.60	0.56	0.26	0.22	0.17	0.08
	4	1.30	1.20	0.48	0.40	0.25	0.21	0.16	0.08
	5	0.74	0.65	0.30	0.28	0.13	0.10	0.08	0.04
MR 850	1	0.60	0.43	0.34	0.25	0.13	0.12	0.09	0.03
	2	0.37	0.26	0.23	0.21	0.11	0.08	0.07	0.03
	3	0.27	0.18	0.17	0.17	0.05	0.04	0.04	0.02
	4	0.23	0.16	0.13	0.12	0.04	0.03	0.03	0.02

## Return / Suction filters

Filter element	Absolute filtration								
	Type	A10	A16	A25					
RSX 116	1	5.12	4.33	3.85					
	2	2.22	1.87	1.22					
RSX 165	1	2.06	1.75	1.46					
	2	1.24	1.05	0.96					
	3	0.94	0.86	0.61					
Filter element	Absolute filtration N Series								
	Type	A03	A06	A10	A16	A25	P10	P25	M25 M60 M90
CU 110	1	16.25	15.16	8.75	8.14	5.87	2.86	2.65	0.14
	2	12.62	10.44	6.11	6.02	4.16	1.60	1.49	0.12
	3	8.57	7.95	5.07	4.07	2.40	1.24	1.15	0.11
	4	5.76	4.05	2.80	2.36	1.14	0.91	0.85	0.05

## Low & Medium pressure filters

Filter element	Absolute filtration N-W Series					Nominal filtration N Series			
	Type	A03	A06	A10	A16	A25	P10	P25	M25
CU 110	1	16.25	15.16	8.75	8.14	5.87	2.86	2.65	0.14
	2	12.62	10.44	6.11	6.02	4.15	1.60	1.49	0.12
	3	8.57	7.95	5.07	4.07	2.40	1.24	1.15	0.11
	4	5.76	4.05	2.80	2.36	1.14	0.91	0.85	0.05
CU 210	1	5.30	4.80	2.00	1.66	1.32	0.56	0.43	0.12
	2	3.44	2.95	1.24	1.09	0.70	0.42	0.35	0.09
	3	2.40	1.70	0.94	0.84	0.54	0.33	0.23	0.05
DN	016	7.95	7.20	3.00	2.49	1.98	0.84	0.65	0.18
	025	5.00	4.53	1.89	1.57	1.25	0.53	0.41	0.11
	040	3.13	2.66	1.12	0.98	0.63	0.38	0.32	0.08
CU 400	2	3.13	2.55	1.46	1.22	0.78	0.75	0.64	0.19
	3	2.15	1.70	0.94	0.78	0.50	0.40	0.34	0.10
	4	1.60	1.28	0.71	0.61	0.40	0.34	0.27	0.08
	5	1.00	0.83	0.47	0.34	0.20	0.24	0.19	0.06
	6	0.82	0.58	0.30	0.27	0.17	0.22	0.18	0.05
	CU 900	1	0.86	0.63	0.32	0.30	0.21	-	-
CU 950	2	1.03	0.80	0.59	0.40	0.26	-	-	0.05
	3	0.44	0.40	0.27	0.18	0.15	-	-	0.02
MR 630	7	0.88	0.78	0.36	0.34	0.16	0.12	0.96	0.47

**Corrective factor Y to be used for the filter element pressure drop calculation. The values depend to the filter size and length and to the filter media.**  
Reference oil viscosity 30 mm<sup>2</sup>/s

## High pressure filters

Filter element	Absolute filtration N - R Series					Nominal filtration N Series	
	Type	A03	A06	A10	A16	A25	M25
HP 011	1	332.71	250.07	184.32	152.36	128.36	-
	2	220.28	165.56	74.08	59.13	37.05	-
	3	123.24	92.68	41.48	33.08	20.72	-
	4	77.76	58.52	28.37	22.67	16.17	-
HP 039	2	70.66	53.20	25.77	20.57	14.67	4.90
	3	36.57	32.28	18.00	13.38	8.00	2.90
	4	26.57	23.27	12.46	8.80	5.58	2.20
HP 050	1	31.75	30.30	13.16	12.3	7.29	1.60
	2	24.25	21.26	11.70	9.09	4.90	1.40
	3	17.37	16.25	8.90	7.18	3.63	1.25
	4	12.12	10.75	6.10	5.75	3.08	1.07
	5	7.00	6.56	3.60	3.10	2.25	0.80
HP 065	1	58.50	43.46	23.16	19.66	10.71	1.28
	2	42.60	25.64	16.22	13.88	7.32	1.11
	3	20.50	15.88	8.18	6.81	3.91	0.58
HP 135	1	20.33	18.80	9.71	8.66	4.78	2.78
	2	11.14	10.16	6.60	6.38	2.22	1.11
	3	6.48	6.33	3.38	3.16	2.14	1.01
HP 150	1	17.53	15.91	7.48	6.96	5.94	1.07
	2	8.60	8.37	3.54	3.38	3.15	0.58
	3	6.53	5.90	2.93	2.79	2.12	0.49
HP 320	1	10.88	9.73	5.02	3.73	2.54	1.04
	2	4.40	3.83	1.75	1.48	0.88	0.71
	3	2.75	2.11	1.05	0.87	0.77	0.61
	4	2.12	1.77	0.98	0.78	0.55	0.47
HP 500	1	4.44	3.67	2.30	2.10	1.65	0.15
	2	3.37	2.77	1.78	1.68	1.24	0.10
	3	2.22	1.98	1.11	1.09	0.75	0.08
	4	1.81	1.33	0.93	0.86	0.68	0.05
	5	1.33	1.15	0.77	0.68	0.48	0.04

Filter element	Absolute filtration N Series					Nominal filtration N Series	
	Type	A03	A06	A10	A16	A25	M25
HF 320	1	3.65	2.95	2.80	1.80	0.90	0.38
	2	2.03	1.73	1.61	1.35	0.85	0.36
	3	1.84	1.42	1.32	1.22	0.80	0.35

## Suction filters

Filter element	Nominal filtration N Series	
	P10	P25
SF 250	65	21

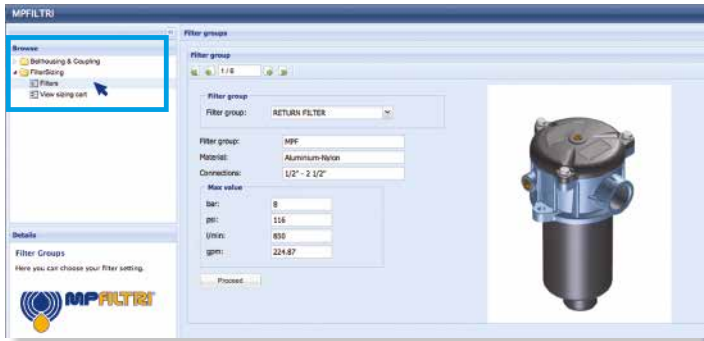
## Stainless steel high pressure filters

Filter element	Absolute filtration N Series					
	Type	A03	A06	A10	A16	A25
HP 011	1	332.71	250.07	184.32	152.36	128.36
	2	220.28	165.56	74.08	59.13	37.05
	3	123.24	92.68	41.48	33.08	20.72
	4	77.76	58.52	28.37	22.67	16.17
HP 039	2	70.66	53.20	25.77	20.57	14.67
	3	36.57	32.28	18.00	13.38	8.00
	4	26.57	23.27	12.46	8.80	5.58
HP 050	1	31.75	30.30	13.16	12.3	7.29
	2	24.25	21.26	11.70	9.09	4.90
	3	17.37	16.25	8.90	7.18	3.63
	4	12.12	10.75	6.10	5.75	3.08
	5	7.00	6.56	3.60	3.10	2.25
HP 135	1	20.33	18.80	9.71	8.66	4.78
	2	11.14	10.16	6.60	6.38	2.22
	3	6.48	6.33	3.38	3.16	2.14

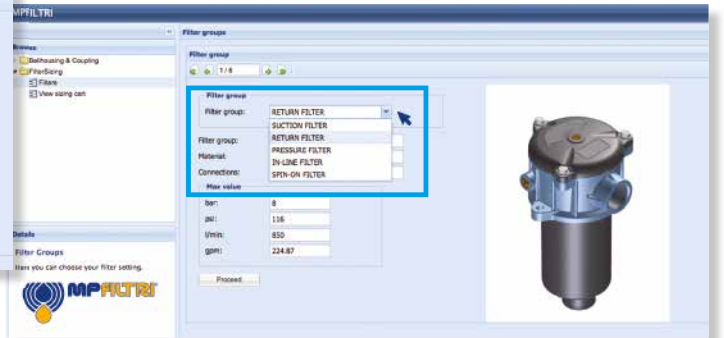
Filter element	Absolute filtration H - U Series					
	Type	A03	A06	A10	A16	A25
HP 011	1	424.58	319.74	235.17	194.44	163.78
	2	281.06	211.25	94.53	75.45	47.26
	3	130.14	97.50	43.63	34.82	21.81
	4	109.39	82.25	36.79	29.37	18.40
HP 039	2	73.00	57.00	28.00	24.00	17.20
	3	40.90	36.33	21.88	18.80	11.20
	4	31.50	28.22	17.22	9.30	6.70
HP 050	1	47.33	34.25	21.50	20.50	14.71
	2	29.10	25.95	14.04	10.90	5.88
	3	20.85	19.50	10.68	8.61	4.36
	4	14.55	12.90	7.32	6.90	3.69
	5	9.86	9.34	6.40	4.80	2.50
HP 135	1	29.16	25.33	13.00	12.47	5.92
	2	14.28	11.04	7.86	7.60	4.44
	3	8.96	7.46	4.89	4.16	3.07

# FILTER SIZING Selection Software

## Step 1 Select "FILTERS"



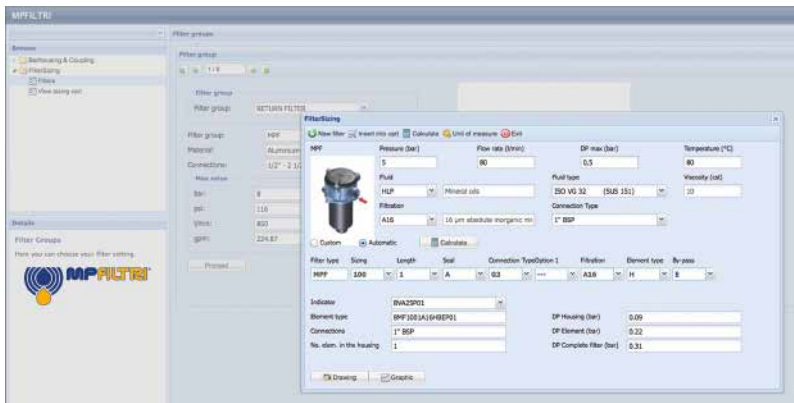
## Step 2 Choose filter group (Return Filter, Pressure Filter, etc.)



## Step 3 Choose filter type (MPF, MPT, etc.) in function of the max working pressure and the max flow rate



## Step 4 Push "PROCEED"



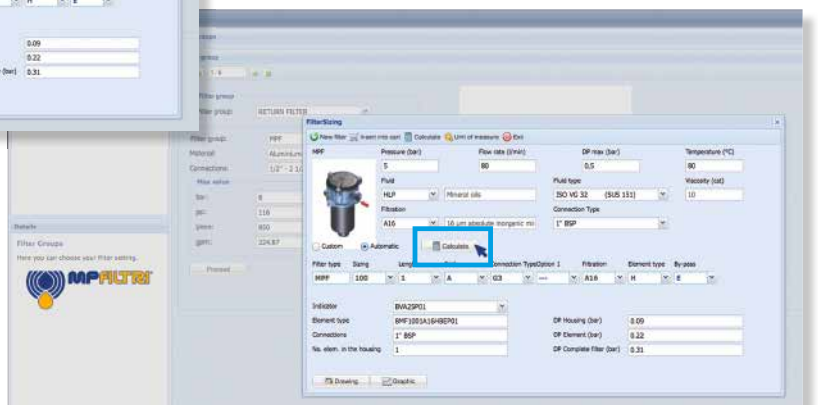
## Step 5

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"







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.



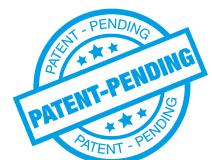
UNIQUE polygonal spigot fitting within the filter bowl.

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





# MPFX series

Maximum working pressure up to 800 kPa (8 bar) - Flow rate up to 750 l/min



# MPFX GENERAL INFORMATION

## Description

### Return filter

**Maximum working pressure up to 800 kPa (8 bar)**

**Flow rate up to 750 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 750 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 meet any reservoir surface flatness and roughness
- O-ring or Flat seal, to meet any reservoir surface flatness and roughness
- 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

Nylon: MPFX 030-100-104-110

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

- 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

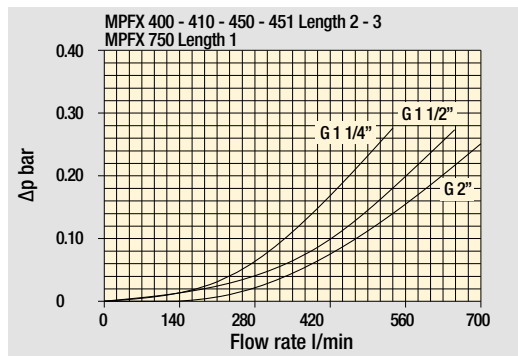
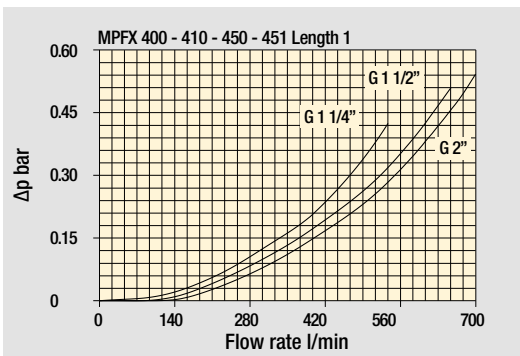
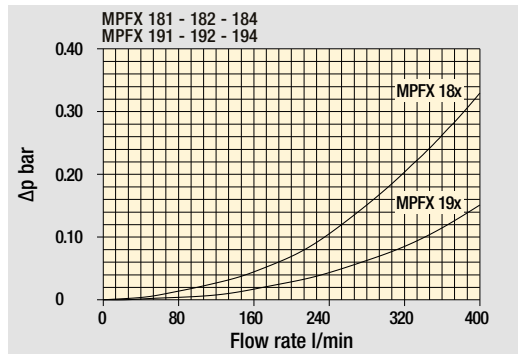
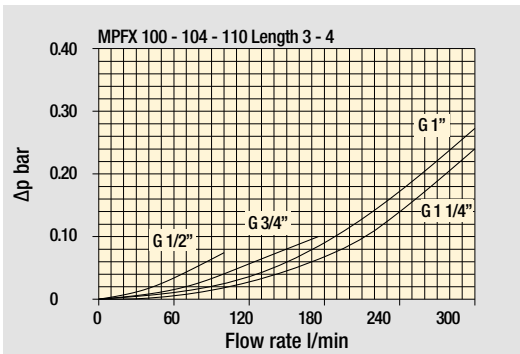
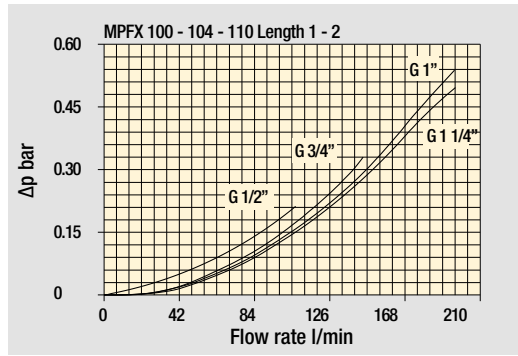
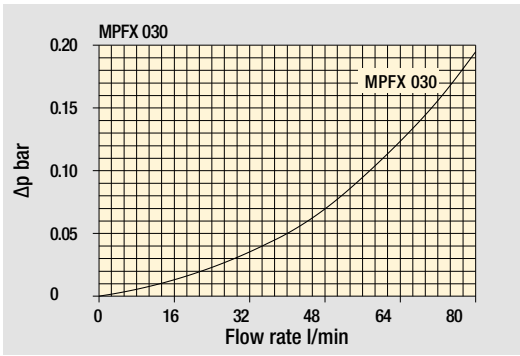
MPFX filters are provided for vertical mounting



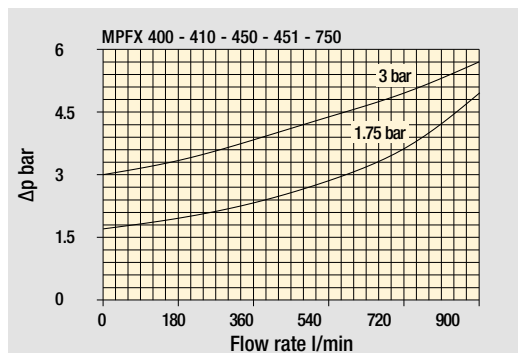
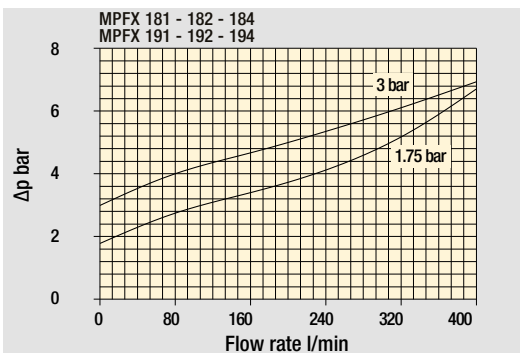
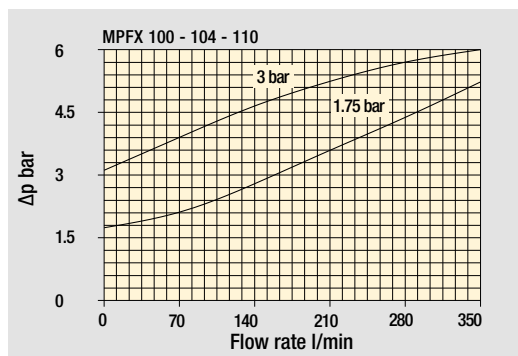
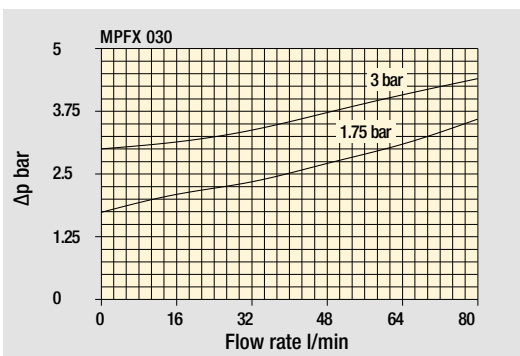
## Weights [kg] and volumes [dm<sup>3</sup>]

Filter series	Weights [kg]				Volumes [dm <sup>3</sup> ]					
	Length	1	2	3	4	Length	1	2	3	4
<b>MPFX 030</b>		0.40	-	-	-		0.29	-	-	-
<b>MPFX 100</b>		0.61	0.64	0.67	0.74		0.64	0.85	1.20	1.65
<b>MPFX 104</b>		0.82	0.96	1.02	1.25		0.64	0.85	1.20	1.65
<b>MPFX 110</b>		0.64	0.68	0.71	0.78		-	-	-	-
<b>MPFX 181</b>		2.20	3.00	-	-		2.50	4.00	-	-
<b>MPFX 182</b>		2.30	3.10	-	-		2.50	4.00	-	-
<b>MPFX 184</b>		2.55	3.45	-	-		2.65	4.45	-	-
<b>MPFX 191</b>		-	3.00	-	-		-	4.25	-	-
<b>MPFX 192</b>		-	3.10	-	-		-	4.25	-	-
<b>MPFX 194</b>		-	3.45	-	-		-	4.45	-	-
<b>MPFX 400</b>		3.35	3.65	3.90	-		3.70	4.60	5.40	-
<b>MPFX 410</b>		3.55	3.85	4.10	-		3.70	4.60	5.40	-
<b>MPFX 450-451</b>		3.95	4.25	4.50	-		3.70	4.60	5.40	-
<b>MPFX 750</b>		6.30	-	-	-		8.45	-	-	-

### Filter housings $\Delta p$ pressure drop



### Bypass valve pressure drop



The curves are plotted using mineral oil with density of 0.86 kg/dm<sup>3</sup> in compliance with ISO 3968.  
 $\Delta p$  varies proportionally with density.

# MPFX 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
<b>MPFX 030</b>	<b>1</b>	7	10	24	29	47	84	60	66
<b>MPFX 100-104-110</b>	<b>1</b>	18	20	53	56	65	153	87	96
	<b>2</b>	28	38	65	75	95	158	111	123
	<b>3</b>	48	55	125	135	169	289	224	251
	<b>4</b>	79	89	180	185	198	306	264	289
<b>MPFX 181-182-184</b>	<b>1</b>	127	148	235	243	278	441	285	299
	<b>2</b>	231	262	358	382	388	472	404	412
<b>MPFX 191-192-194</b>	<b>2</b>	261	305	489	528	546	696	583	598
<b>MPFX 400</b>	<b>1</b>	150	171	294	304	350	585	370	390
	<b>2</b>	237	252	454	462	589	868	619	645
	<b>3</b>	248	288	553	609	621	885	680	703
<b>MPFX 410</b>	<b>1</b>	146	167	277	285	325	512	341	357
	<b>2</b>	226	239	396	402	485	644	503	519
	<b>3</b>	236	269	462	497	505	653	539	553
<b>MPFX 450-451</b>	<b>1</b>	150	171	294	304	350	585	370	390
	<b>2</b>	237	252	454	462	589	868	619	645
	<b>3</b>	248	288	553	609	621	885	680	703
<b>MPFX 750</b>	<b>1</b>	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.**

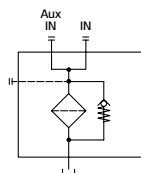
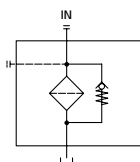
The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

For different pressure drop or fluid viscosity we recommend to use our selection software available on [www.mpfiltri.com](http://www.mpfiltri.com).

Please, contact our Sales Department for further additional information.

## Hydraulic symbols

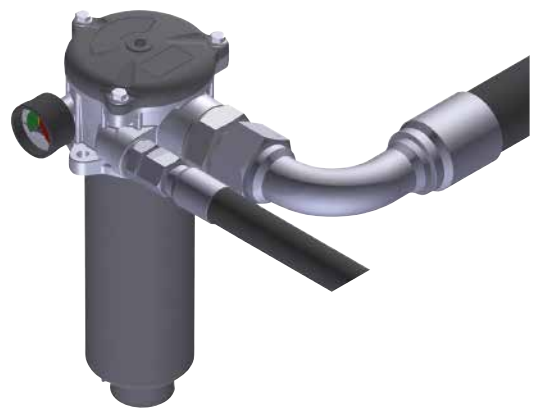
Filter series	Style 1 connection	Style 2 connections
<b>MPFX 030</b>	•	
<b>MPFX 100</b>	•	
<b>MPFX 104</b>	•	
<b>MPFX 110</b>		•
<b>MPFX 181</b>	•	
<b>MPFX 182</b>		•
<b>MPFX 184</b>	•	•
<b>MPFX 191</b>	•	
<b>MPFX 192</b>	•	
<b>MPFX 194</b>	•	•
<b>MPFX 400</b>	•	
<b>MPFX 410</b>		•
<b>MPFX 450</b>	•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



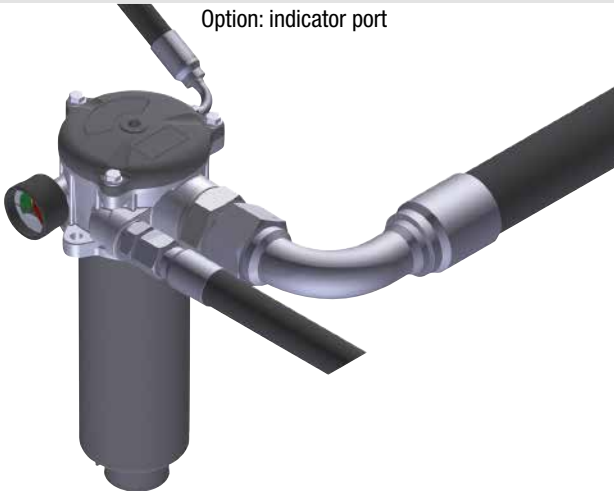
Standard - Single IN port



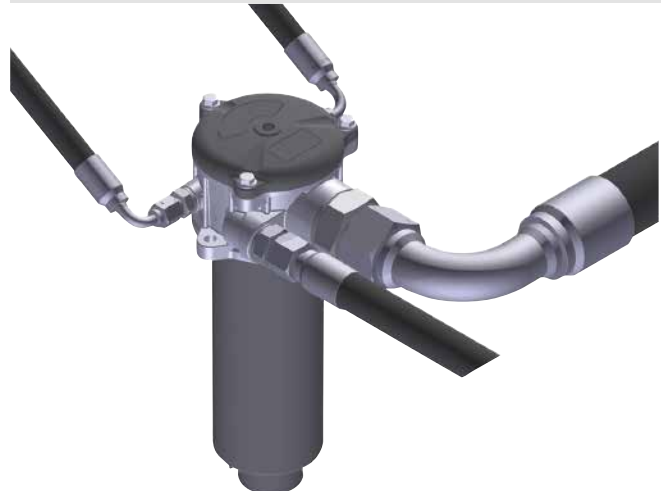
Double IN port  
Option: double indicator port



Double IN port - Drain port  
Option: indicator port



Double IN port - Double drain port



## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>	Configuration example 1:	MPFX030	1	V	G1	M25	N	B	P01
<b>MPFX030</b> Filter element with private spigot	Configuration example 2:	MPFX030	1	A	G4	A10	H	E	P01
<b>Length</b>									
1									
<b>Seals and treatments</b>									
A NBR									
V FPM									
W NBR head anodized									
Z FPM head anodized									
<b>Connections</b>									
G1 G 1/2"									
G4 1/2" NPT									
G7 SAE 8 - 3/4" - 16 UNF									
<b>Filtration rating (filter media)</b>									
A03 Inorganic microfiber	M25 Wire mesh								
A06 Inorganic microfiber	M60 Wire mesh								
A10 Inorganic microfiber	M90 Wire mesh								
A16 Inorganic microfiber	P10 Resin impregnated paper 10 µm								
A25 Inorganic microfiber	P25 Resin impregnated paper								
<b>Element Δp</b>	Filter media								
	Axx	Mxx	Pxx						
N 10 bar		•	•						
H 10 bar	•								
W 10 bar, compatible with fluids HFA, HFB and HFC	•	•							
	<b>Bypass valve</b>	<b>Execution</b>							
	E 3 bar	P01 MP Filtri standard							
	B 1.75 bar	Pxx Customized							

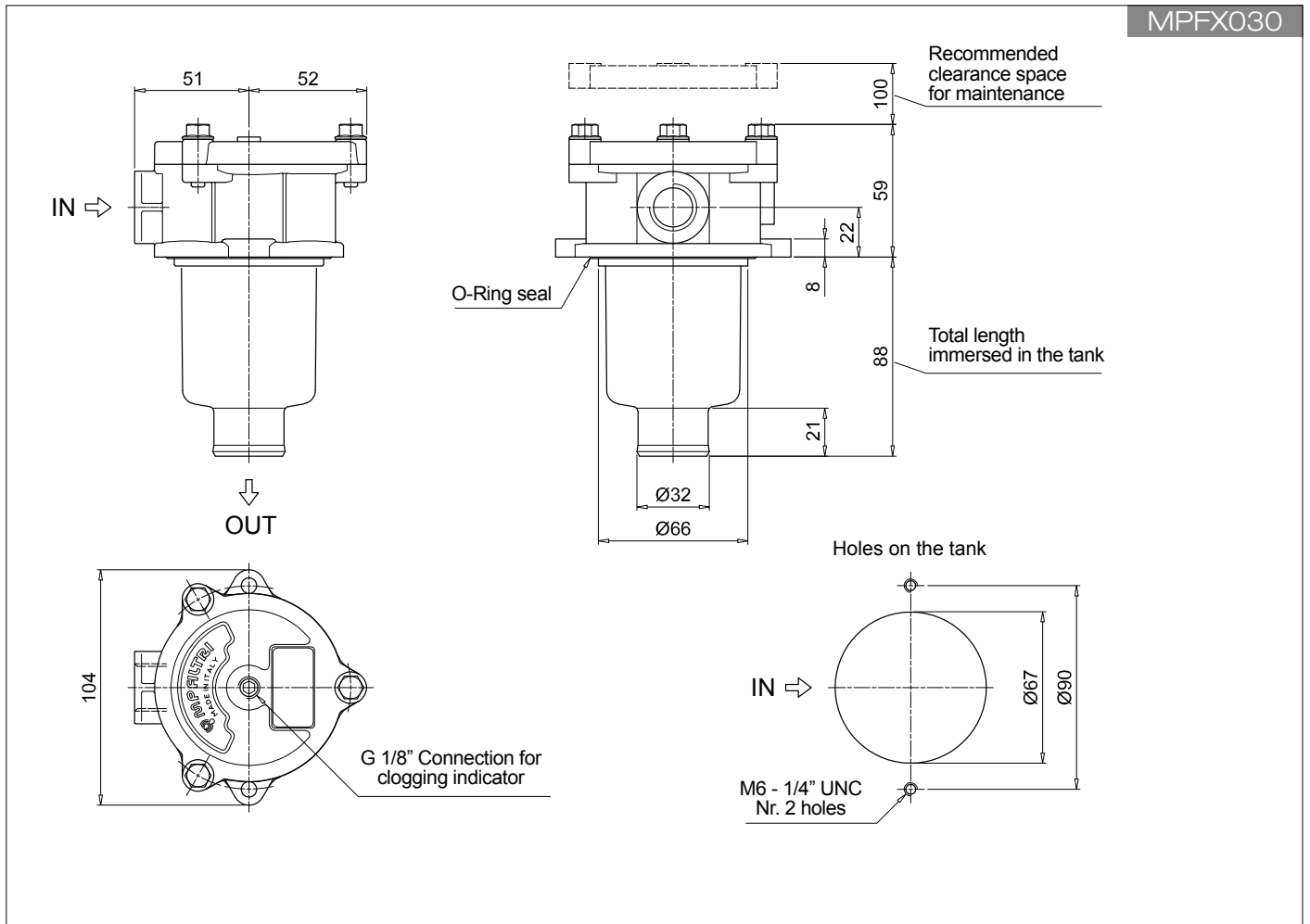
### FILTER ELEMENT

<b>Element series and size</b>	Configuration example 1:	MFXX030	1	M25	N	V		P01
<b>MFXX030</b> Filter element with private spigot	Configuration example 2:	MFXX030	1	A10	H	B	E	P01
<b>Element length</b>								
1								
<b>Filtration rating (filter media)</b>								
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							
<b>Element Δp</b>	Filter media							
	Axx	Mxx	Pxx					
N 10 bar		•	•					
H 10 bar	•							
W 10 bar, compatible with fluids HFA, HFB and HFC	•	•						
	<b>Seals</b>	<b>Bypass valve</b>	<b>Execution</b>					
	B NBR	E 3 bar	P01 MP Filtri standard					
	V FPM	1.75 bar	Pxx Customized					

### ACCESSORIES

<b>Indicators</b>	page		
BVA Axial pressure gauge	240	BEA Electrical pressure indicator	239
BVR Radial pressure gauge	240	BEM Electrical pressure indicator	239
BVP Visual pressure indicator with automatic reset	241	BLA Electrical / visual pressure indicator	239-240
BVQ Visual pressure indicator with manual reset	241		
<b>Additional features</b>	page		
TE Extension tube	248		
T5 Filler plug M30x1.5	249		

MPFX030





# MPFX MPFX100 - MPFX104

## Designation & Ordering code

### COMPLETE FILTER

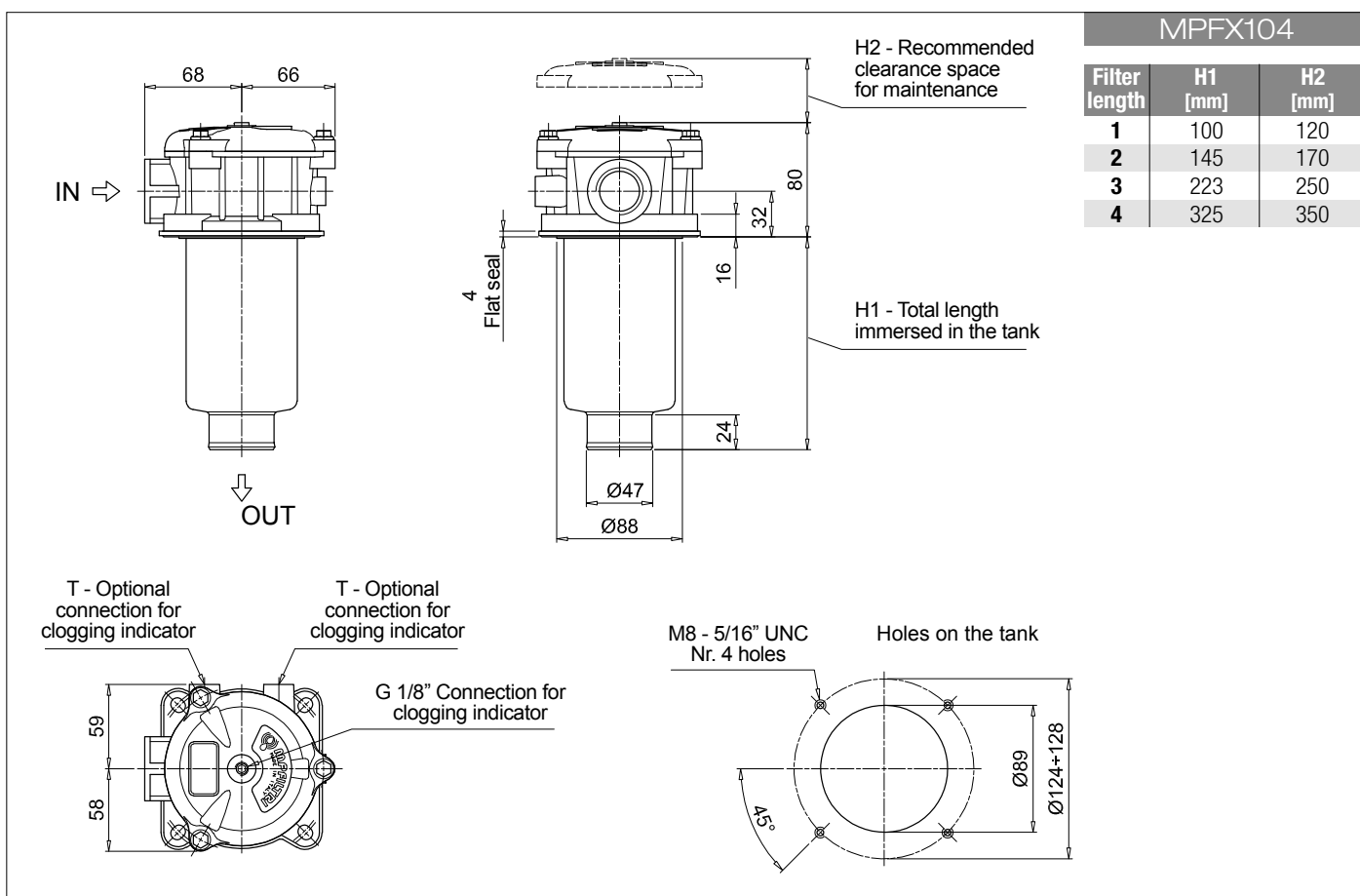
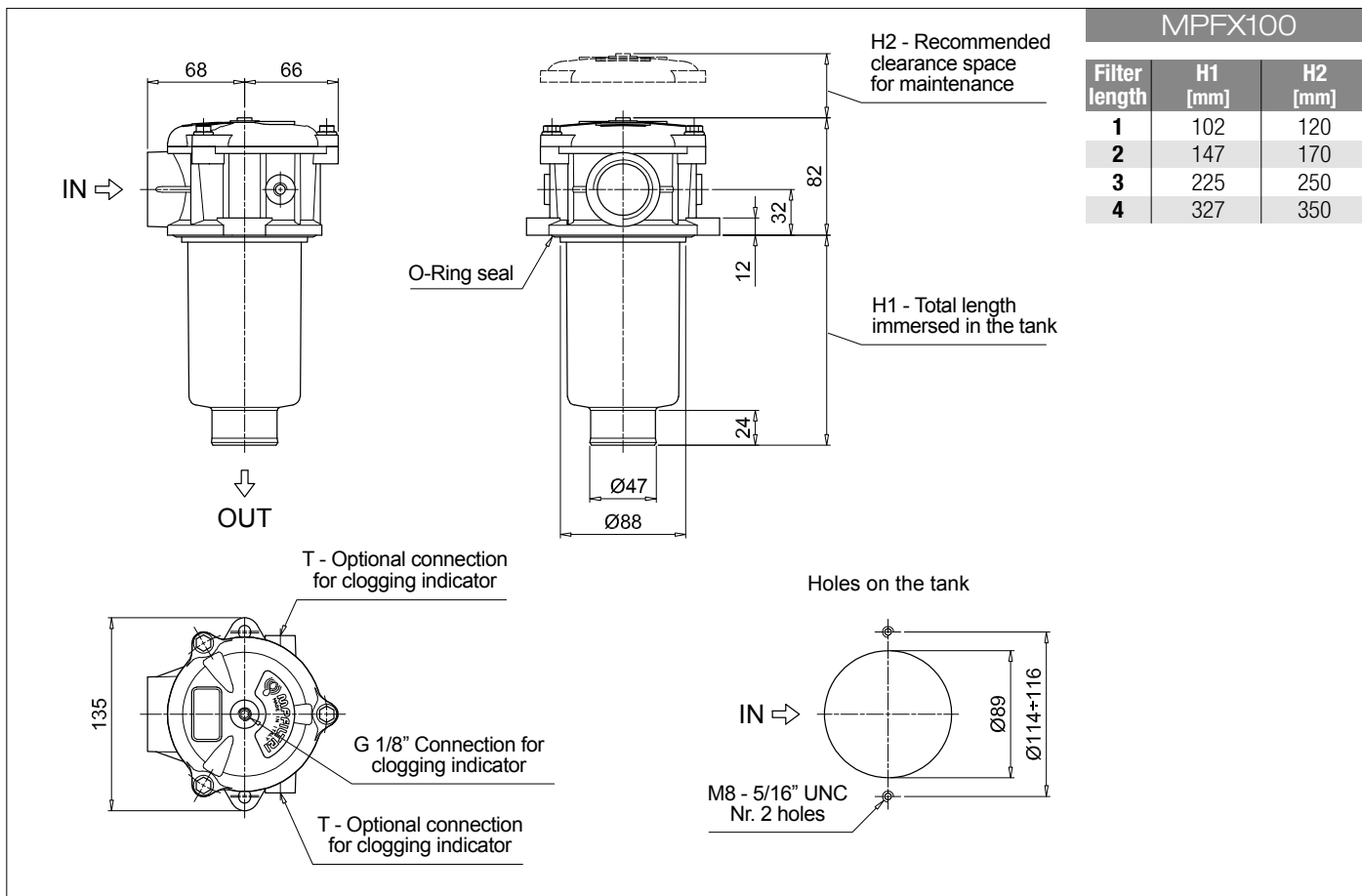
<b>Series and size</b>		Configuration example 1: <b>MPFX100</b>   <b>2</b>   <b>W</b>   <b>G3</b>   <b>A06</b>   <b>W</b>   <b>B</b>   <b>P01</b>									
<b>MPFX100</b>   <b>MPFX104</b> Filter element with private spigot		Configuration example 2: <b>MPFX104</b>   <b>4</b>   <b>A</b>   <b>G8</b>   <b>P10</b>   <b>N</b>   <b>E</b>   <b>P01</b>									
<b>Length</b>											
<b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>											
<b>Seals and treatments</b>											
<b>A</b> NBR											
<b>V</b> FPM											
<b>W</b> NBR head anodized											
<b>Z</b> FPM head anodized											
<b>Connections</b>		<b>Size 100</b>		<b>Size 104</b>		<b>Connections</b>		<b>Size 100</b>		<b>Size 104</b>	
<b>G1</b> G 1/2"		•		•		<b>G7</b> SAE 8 - 3/4" - 16 UNF		•		•	
<b>G2</b> G 3/4"		•		•		<b>G8</b> SAE 12 - 1 1/16" - 12 UN		•		•	
<b>G3</b> G 1"		•		•		<b>G9</b> SAE 16 - 1 5/16" - 12 UN		•		•	
<b>G4</b> 1/2" NPT		•		•		<b>G10</b> G 1 1/4"		•			
<b>G5</b> 3/4" NPT		•		•		<b>G11</b> 1 1/4" NPT		•			
<b>G6</b> 1" NPT		•		•		<b>G12</b> SAE 20 - 1 5/8" - 12 UN		•			
<b>Filtration rating (filter media)</b>											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>Element Δp</b>				<b>Filter media</b>							
<b>N</b> 10 bar				•		•					
<b>H</b> 10 bar				•							
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC				•		•					
								<b>Bypass valve</b>		<b>Execution</b>	
								<b>E</b> 3 bar		<b>P01</b> MP Filtri standard	
								<b>B</b> 1.75 bar		<b>Pxx</b> Customized	

### FILTER ELEMENT

<b>Element series and size</b>		Configuration example 1: <b>MFX100</b>   <b>2</b>   <b>A06</b>   <b>W</b>   <b>B</b>   <b></b>   <b>P01</b>									
<b>MFX100</b> Filter element with private spigot		Configuration example 2: <b>MFX100</b>   <b>4</b>   <b>P10</b>   <b>N</b>   <b>B</b>   <b>E</b>   <b>P01</b>									
<b>Element length</b>											
<b>1</b>   <b>2</b>   <b>3</b>   <b>4</b>											
<b>Filtration rating (filter media)</b>											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>Element Δp</b>				<b>Filter media</b>							
<b>N</b> 10 bar				•		•					
<b>H</b> 10 bar				•							
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC				•		•					
								<b>Seals</b>		<b>Bypass valve</b>	
								<b>B</b> NBR		<b>E</b> 3 bar	
								<b>V</b> FPM		1.75 bar	
										<b>Execution</b>	
										<b>P01</b> MP Filtri standard	
										<b>Pxx</b> Customized	

### ACCESSORIES

<b>Indicators</b>		<b>page</b>		<b>page</b>	
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239		
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239		
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240		
<b>BVQ</b> Visual pressure indicator with manual reset	241				
<b>Additional features</b>		<b>page</b>		<b>page</b>	
<b>TE</b> Extension tube	248	<b>T5</b> Filler plug M30x1.5	249		
<b>DFS</b> Diffuser with fast lock connection	249	<b>DPT</b> Dipstick	249		



## Designation & Ordering code

### COMPLETE FILTER

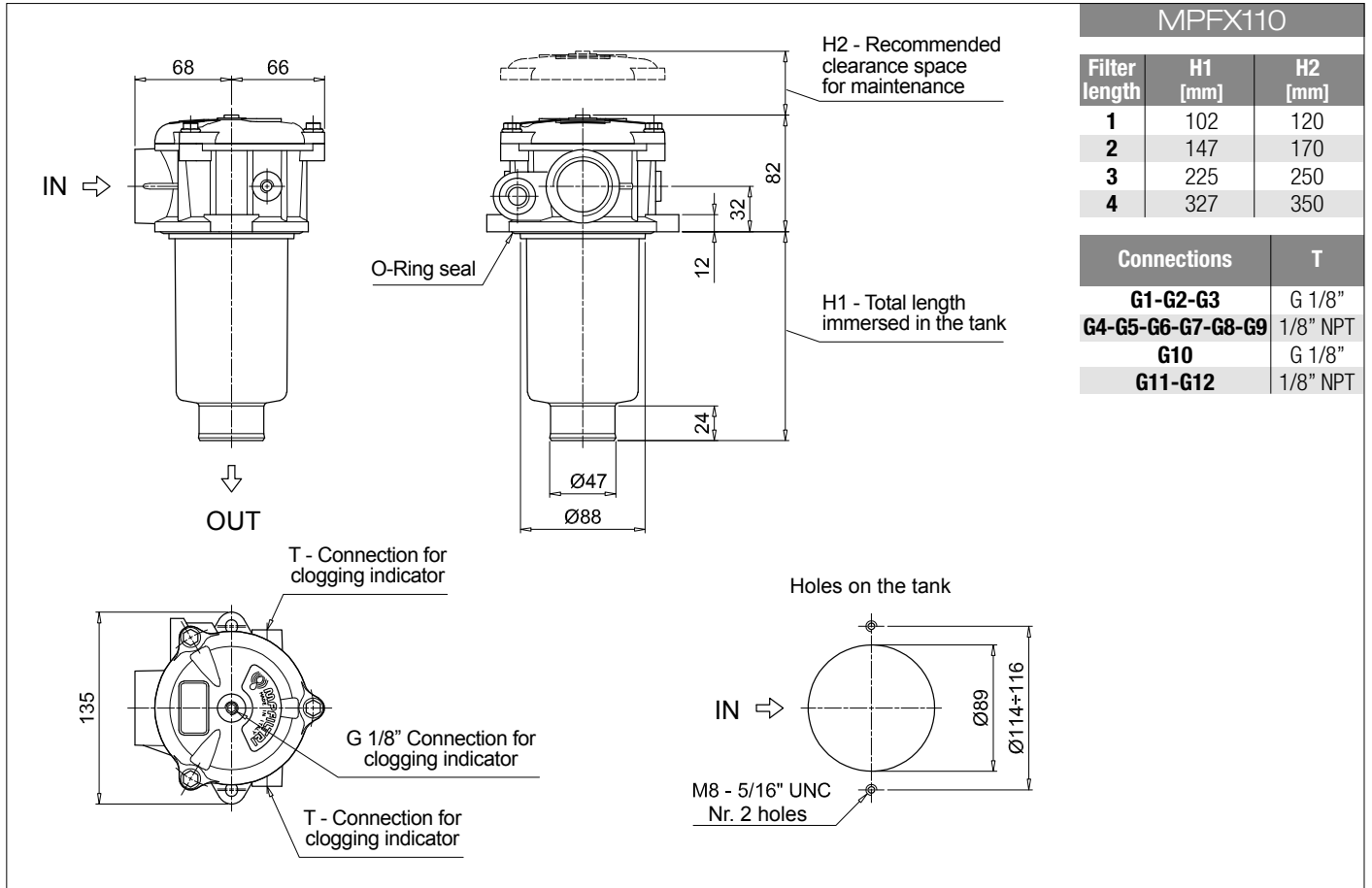
<b>Series and size</b>		Configuration example 1: <b>MPFX110</b>   <b>3</b>   <b>Z</b>   <b>G4</b>   <b>2</b>   <b>M25</b>   <b>W</b>   <b>B</b>   <b>P01</b>									
<b>MPFX110</b> Filter element with private spigot		Configuration example 2: <b>MPFX110</b>   <b>4</b>   <b>A</b>   <b>G8</b>   <b>1</b>   <b>P10</b>   <b>N</b>   <b>E</b>   <b>P01</b>									
<b>Length</b>											
1   2   3   4											
<b>Seals and treatments</b>											
<b>A</b> NBR		<b>W</b> NBR head anodized									
<b>V</b> FPM		<b>Z</b> FPM head anodized									
<b>Main Connections</b>	<b>Aux size 1</b>	<b>Aux size 2</b>	<b>Main Connections</b>	<b>Aux size 1</b>	<b>Aux size 2</b>						
<b>G1</b> G 1/2"	G 3/8"	G 1/2"	<b>G7</b> SAE 8 - 3/4" - 16 UNF	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF						
<b>G2</b> G 3/4"			<b>G8</b> SAE 12 - 1 1/16" - 12 UN								
<b>G3</b> G 1"	3/8" NPT	1/2" NPT	<b>G9</b> SAE 16 - 1 5/16" - 12 UN	G 3/8"	G 1/2"						
<b>G4</b> 1/2" NPT			<b>G10</b> G 1 1/4"								
<b>G5</b> 3/4" NPT			<b>G11</b> 1 1/4" NPT								
<b>G6</b> 1" NPT			<b>G12</b> SAE 20 - 1 5/8" - 12 UN	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF						
<b>Aux connection - see previous table</b>											
1 Aux size 1		2 Aux size 2									
<b>Filtration rating (filter media)</b>											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>Element Δp</b>		Filter media									
		Axx   Mxx   Pxx									
<b>N</b> 10 bar		• •									
<b>H</b> 10 bar		•									
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC		• •									
		<b>Bypass valve</b>		<b>Execution</b>							
		<b>E</b> 3 bar		<b>P01</b> MP Filtri standard							
		<b>B</b> 1.75 bar		<b>Pxx</b> Customized							

### FILTER ELEMENT

<b>Element series and size</b>		Configuration example 1: <b>MPFX100</b>   <b>3</b>   <b>M25</b>   <b>W</b>   <b>V</b>   <b>P01</b>									
<b>MPFX100</b> Filter element with private spigot		Configuration example 2: <b>MPFX100</b>   <b>4</b>   <b>P10</b>   <b>N</b>   <b>B</b>   <b>E</b>   <b>P01</b>									
<b>Element length</b>											
1   2   3   4											
<b>Filtration rating (filter media)</b>											
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm									
<b>Element Δp</b>		Filter media									
		Axx   Mxx   Pxx									
<b>N</b> 10 bar		• •									
<b>H</b> 10 bar		•									
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC		• •									
		<b>Seals</b>		<b>Bypass valve</b>		<b>Execution</b>					
		<b>B</b> NBR		<b>E</b> 3 bar		<b>P01</b> MP Filtri standard					
		<b>V</b> FPM		<b>B</b> 1.75 bar		<b>Pxx</b> Customized					

### ACCESSORIES

<b>Indicators</b>	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
<b>Additional features</b>	page		page
<b>TE</b> Extension tube	248	<b>T5</b> Filler plug M30x1.5	249
<b>DFS</b> Diffuser with fast lock connection	249	<b>DPT</b> Dipstick	249



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

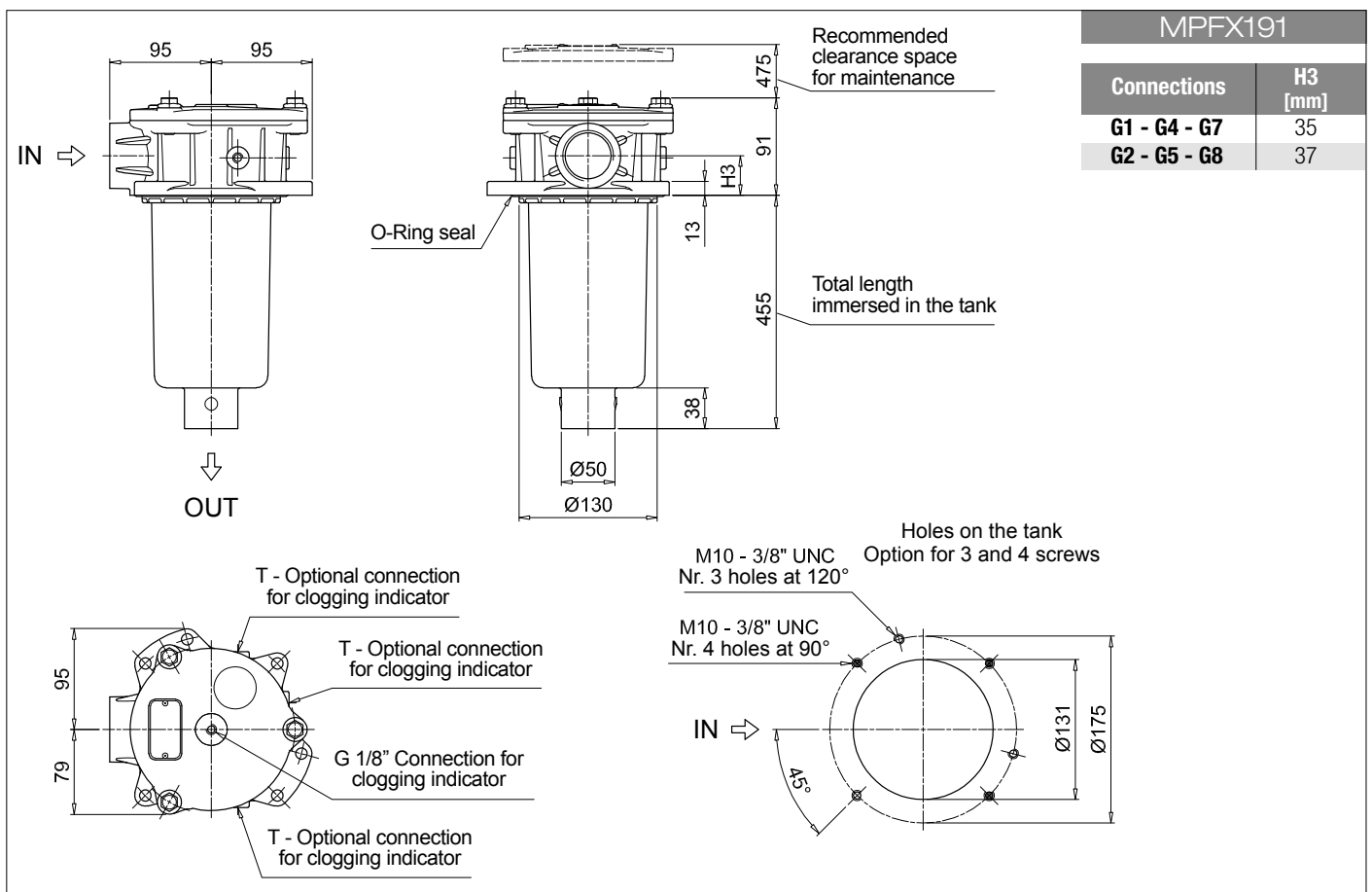
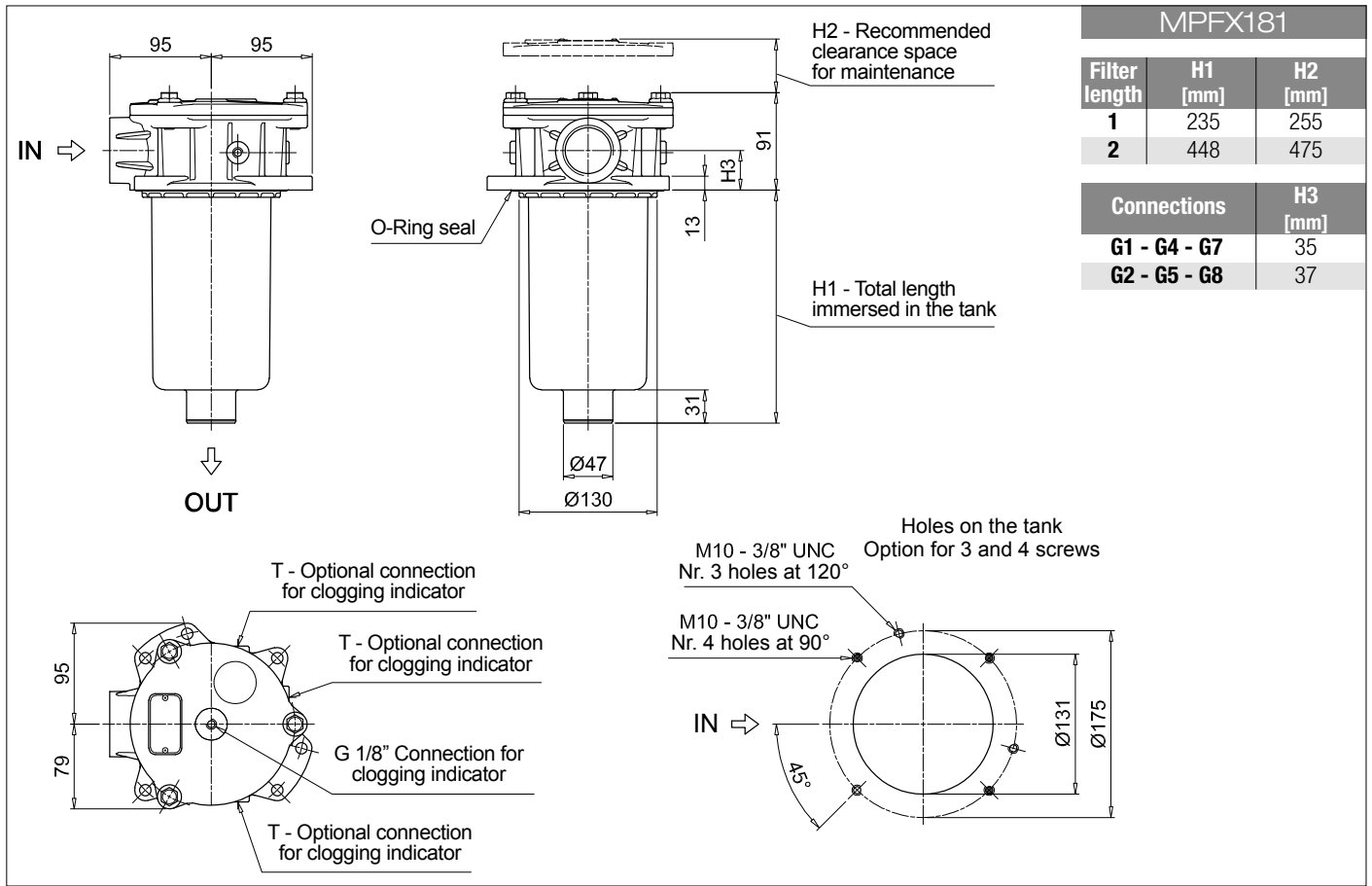
<b>Series and size</b>			Configuration example 1: <b>MPFX181</b>   1   A   G1   A25   H   E   P01								
<b>MPFX181</b>   <b>MPFX191</b> Filter element with private spigot			Configuration example 2: <b>MPFX191</b>   2   V   G2   P10   N   B   P01								
<b>Length</b>											
	Size 181	Size 191									
1	•										
2	•	•									
<b>Seals and treatments</b>											
<b>A</b>	NBR	<b>B</b>	NBR	flat seal on head							
<b>V</b>	FPM	<b>D</b>	FPM	flat seal on head							
<b>W</b>	NBR	<b>L</b>	NBR	head anodized, flat seal on head							
<b>Z</b>	FPM	<b>M</b>	FPM	head anodized, flat seal on head							
<b>Connections</b>											
<b>G1</b>	G 1 1/4"		<b>G5</b>	1 1/2" NPT							
<b>G2</b>	G 1 1/2"		<b>G7</b>	SAE 20 - 1 5/8" - 12 UN							
<b>G4</b>	1 1/4" NPT		<b>G8</b>	SAE 24 - 1 7/8" - 12 UN							
<b>Filtration rating (filter media)</b>											
<b>A03</b>	Inorganic microfiber 3 µm		<b>M25</b>	Wire mesh 25 µm							
<b>A06</b>	Inorganic microfiber 6 µm		<b>M60</b>	Wire mesh 60 µm							
<b>A10</b>	Inorganic microfiber 10 µm		<b>M90</b>	Wire mesh 90 µm							
<b>A16</b>	Inorganic microfiber 16 µm		<b>P10</b>	Resin impregnated paper 10 µm							
<b>A25</b>	Inorganic microfiber 25 µm		<b>P25</b>	Resin impregnated paper 25 µm							
<b>Element Δp</b>			Filter media								
			Axx	Mxx	Pxx						
<b>N</b>	10 bar			•	•						
<b>H</b>	10 bar		•								
<b>W</b>	10 bar, compatible with fluids HFA, HFB and HFC		•	•							
						<b>Bypass valve</b>		<b>Execution</b>			
						<b>E</b> 3 bar		<b>P01</b> MP Filtri standard			
						<b>B</b> 1.75 bar		<b>Pxx</b> Customized			

### FILTER ELEMENT

<b>Element series and size</b>			Configuration example 1: <b>MFX180</b>   1   A25   H   B   E   P01								
<b>MFX180</b> Filter element with private spigot			Configuration example 2: <b>MFX180</b>   2   P10   N   V     P01								
<b>Element length</b>											
1											
2											
<b>Filtration rating (filter media)</b>											
<b>A03</b>	Inorganic microfiber 3 µm		<b>M25</b>	Wire mesh 25 µm							
<b>A06</b>	Inorganic microfiber 6 µm		<b>M60</b>	Wire mesh 60 µm							
<b>A10</b>	Inorganic microfiber 10 µm		<b>M90</b>	Wire mesh 90 µm							
<b>A16</b>	Inorganic microfiber 16 µm		<b>P10</b>	Resin impregnated paper 10 µm							
<b>A25</b>	Inorganic microfiber 25 µm		<b>P25</b>	Resin impregnated paper 25 µm							
<b>Element Δp</b>			Filter media								
			Axx	Mxx	Pxx						
<b>N</b>	10 bar			•	•						
<b>H</b>	10 bar		•								
<b>W</b>	10 bar, compatible with fluids HFA, HFB and HFC		•	•							
						<b>Seals</b>		<b>Bypass valve</b>		<b>Execution</b>	
						<b>B</b> NBR		<b>E</b> 3 bar		<b>P01</b> MP Filtri standard	
						<b>V</b> FPM		<b>B</b> 1.75 bar		<b>Pxx</b> Customized	

### ACCESSORIES

<b>Indicators</b>		page			page
<b>BVA</b>	Axial pressure gauge	240	<b>BEA</b>	Electrical pressure indicator	239
<b>BVR</b>	Radial pressure gauge	240	<b>BEM</b>	Electrical pressure indicator	239
<b>BVP</b>	Visual pressure indicator with automatic reset	241	<b>BLA</b>	Electrical / visual pressure indicator	239-240
<b>BVQ</b>	Visual pressure indicator with manual reset	241			
<b>Additional features</b>		page			
<b>TE</b>	Extension tube	248			
<b>T5</b>	Filler plug M30x1.5	249			



# MPFX MPFX182 - MPFX192

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>	Configuration example 1: <b>MPFX182</b>   1   A   G1   1   A25   H   E   P01								
<b>MPFX182   MPFX192</b> Filter element with private spigot	Configuration example 2: <b>MPFX192</b>   2   V   G4   2   P10   N   B   P01								
<b>Length</b>	<b>Size 182</b>	<b>Size 192</b>							
1	•								
2	•	•							
<b>Seals and treatments</b>									
<b>A</b> NBR	<b>B</b> NBR flat seal on head								
<b>V</b> FPM	<b>D</b> FPM flat seal on head								
<b>W</b> NBR head anodized	<b>L</b> NBR head anodized, flat seal on head								
<b>Z</b> FPM head anodized	<b>M</b> FPM head anodized, flat seal on head								
<b>Main Connections</b>			<b>Aux size 1</b>	<b>Aux size 2</b>					
<b>G1</b> G 1 1/4"	<b>G 1/2"</b>		<b>G 3/4"</b>						
<b>G4</b> 1 1/4" NPT	<b>1/2" NPT</b>		<b>3/4" NPT</b>						
<b>G7</b> SAE 20 - 1 5/8" - 12 UN	<b>SAE 8 - 3/16" - 16 UNF</b>		<b>SAE 12 - 1 1/16" - 12 UN</b>						
<b>Aux connection - see previous table</b>									
<b>1</b> Aux size 1	<b>2</b> Aux size 2								
<b>Filtration rating (filter media)</b>									
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm								
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm								
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm								
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm								
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm								
<b>Element Δp</b>			<b>Filter media</b>						
<b>N</b> 10 bar	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>						
<b>H</b> 10 bar		•	•						
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•							
			<b>Bypass valve</b>		<b>Execution</b>				
			<b>E</b> 3 bar		<b>P01</b> MP Filtri standard				
			<b>B</b> 1.75 bar		<b>Pxx</b> Customized				

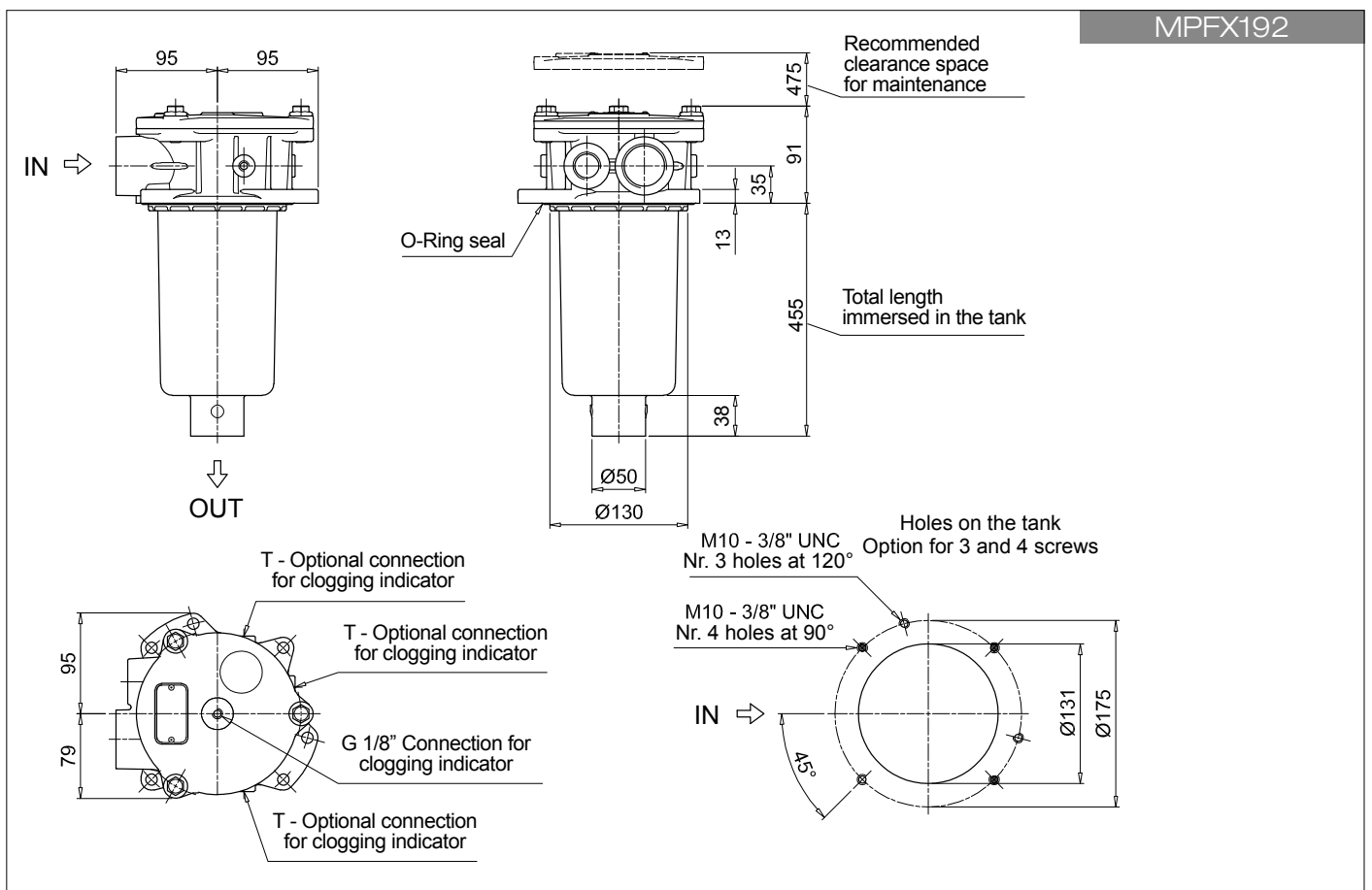
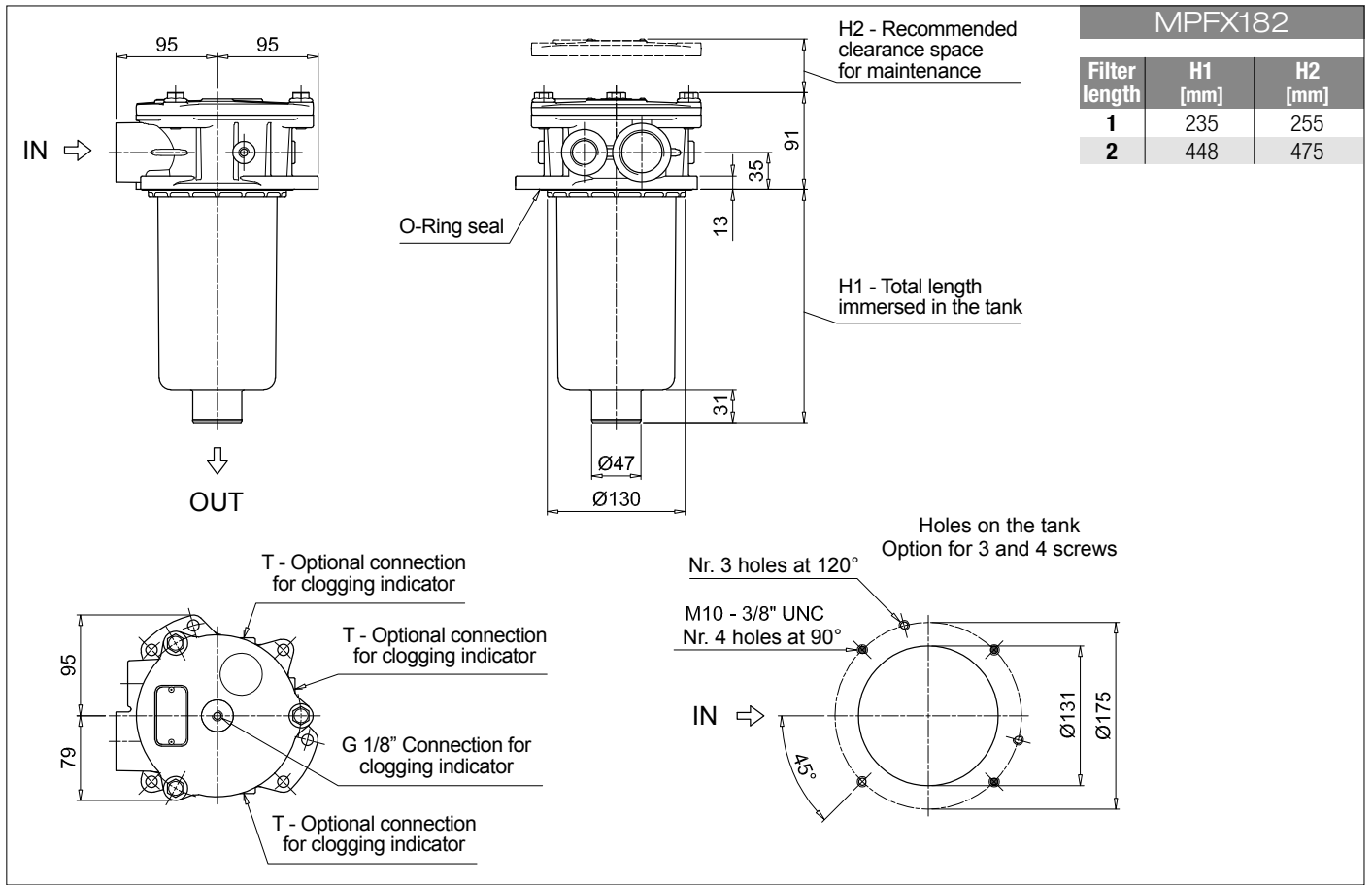
### FILTER ELEMENT

<b>Element series and size</b>	Configuration example 1: <b>MPFX180</b>   1   A25   H   B   E   P01								
<b>MPFX180</b> Filter element with private spigot	Configuration example 2: <b>MPFX180</b>   2   P10   N   V     P01								
<b>Element length</b>									
1									
2									
<b>Filtration rating (filter media)</b>									
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm								
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm								
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm								
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm								
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm								
<b>Element Δp</b>			<b>Filter media</b>						
<b>N</b> 10 bar	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>						
<b>H</b> 10 bar		•	•						
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•							
			<b>Seals</b>		<b>Bypass valve</b>		<b>Execution</b>		
			<b>B</b> NBR		<b>E</b> 3 bar		<b>P01</b> MP Filtri standard		
			<b>V</b> FPM		<b>1.75 bar</b>		<b>Pxx</b> Customized		

### ACCESSORIES

<b>Indicators</b>	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
<b>Additional features</b>	page		
<b>TE</b> Extension tube	248		
<b>T5</b> Filler plug M30x1.5	249		





# MPFX MPFX184 - MPFX194

## Designation & Ordering code

### COMPLETE FILTER

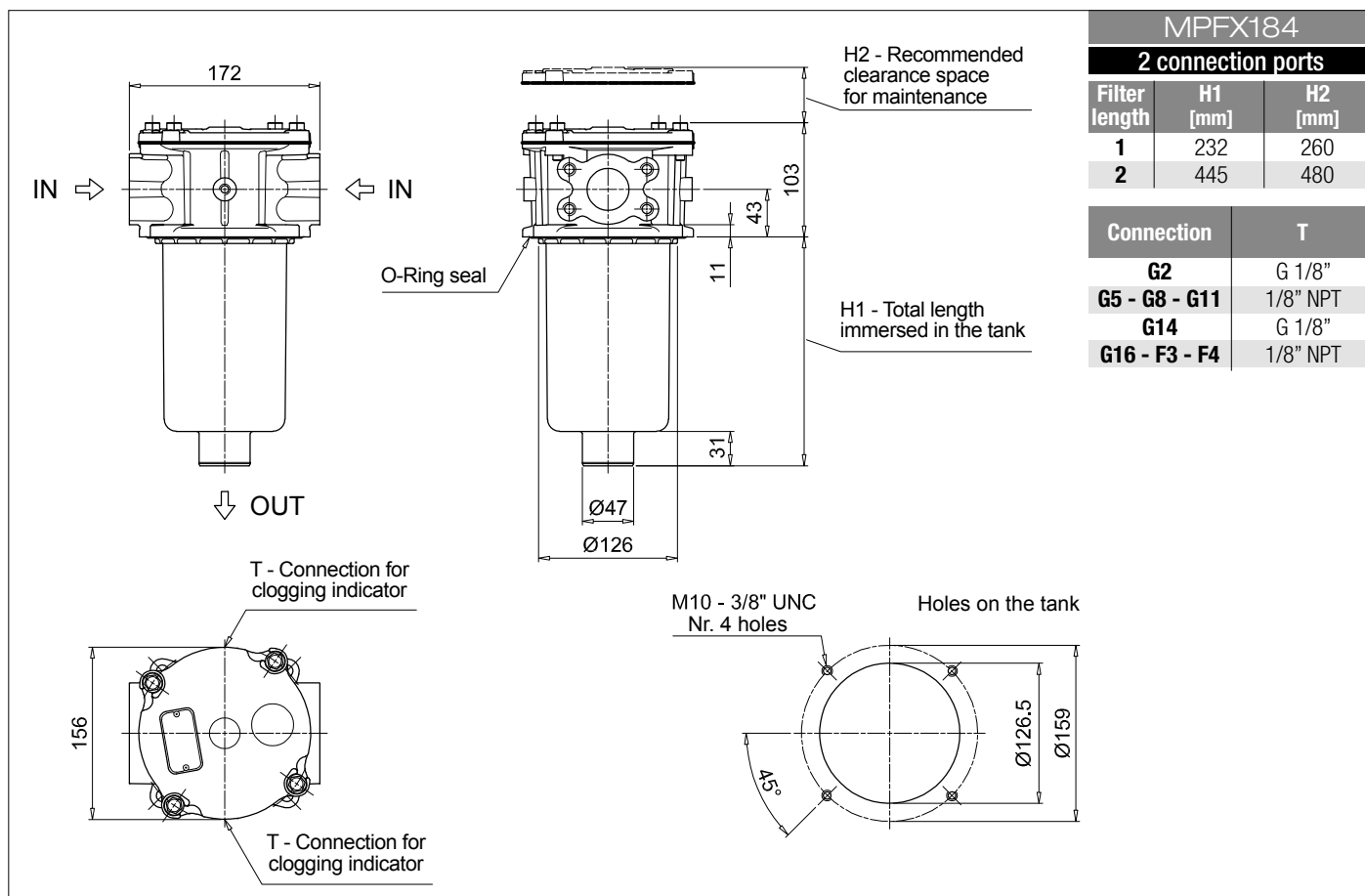
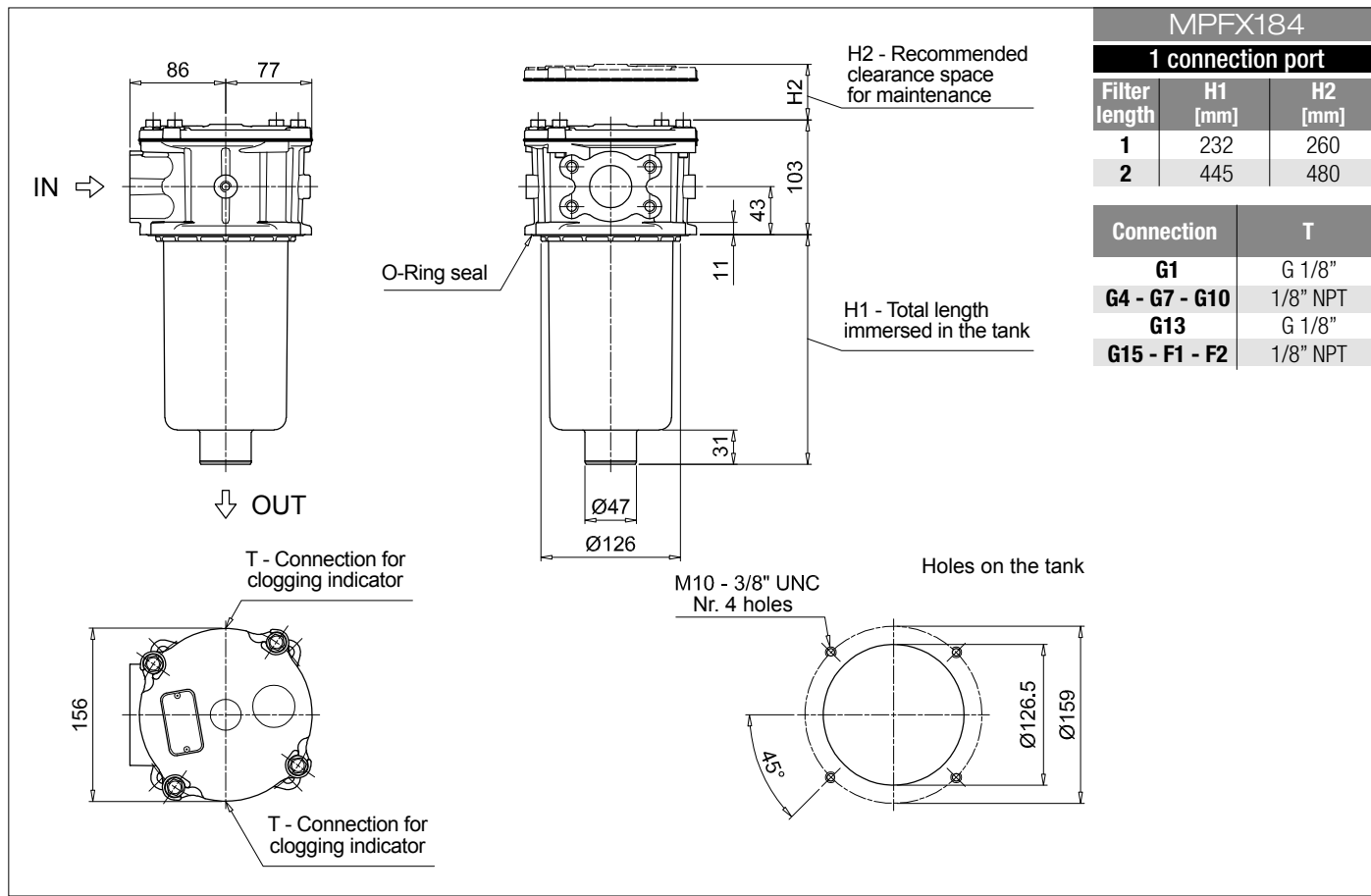
<b>Series and size</b>		Configuration example 1: <b>MPFX184</b>   1   A   G1   A25   H   E   P01										
<b>MPFX184   MPFX194</b> Filter element with private spigot		Configuration example 2: <b>MPFX194</b>   2   V   F3   P10   N   B   P01										
<b>Length</b>	<b>Size 184</b>	<b>Size 194</b>										
1	•											
2	•	•										
<b>Seals and treatments</b>												
<b>A</b> NBR	<b>W</b> NBR	head anodized										
<b>V</b> FPM	<b>Z</b> FPM	head anodized										
<b>Main Connections</b>		<b>Rear connections</b>		<b>Main Connections</b>		<b>Rear connections</b>						
<b>G1</b> G 1 1/4"	-		<b>G13</b> G 1 1/2"	-								
<b>G2</b> G 1 1/4"	G 1 1/4"		<b>G14</b> G 1 1/2"	G 1 1/4"								
<b>G4</b> 1 1/4" NPT	-		<b>G15</b> 1 1/2" NPT	-								
<b>G5</b> 1 1/4" NPT	1 1/4" NPT		<b>G16</b> 1 1/2" NPT	1 1/4" NPT								
<b>G7</b> SAE 20 - 1 5/8" - 12 UN	-		<b>F1</b> 1 1/2" SAE 3000 psi/M	-								
<b>G8</b> SAE 20 - 1 5/8" - 12 UN	SAE 20 - 1 5/8" - 12 UN		<b>F2</b> 1 1/2" SAE 3000 psi/UNC	-								
<b>G10</b> SAE 24 - 1 7/8" - 12 UN	-		<b>F3</b> 1 1/2" SAE 3000 psi/M	1 1/2" SAE 3000 psi/M								
<b>G11</b> SAE 24 - 1 7/8" - 12 UN	SAE 20 - 1 5/8" - 12 UN		<b>F4</b> 1 1/2" SAE 3000 psi/UNC	1 1/2" SAE 3000 psi/UNC								
<b>Filtration rating (filter media)</b>												
<b>A03</b> Inorganic microfiber 3 µm			<b>M25</b> Wire mesh 25 µm									
<b>A06</b> Inorganic microfiber 6 µm			<b>M60</b> Wire mesh 60 µm									
<b>A10</b> Inorganic microfiber 10 µm			<b>M90</b> Wire mesh 90 µm									
<b>A16</b> Inorganic microfiber 16 µm			<b>P10</b> Resin impregnated paper 10 µm									
<b>A25</b> Inorganic microfiber 25 µm			<b>P25</b> Resin impregnated paper 25 µm									
<b>Element Δp</b>		<b>Filter media</b>										
<b>N</b> 10 bar	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>									
<b>H</b> 10 bar		•	•									
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•										
				<b>Bypass valve</b>		<b>Execution</b>						
				<b>E</b> 3 bar		<b>P01</b> MP Filtri standard						
				<b>B</b> 1.75 bar		<b>Pxx</b> Customized						

### FILTER ELEMENT

<b>Element series and size</b>		Configuration example 1: <b>MFx180</b>   1   A25   H   B   E   P01									
<b>MFx180</b> Filter element with private spigot		Configuration example 2: <b>MFx180</b>   2   P10   N   V     P01									
<b>Element length</b>											
1											
2											
<b>Filtration rating (filter media)</b>											
<b>A03</b> Inorganic microfiber 3 µm			<b>M25</b> Wire mesh 25 µm								
<b>A06</b> Inorganic microfiber 6 µm			<b>M60</b> Wire mesh 60 µm								
<b>A10</b> Inorganic microfiber 10 µm			<b>M90</b> Wire mesh 90 µm								
<b>A16</b> Inorganic microfiber 16 µm			<b>P10</b> Resin impregnated paper 10 µm								
<b>A25</b> Inorganic microfiber 25 µm			<b>P25</b> Resin impregnated paper 25 µm								
<b>Element Δp</b>		<b>Filter media</b>									
<b>N</b> 10 bar	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>								
<b>H</b> 10 bar		•	•								
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•									
				<b>Seals</b>		<b>Bypass valve</b>		<b>Execution</b>			
				<b>B</b> NBR		<b>E</b> 3 bar		<b>P01</b> MP Filtri standard			
				<b>V</b> FPM		1.75 bar		<b>Pxx</b> Customized			

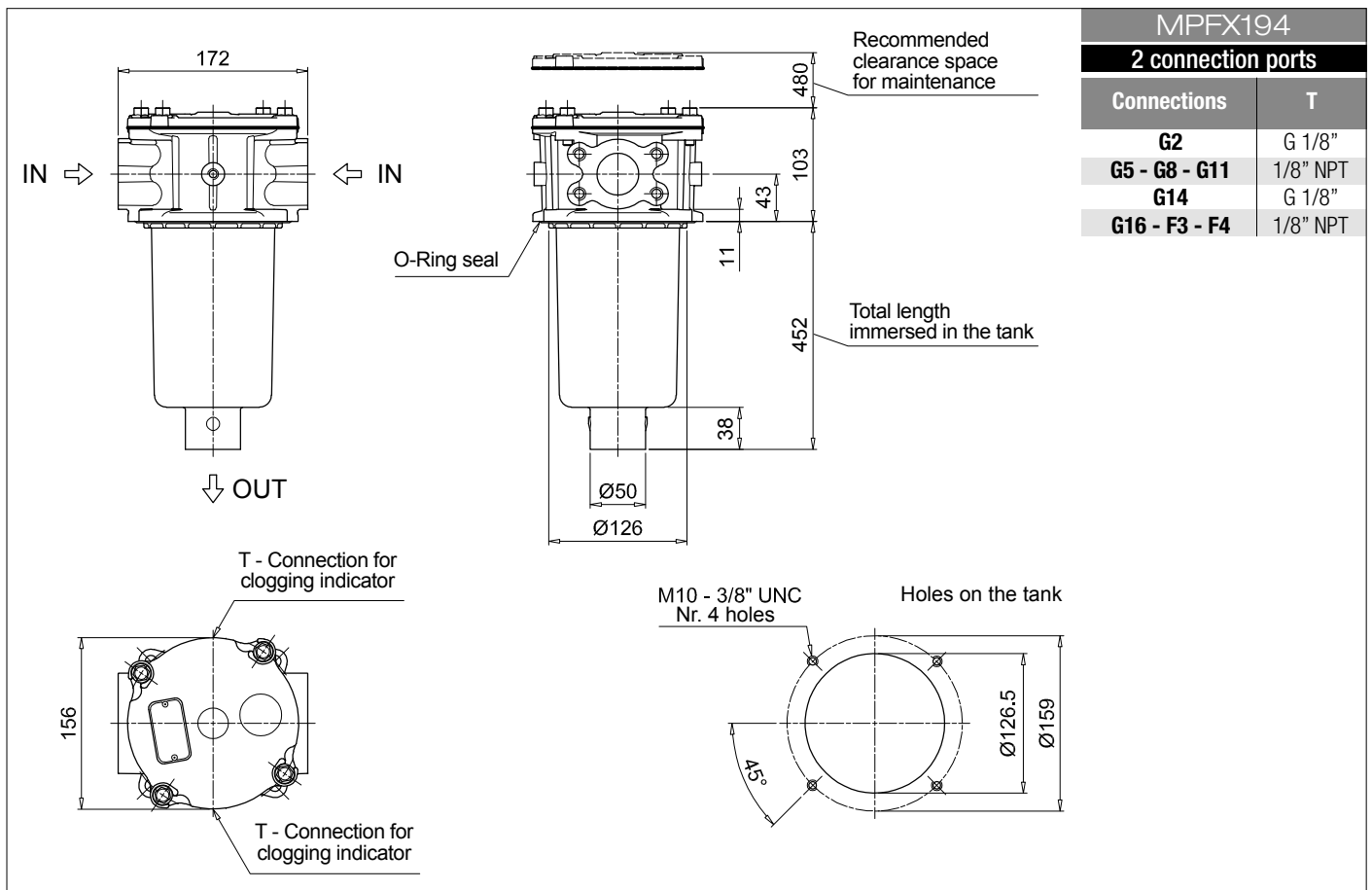
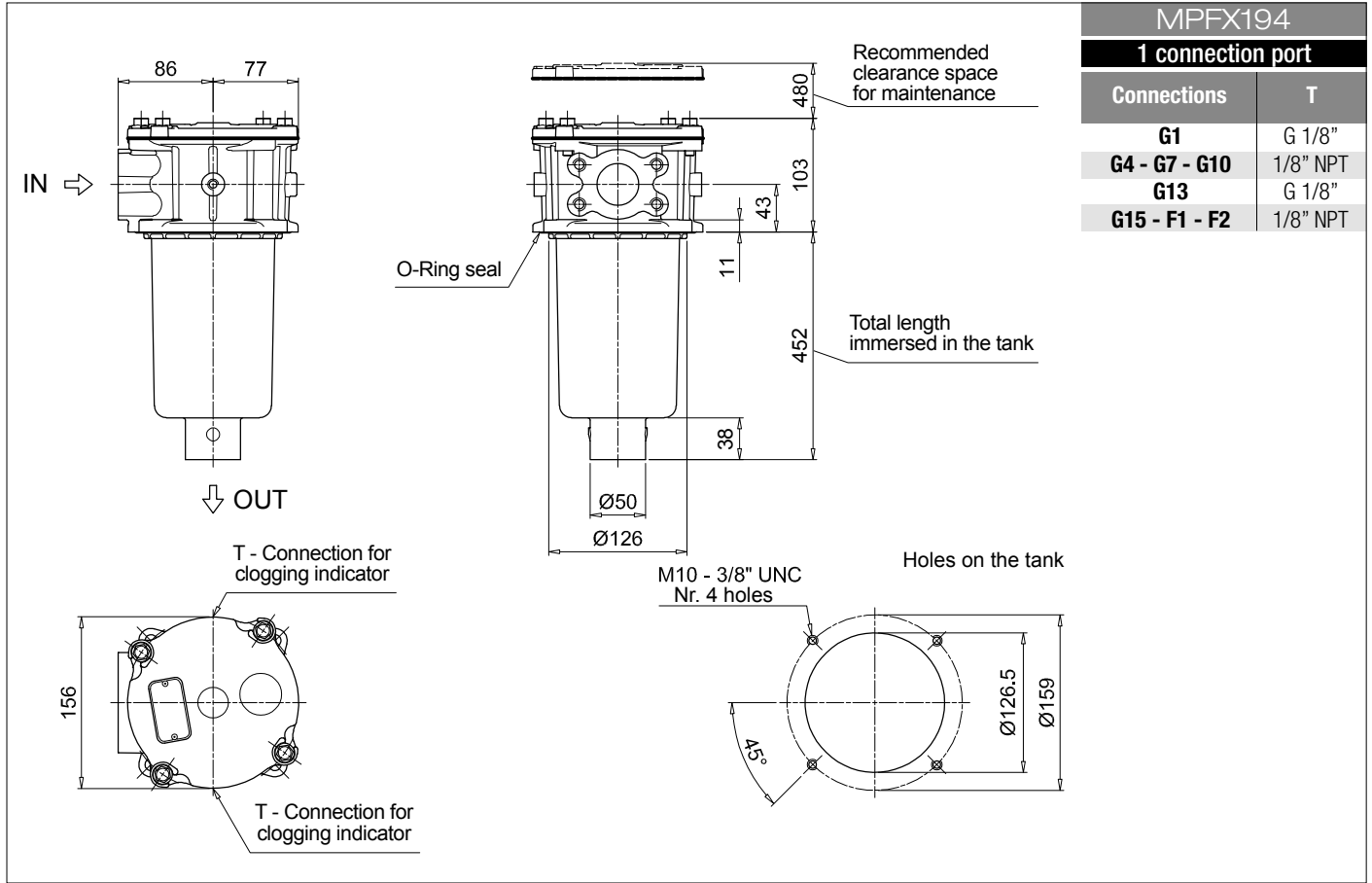
### ACCESSORIES

<b>Indicators</b>		<b>page</b>			<b>page</b>
<b>BVA</b> Axial pressure gauge		240	<b>BEA</b> Electrical pressure indicator		239
<b>BVR</b> Radial pressure gauge		240	<b>BEM</b> Electrical pressure indicator		239
<b>BVP</b> Visual pressure indicator with automatic reset		241	<b>BLA</b> Electrical / visual pressure indicator		239-240
<b>BVQ</b> Visual pressure indicator with manual reset		241			
<b>Additional features</b>		<b>page</b>			
<b>TE</b> Extension tube		248			
<b>T5</b> Filler plug M30x1.5		249			



# MPFX MPFX184 - MPFX194

## Dimensions





# MPFX MPFX400

## Designation & Ordering code

### COMPLETE FILTER

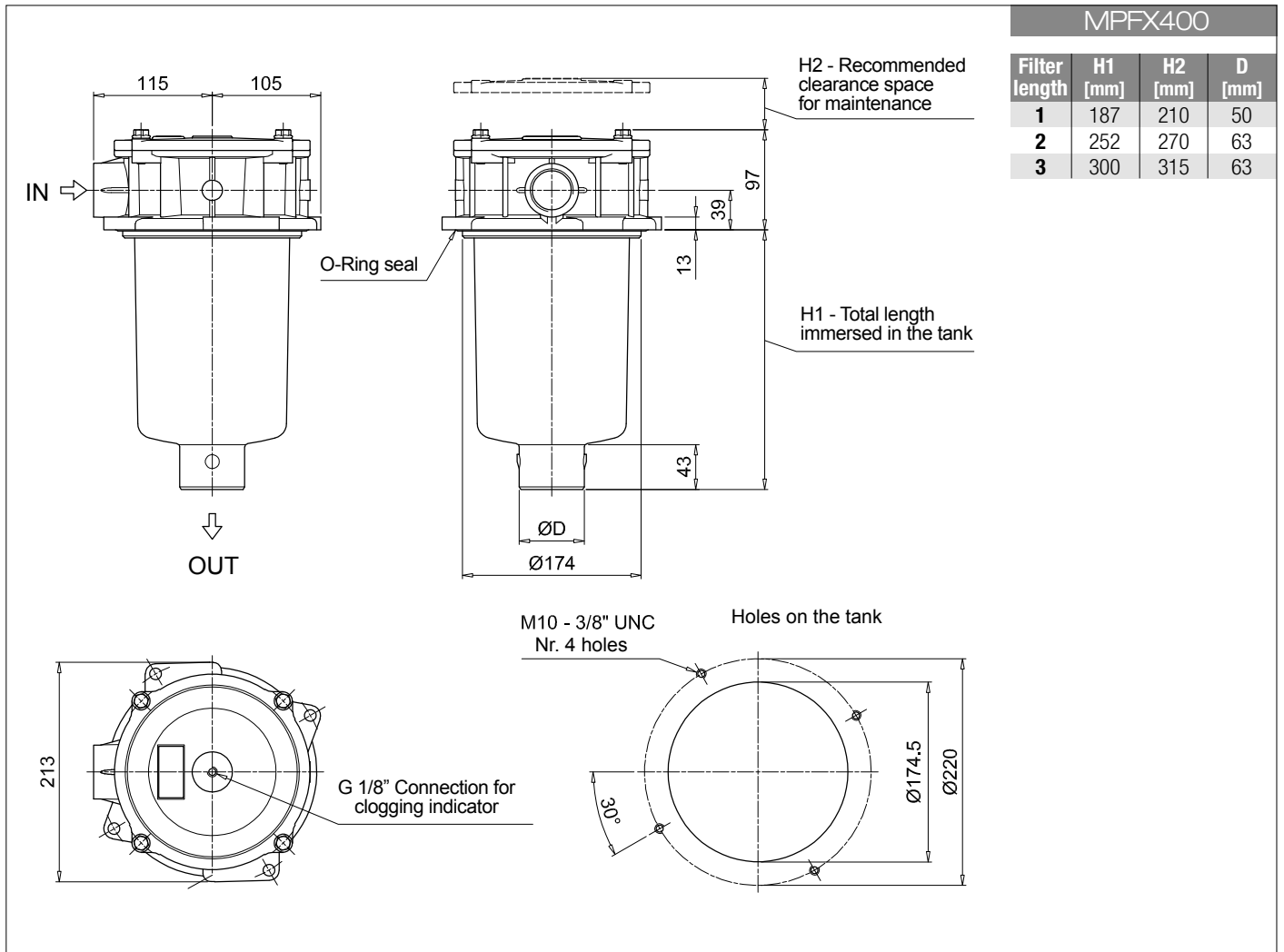
<b>Series and size</b>	Configuration example 1:	MPFX400	1	A	G9	A25	H	B	P01
<b>MPFX400</b> Filter element with private spigot	Configuration example 2:	MPFX400	2	V	G4	P10	N	E	P01
<b>Length</b>									
1   2   3									
<b>Seals and treatments</b>									
A NBR									
V FPM									
W NBR head anodized									
Z FPM head anodized									
<b>Connections</b>									
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									
<b>Filtration rating (filter media)</b>									
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								
<b>Element Δp</b>	<b>Filter media</b>	Axx	Mxx	Pxx					
N 10 bar			•	•					
H 10 bar		•							
W 10 bar, compatible with fluids HFA, HFB and HFC		•	•						
	<b>Bypass valve</b>								
	E 3 bar								
	B 1.75 bar								
	<b>Execution</b>								
	P01 MP Filtri standard								
	Pxx Customized								

### FILTER ELEMENT

<b>Element series and size</b>	Configuration example 1:	MFX400	1	A25	H	B		P01
<b>MFX400</b> Filter element with private spigot	Configuration example 2:	MFX400	2	P10	N	V	E	P01
<b>Element length</b>								
1   2   3								
<b>Filtration rating (filter media)</b>								
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							
<b>Element Δp</b>	<b>Filter media</b>	Axx	Mxx	Pxx				
N 10 bar			•	•				
H 10 bar		•						
W 10 bar, compatible with fluids HFA, HFB and HFC		•	•					
	<b>Seals</b>							
	B NBR							
	V FPM							
	<b>Bypass valve</b>							
	E 3 bar							
	1.75 bar							
	<b>Execution</b>							
	P01 MP Filtri standard							
	Pxx Customized							

### ACCESSORIES

<b>Indicators</b>	page		page
BVA Axial pressure gauge	240	BEA Electrical pressure indicator	239
BVR Radial pressure gauge	240	BEM Electrical pressure indicator	239
BVP Visual pressure indicator with automatic reset	241	BLA Electrical / visual pressure indicator	239-240
BVQ Visual pressure indicator with manual reset	241		
<b>Additional features</b>	page		
T5 Filler plug M30x1.5	249		





# MPFX MPFX410

## Designation & Ordering code

### COMPLETE FILTER

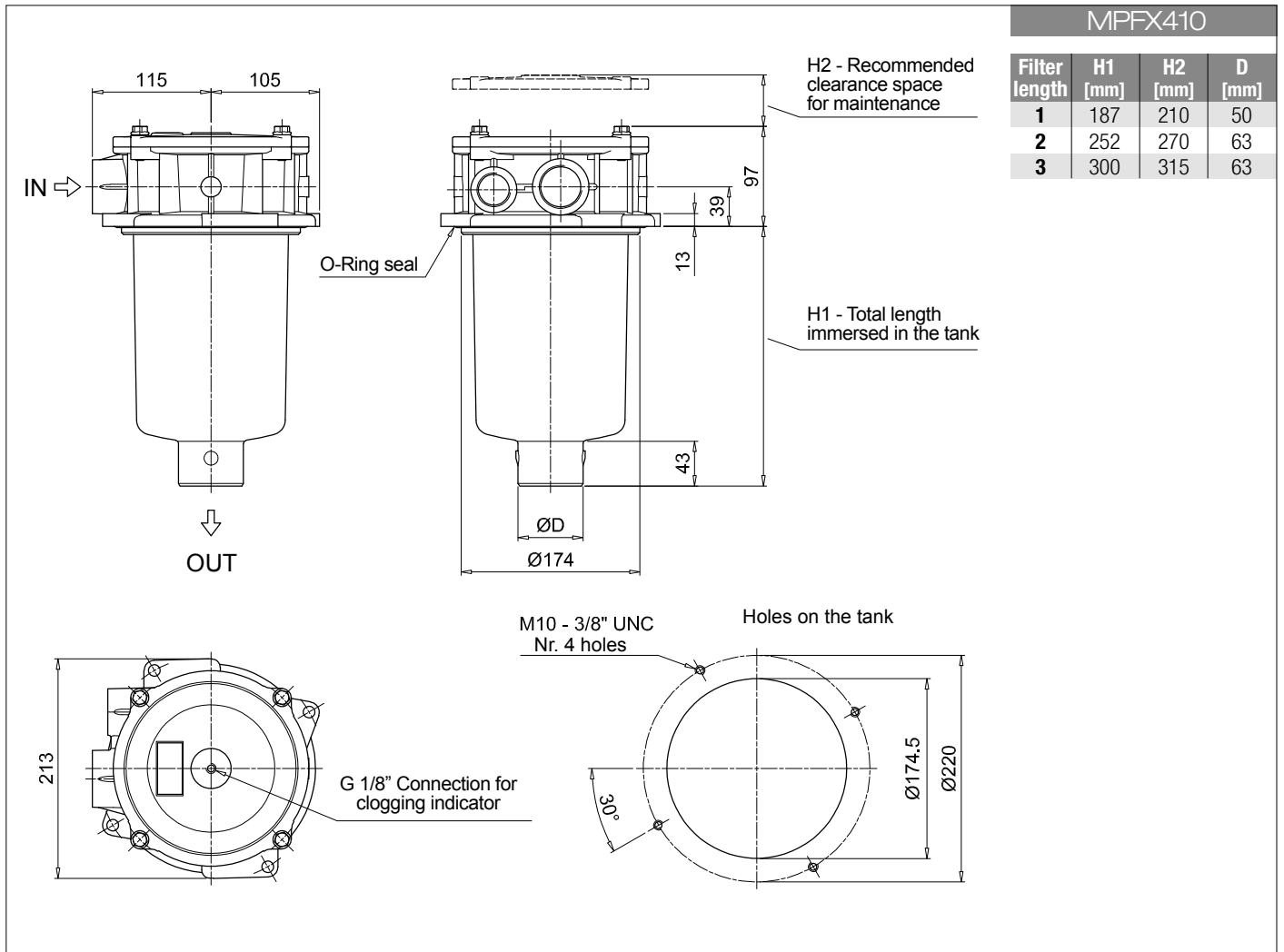
<b>Series and size</b>	Configuration example 1: <b>MPFX410</b>	<b>1</b>	<b>V</b>	<b>G4</b>	<b>1</b>	<b>P10</b>	<b>N</b>	<b>E</b>	<b>P01</b>
<b>MPFX410</b> Filter element with private spigot	Configuration example 2: <b>MPFX410</b>	<b>1</b>	<b>A</b>	<b>G1</b>	<b>1</b>	<b>A25</b>	<b>H</b>	<b>B</b>	<b>P01</b>
<b>Length</b>									
<b>1</b>   <b>2</b>   <b>3</b>									
<b>Seals and treatments</b>									
<b>A</b> NBR									
<b>V</b> FPM									
<b>W</b> NBR head anodized									
<b>Z</b> FPM head anodized									
<b>Main Connections</b>	<b>Aux size 1</b>								
<b>G1</b> G 1 1/4"	G 1"								
<b>G4</b> 1 1/4" NPT	1" NPT								
<b>G7</b> SAE 20 - 1 5/8" - 12 UN	SAE 16 - 1 5/16" - 12 UN								
<b>Aux connection</b> - see previous table									
<b>1</b> Aux size 1									
<b>Filtration rating (filter media)</b>									
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm								
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm								
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm								
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm								
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm								
<b>Element Δp</b>	<b>Filter media</b>								
	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>						
<b>N</b> 10 bar		•	•						
<b>H</b> 10 bar		•							
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•							
				<b>Bypass valve</b>	<b>Execution</b>				
				<b>E</b> 3 bar	<b>P01</b> MP Filtri standard				
				<b>B</b> 1.75 bar	<b>Pxx</b> Customized				

### FILTER ELEMENT

<b>Element series and size</b>	Configuration example 1: <b>MFX400</b>	<b>1</b>	<b>P10</b>	<b>N</b>	<b>V</b>	<b>E</b>	<b>P01</b>
<b>MFX400</b> Filter element with private spigot	Configuration example 2: <b>MFX400</b>	<b>1</b>	<b>A25</b>	<b>H</b>	<b>B</b>		<b>P01</b>
<b>Element length</b>							
<b>1</b>   <b>2</b>   <b>3</b>							
<b>Filtration rating (filter media)</b>							
<b>A03</b> Inorganic microfiber 3 µm	<b>M25</b> Wire mesh 25 µm						
<b>A06</b> Inorganic microfiber 6 µm	<b>M60</b> Wire mesh 60 µm						
<b>A10</b> Inorganic microfiber 10 µm	<b>M90</b> Wire mesh 90 µm						
<b>A16</b> Inorganic microfiber 16 µm	<b>P10</b> Resin impregnated paper 10 µm						
<b>A25</b> Inorganic microfiber 25 µm	<b>P25</b> Resin impregnated paper 25 µm						
<b>Element Δp</b>	<b>Filter media</b>						
	<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>				
<b>N</b> 10 bar		•	•				
<b>H</b> 10 bar		•					
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC	•	•					
	<b>Seals</b>	<b>Bypass valve</b>	<b>Execution</b>				
	<b>B</b> NBR	<b>E</b> 3 bar	<b>P01</b> MP Filtri standard				
	<b>V</b> FPM	1.75 bar	<b>Pxx</b> Customized				

### ACCESSORIES

<b>Indicators</b>	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator	239-240
<b>BVQ</b> Visual pressure indicator with manual reset	241		
<b>Additional features</b>	page		
<b>T5</b> Filler plug M30x1.5	249		



# MPFX MPFX450 - MPFX451 - MPFX750

## Designation & Ordering code

### COMPLETE FILTER

<b>Series and size</b>				Configuration example 1: <b>MPFX450</b>   <b>1</b>   <b>A</b>   <b>G1</b>   <b>A25</b>   <b>H</b>   <b>B</b>   <b>P01</b>								
<b>MPFX450</b>   <b>MPFX451</b>   <b>MPFX750</b> Filter element with private spigot				Configuration example 2: <b>MPFX750</b>   <b>1</b>   <b>V</b>   <b>F2</b>   <b>P10</b>   <b>N</b>   <b>E</b>   <b>P01</b>								
<b>Length</b>				<b>MPFX 450</b>	<b>MPFX 451</b>	<b>MPFX 750</b>						
<b>1</b>		•	•	•								
<b>2</b>		•	•									
<b>3</b>		•	•									
<b>Seals and treatments</b>												
<b>A</b> NBR		<b>W</b> NBR	head anodized									
<b>V</b> FPM		<b>Z</b> FPM	head anodized									
<b>Connections</b>				<b>Aux (only size 451)</b>								
<b>G1</b> G 2"		G 3/4"										
<b>G4</b> 2" NPT		3/4" NPT										
<b>G7</b> SAE 32 - 2 1/2" - 12 UN		SAE 12 - 1 1/16" - 12 UN										
<b>F1</b> 2" SAE 3000 psi/M		G 3/4"										
<b>F2</b> 2" SAE 3000 psi/UN		3/4" NPT										
<b>Filtration rating (filter media)</b>												
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm										
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm										
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm										
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm										
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm										
<b>Element Δp</b>				<b>Filter media</b>								
		<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>								
<b>N</b> 10 bar			•	•								
<b>H</b> 10 bar			•									
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC		•	•									
				<b>Bypass valve</b>								
				<b>E</b> 3 bar								
				<b>B</b> 1.75 bar								
				<b>Execution</b>								
				<b>P01</b> MP Filtri standard								
				<b>Pxx</b> Customized								

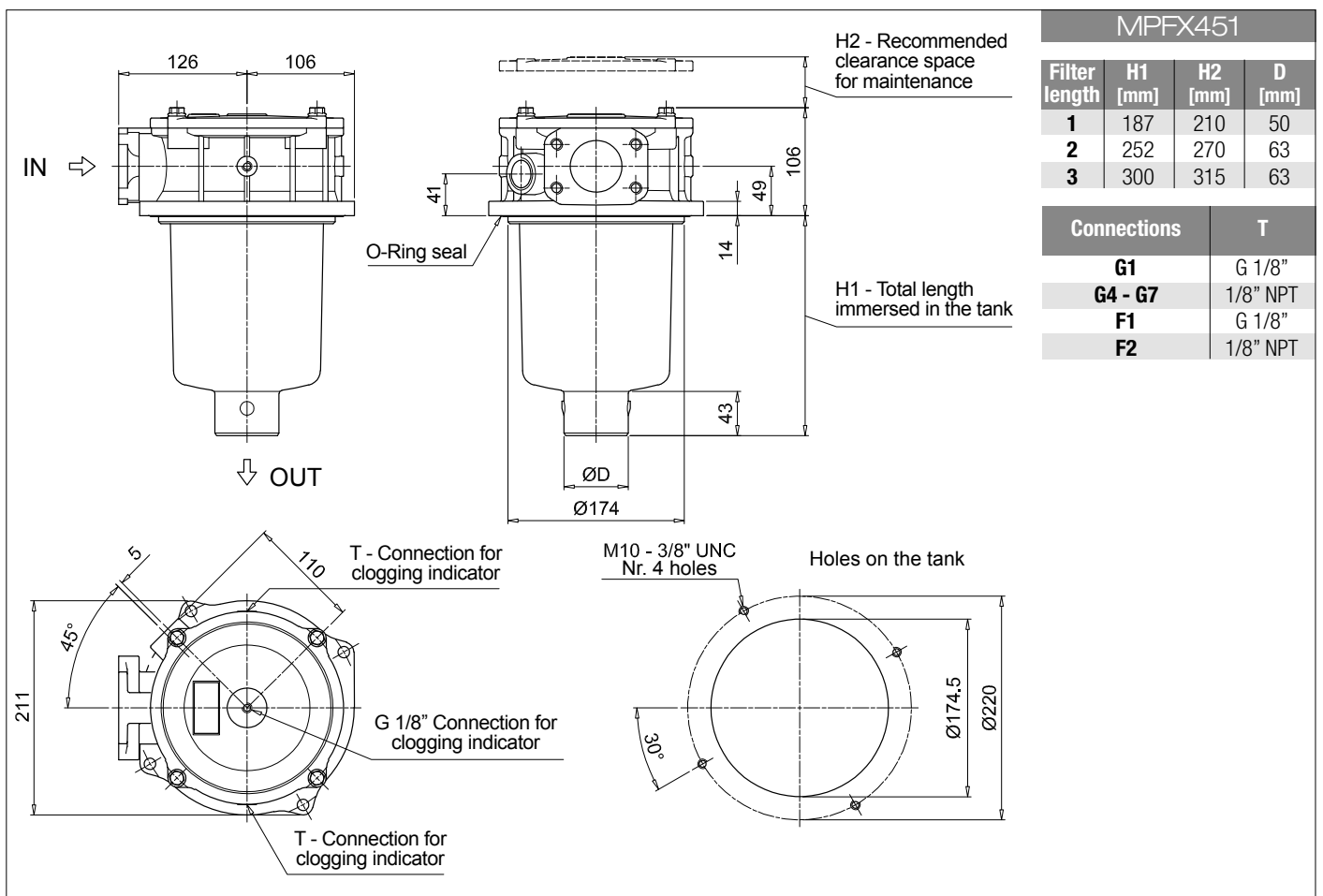
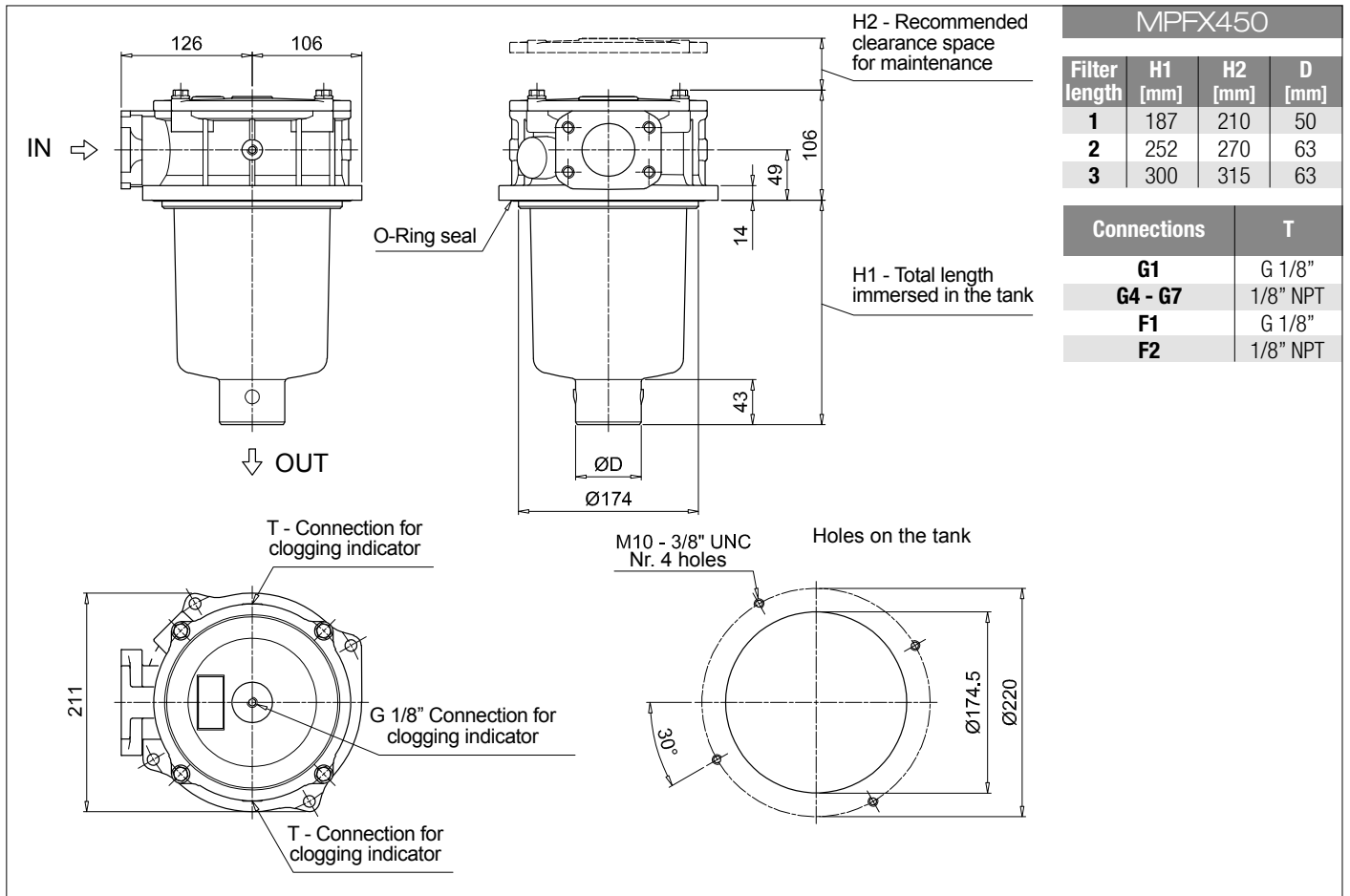
### FILTER ELEMENT

<b>Element series and size</b>				Configuration example 1: <b>MFx400</b>   <b>1</b>   <b>A25</b>   <b>H</b>   <b>B</b>   <b>P01</b>								
<b>MFx400</b>   <b>MFx750</b> Filter element with private spigot				Configuration example 2: <b>MFx750</b>   <b>1</b>   <b>P10</b>   <b>N</b>   <b>V</b>   <b>E</b>   <b>P01</b>								
<b>Element length</b>				<b>MPFX 450</b>	<b>MPFX 451</b>	<b>MPFX 750</b>						
<b>1</b>		•	•	•								
<b>2</b>		•	•									
<b>3</b>		•	•									
<b>Filtration rating (filter media)</b>												
<b>A03</b> Inorganic microfiber 3 µm		<b>M25</b> Wire mesh 25 µm										
<b>A06</b> Inorganic microfiber 6 µm		<b>M60</b> Wire mesh 60 µm										
<b>A10</b> Inorganic microfiber 10 µm		<b>M90</b> Wire mesh 90 µm										
<b>A16</b> Inorganic microfiber 16 µm		<b>P10</b> Resin impregnated paper 10 µm										
<b>A25</b> Inorganic microfiber 25 µm		<b>P25</b> Resin impregnated paper 25 µm										
<b>Element Δp</b>				<b>Filter media</b>								
		<b>Axx</b>	<b>Mxx</b>	<b>Pxx</b>								
<b>N</b> 10 bar			•	•								
<b>H</b> 10 bar			•									
<b>W</b> 10 bar, compatible with fluids HFA, HFB and HFC		•	•									
				<b>Seals</b>								
				<b>B</b> NBR								
				<b>V</b> FPM								
				<b>Bypass valve</b>								
				<b>E</b> 3 bar								
				<b>B</b> 1.75 bar								
				<b>Execution</b>								
				<b>P01</b> MP Filtri standard								
				<b>Pxx</b> Customized								

### ACCESSORIES

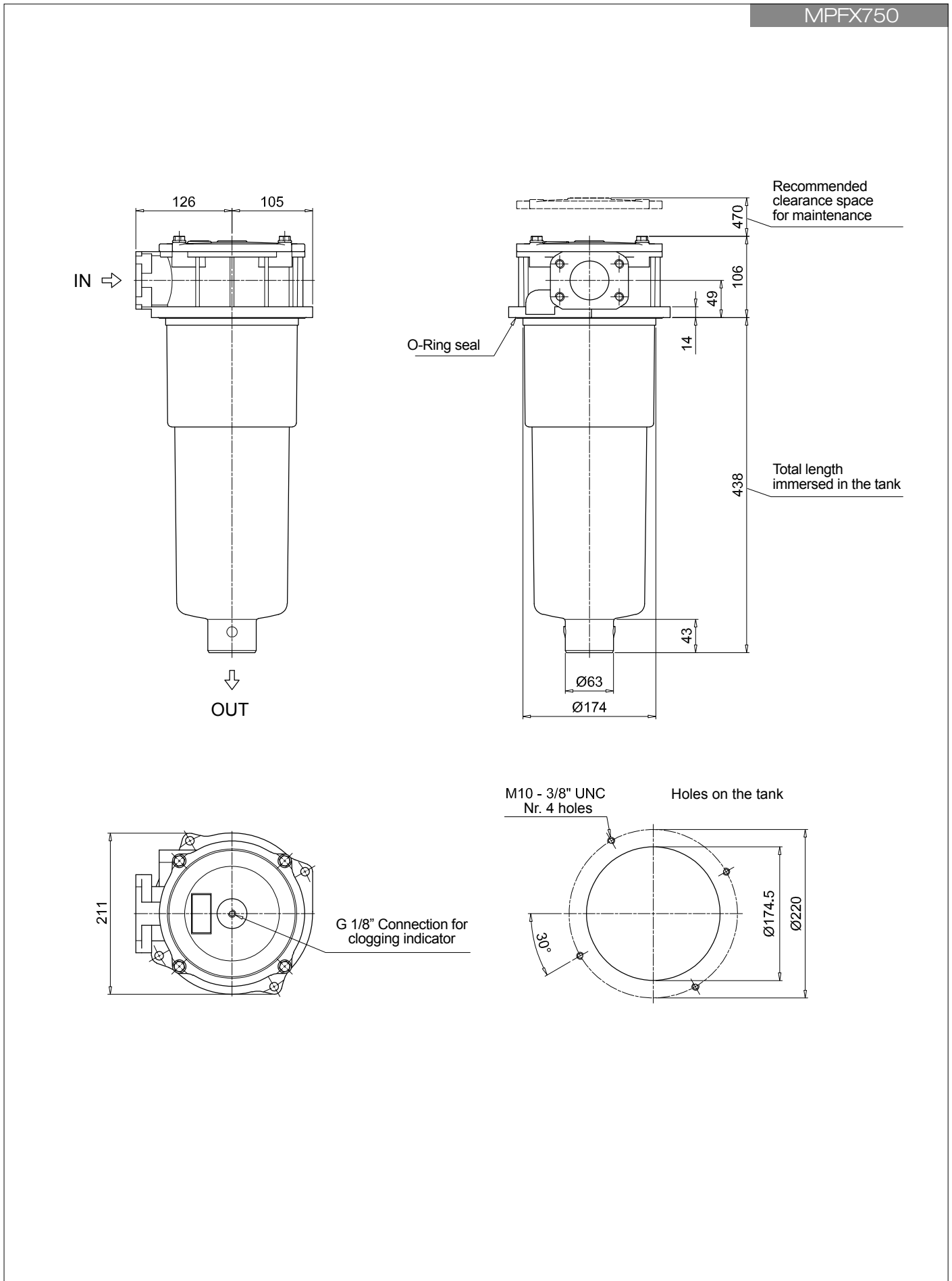
<b>Indicators</b>	page		page
<b>BVA</b> Axial pressure gauge	240	<b>BEA</b> Electrical pressure indicator	239
<b>BVR</b> Radial pressure gauge	240	<b>BEM</b> Electrical pressure indicator	239
<b>BVP</b> Visual pressure indicator with automatic reset	241	<b>BLA</b> Electrical / visual pressure indicator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

<b>Additional features</b>	page
<b>T5</b> Filler plug M30x1.5	249



# MPFX MPFX450 - MPFX451 - MPFX750

## Dimensions



**MPFX 100**

**MPFX 181**

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

**MPFX 104**

**MPFX 181**

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