

MPT

Maximum pressure 8 bar
Flow rates to 300 l/min



Technical data

Filter housing (Materials)

- Head: Aluminium
- Cover: Nylon
- Bowl: Nylon

Pressure

- Working pressure: 8 bar (0,8 MPa)

Temperature

- From -25 °C to +110 °C

Bypass valve

- Opening pressure 1,75 bar ±10%
- Opening pressure 3 bar ±10%

Δp Elements type

- Microfibre 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

MPT FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

Weights (kg)

Length	1	2	3	4
• MPT 025	0,41	0,45	0,50	-
• MPT 027	0,44	0,48	0,55	-
• MPT 101	1,00	1,05	1,15	1,40
• MPT 104	1,10	1,15	1,25	1,50
• MPT 110-120	1,00	1,05	1,15	1,40
• MPT 114	1,10	1,15	1,25	1,50

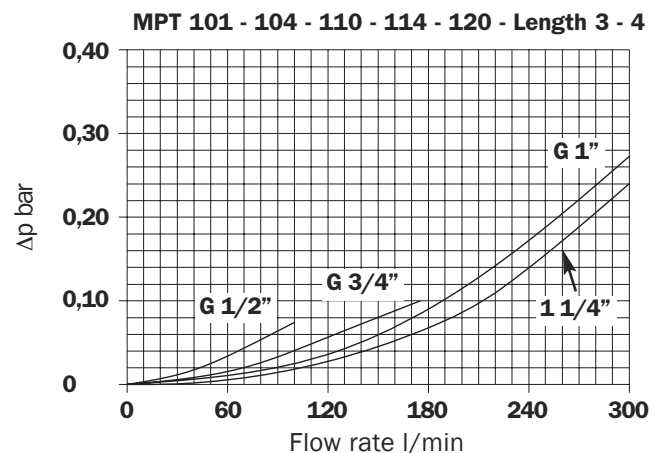
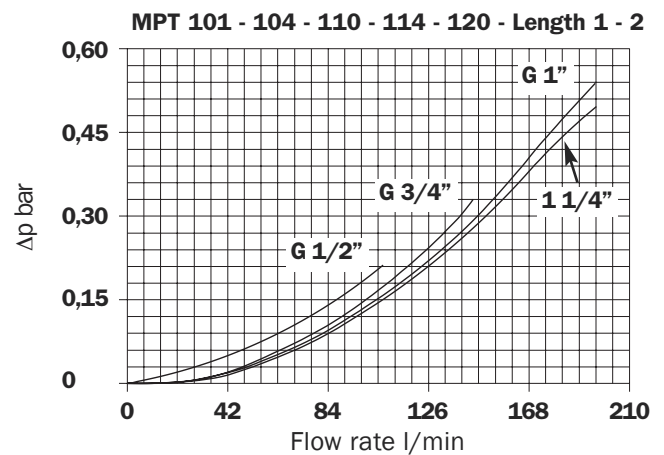
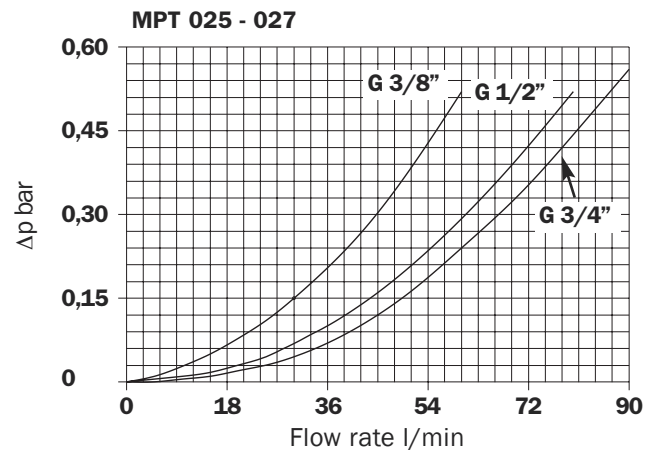
Volumes (dm³)

Length	1	2	3	4
• MPT 025	0,24	0,35	0,42	-
• MPT 027	0,24	0,35	0,42	-
• MPT 101	0,72	0,93	1,28	1,74
• MPT 104	0,72	0,93	1,28	1,74
• MPT 110-120	0,72	0,93	1,28	1,74
• MPT 114	0,72	0,93	1,28	1,74

Filter housings Δp pressure drop

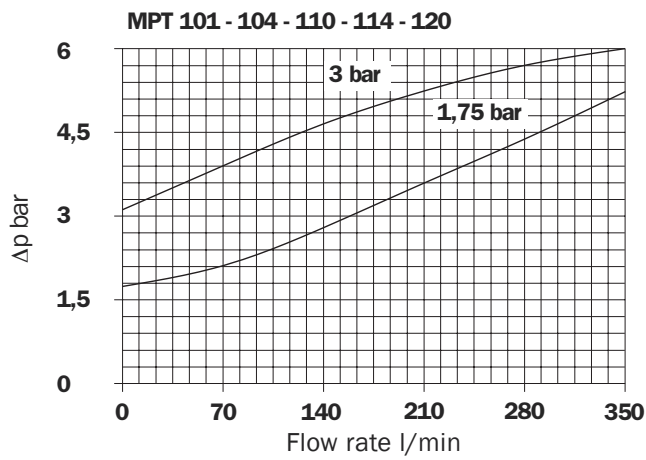
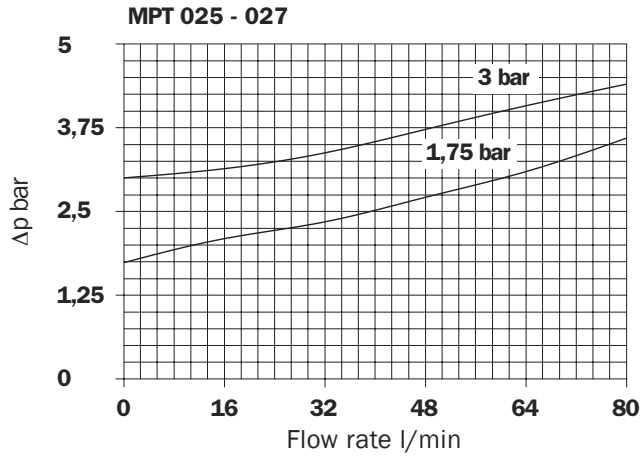
The curves are plotted utilising mineral oil with density of 0,86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.



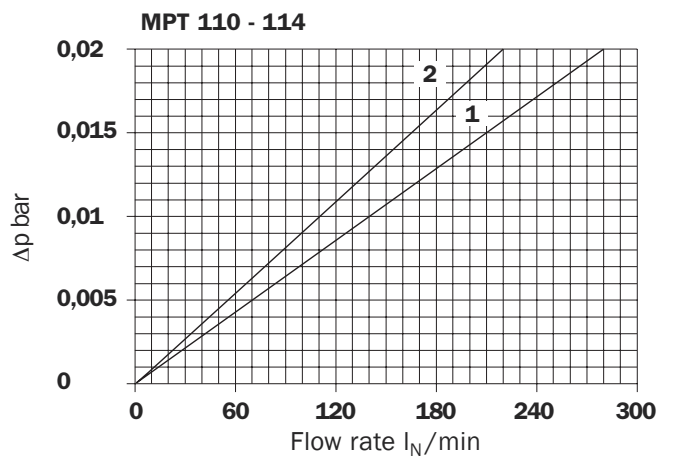
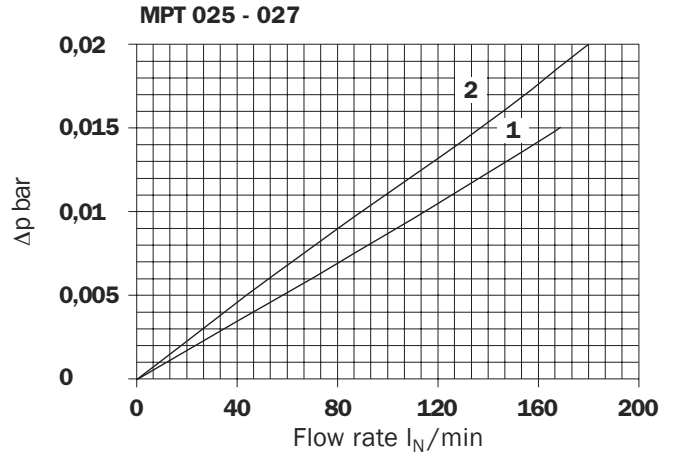
Valves

Bypass valve pressure drop



Air breather

Pressure drop



- 1: C With air breather 10 μm
- 2: D With anti-splash and SAP50 10 μm

Recommended maximum flow rate

- Pressure drop of filter assembly equal to Δp 0,5 bar.
- Oil kinematic viscosity 30 mm²/s (cSt).
- Density 0,86 kg/dm³.

Filtration

	Length	A03	A06	A10	A16	A25	P10	P25	M25-M60-M90
MPT 025 - 027	1	6	9	23	28	42	50	54	110
	2	16	19	45	48	55	64	67	110
	3	21	24	50	55	59	70	75	110

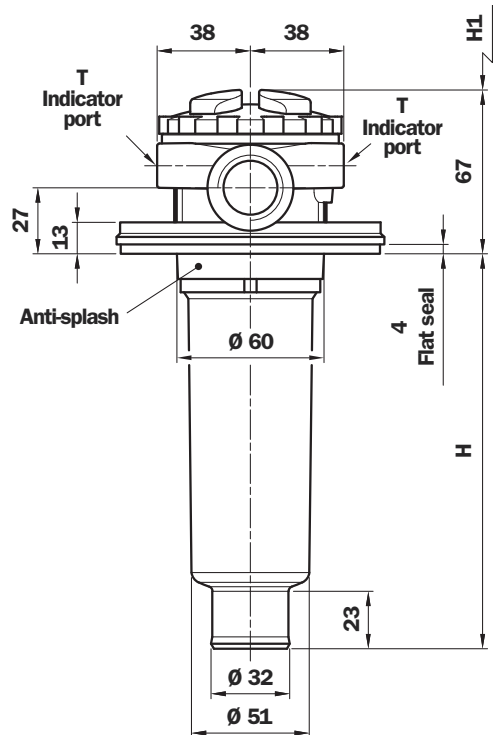
Flow rate l/min

Filtration

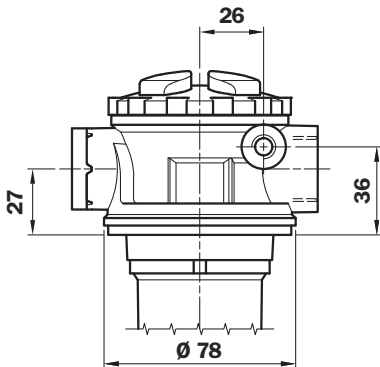
	Length	A03	A06	A10	A16	A25	P10	P25	M25-M60-M90
MPT 101 - 104	1	17	20	53	56	64	86	94	290
110 - 114	2	28	38	64	75	95	110	120	290
120	3	47	53	125	135	168	220	250	290
	4	80	88	180	185	195	260	280	290

Flow rate l/min

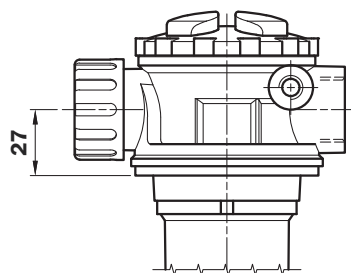
MPT 025



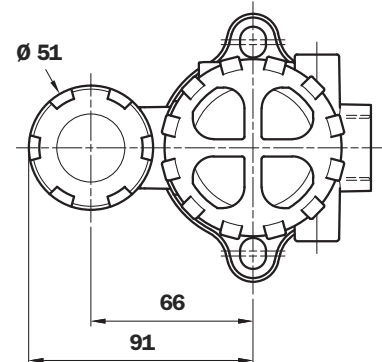
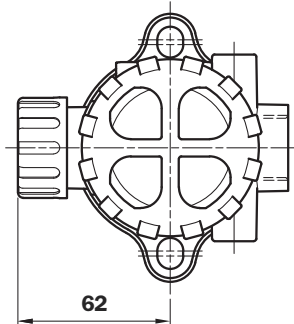
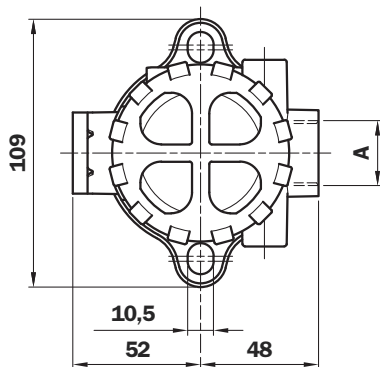
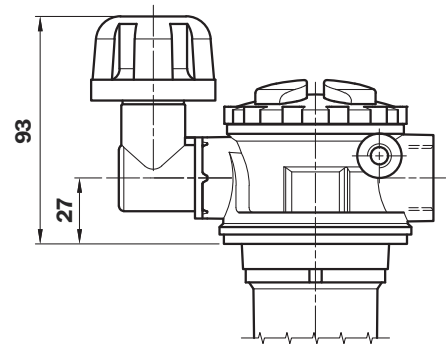
Version "S"
Without air breather



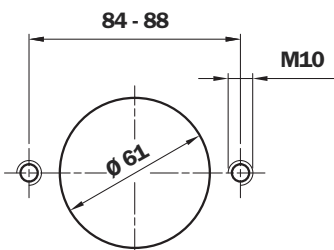
Version "C"
With air breather



Version "D" and "P"
Anti-splash and SAP50



Holes on the tank

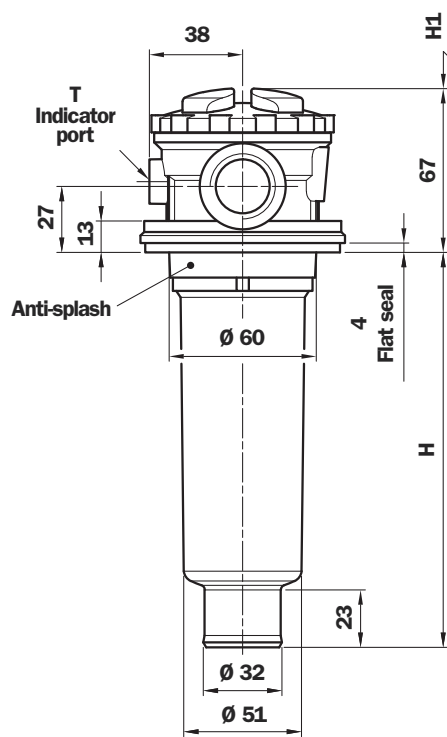


Thread connections

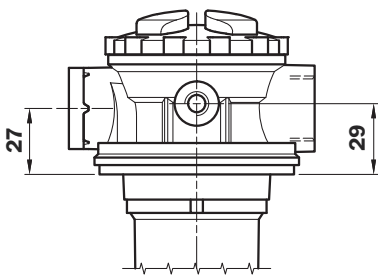
Type	A	T
G1	G 3/8"	G 1/8"
G2	G 1/2"	G 1/8"
G3	G 3/4"	G 1/8"
G4	3/8" NPT	1/8" NPT
G5	1/2" NPT	1/8" NPT
G6	3/4" NPT	1/8" NPT
G7	SAE 6 - 9/16" - 18 UNF	1/8" NPT
G8	SAE 8 - 3/4" - 16 UNF	1/8" NPT
G9	SAE 12 - 1 1/16" - 12 UN	1/8" NPT

Filter Length	H mm	H1 mm
1	99	130
2	163	195
3	202	230

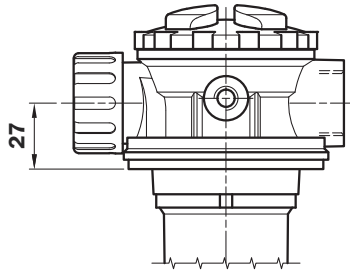
MPT 027



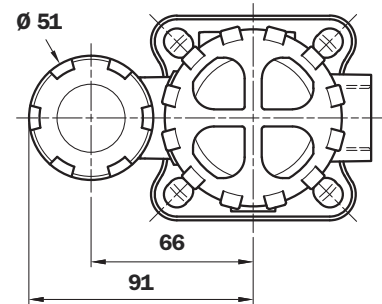
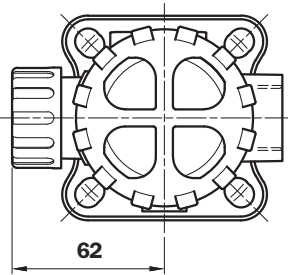
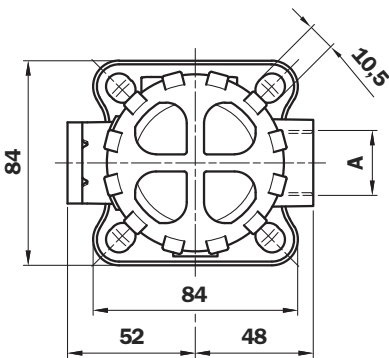
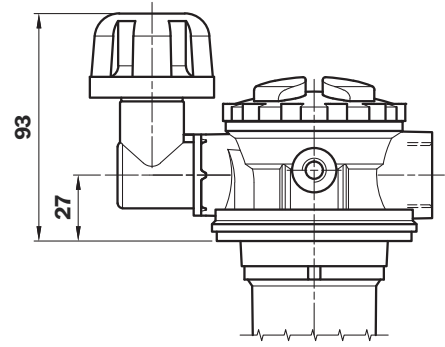
Version "S"
Without air breather



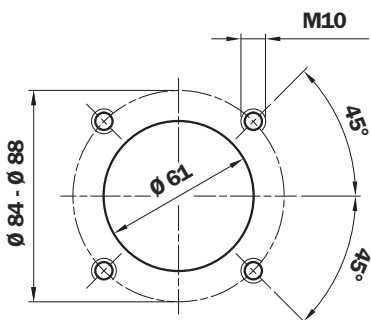
Version "C"
With air breather



Version "D" and "P"
Anti-splash and SAP50



Holes on the tank



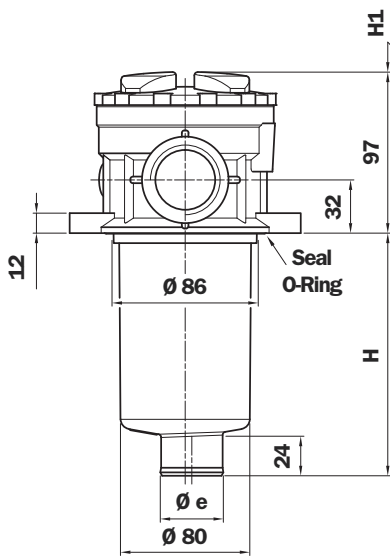
Thread connections

Type	A	T
G1	G 3/8"	G 1/8"
G2	G 1/2"	G 1/8"
G3	G 3/4"	G 1/8"
G4	3/8" NPT	1/8" NPT
G5	1/2" NPT	1/8" NPT
G6	3/4" NPT	1/8" NPT
G7	SAE 6-9/16" - 18 UNF	1/8" NPT
G8	SAE 8-3/4" - 16 UNF	1/8" NPT
G9	SAE 12-1 1/16" - 12 UN	1/8" NPT

Filter Length	H mm	H1 mm
1	99	130
2	163	195
3	202	230

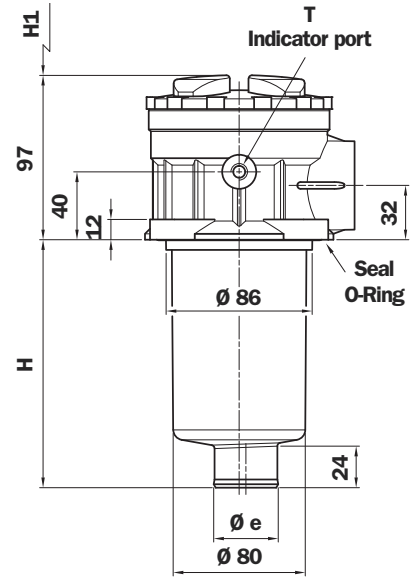
MPT 101

Without air breather

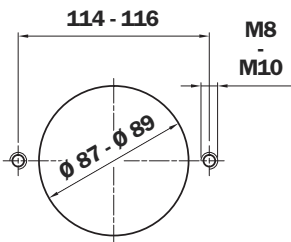


MPT 104

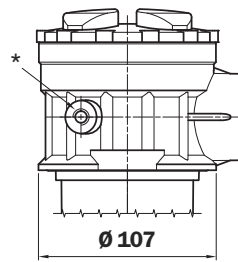
Without air breather



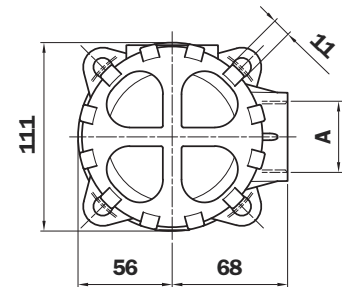
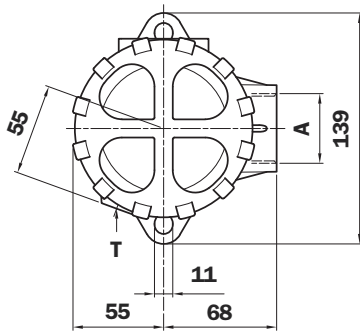
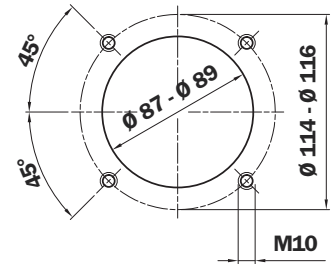
Holes on the tank



T* Indicator port



Holes on the tank



MPT 101

Filter Length	H mm	H1 mm	Ø e mm
1	99	120	38
2	146	170	38
3	224	250	46,5
4	326	350	46,5

T indicator port
G 1/4" - 1/4" NPT
ON REQUEST

MPT 104

Filter Length	H mm	H1 mm	Ø e mm
1	99	120	38
2	146	170	38
3	224	250	46,5
4	326	350	46,5

T indicator port
G 1/4" - 1/4" NPT
ON REQUEST

MPT 101 - Thread connections

Type	A	T
G1	G 3/4"	G 1/8"
G2	G 1"	G 1/8"
G3	G 1 1/4"	G 1/8"
G4	3/4" NPT	1/8" NPT
G5	1" NPT	1/8" NPT
G6	1 1/4" NPT	1/8" NPT
G7	SAE 12 - 1 1/16" - 12 UN	1/8" NPT
G8	SAE 16 - 1 5/16" - 12 UN	1/8" NPT
G9	SAE 20 - 1 5/8" - 12 UN	1/8" NPT

MPT 104 - Thread connections

Type	A	T
G1	G 3/4"	G 1/8"
G2	G 1"	G 1/8"
G3	G 1 1/4"	G 1/8"
G4	3/4" NPT	1/8" NPT
G5	1" NPT	1/8" NPT
G6	1 1/4" NPT	1/8" NPT
G7	SAE 12 - 1 1/16" - 12 UN	1/8" NPT
G8	SAE 16 - 1 5/16" - 12 UN	1/8" NPT
G9	SAE 20 - 1 5/8" - 12 UN	1/8" NPT

MPT 110



Multiport - Multifunction
Standard
Single In Port



Multiport - Multifunction
Double In Port
Double Indicator Port



Multiport - Multifunction
Double In Port
Option: Drain Port
Indicator Port



Multiport - Multifunction
Double In Port
Option: Double Drain Port

MPT 120

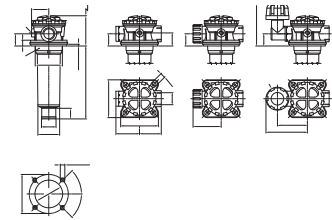


Multiport - Multifunction
Triple In Port
Option: Double Drain Port

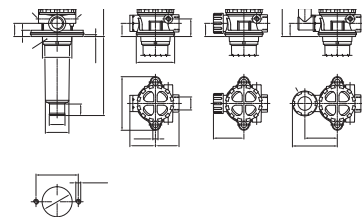
MPT 025-027



Multifunction
Air breather Port plugged
Indicator Port

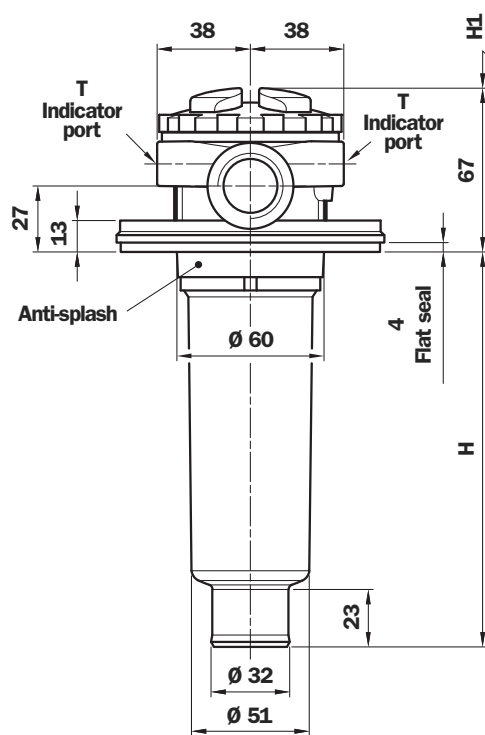


Multifunction
Air breather standard
Indicator Port

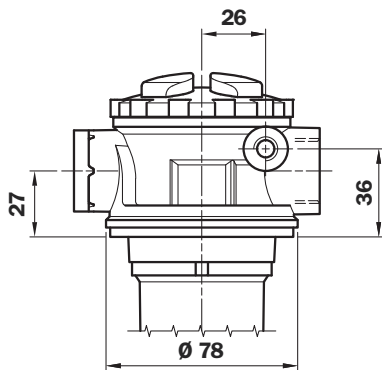


Multifunction
Air breather anti-splash & pressurized
Double Indicator Port

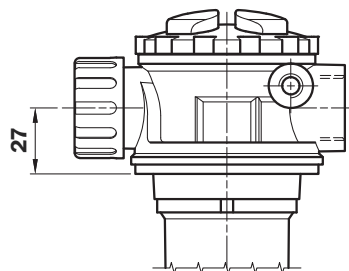
MPT 025



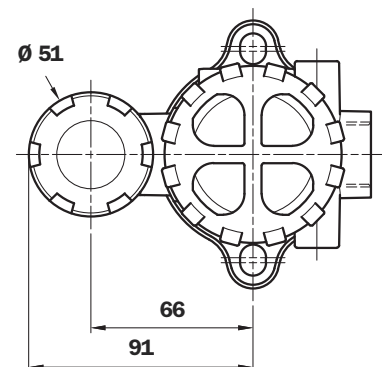
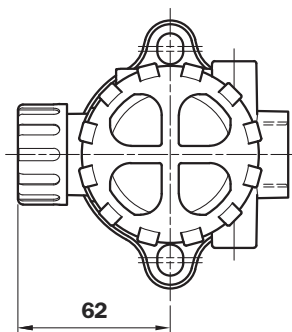
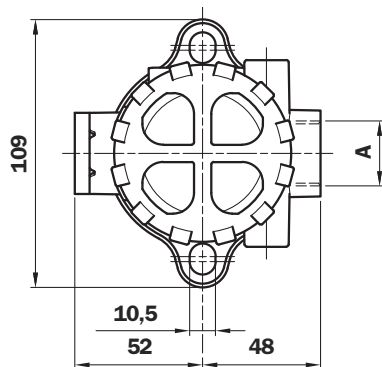
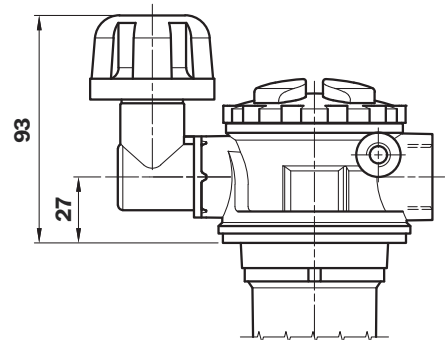
Version "S"
Without air breather



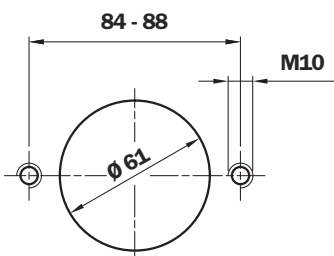
Version "C"
With air breather



Version "D" and "P"
Anti-splash and SAP50



Holes on the tank

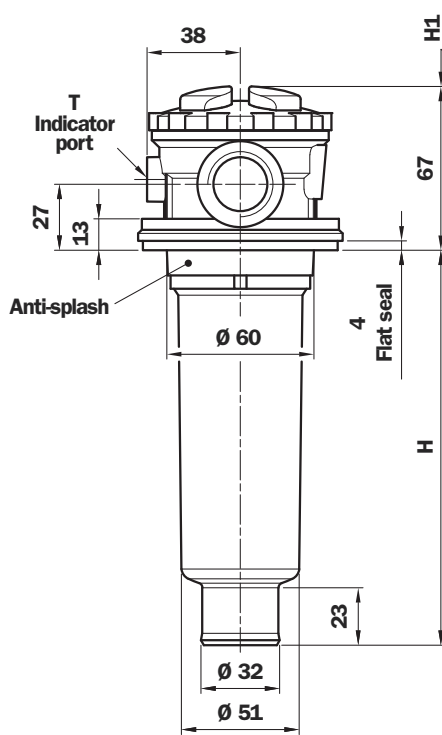


Thread connections

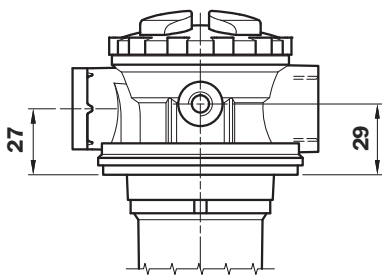
Type	A	T
G1	G 3/8"	G 1/8"
G2	G 1/2"	G 1/8"
G3	G 3/4"	G 1/8"
G4	3/8" NPT	1/8" NPT
G5	1/2" NPT	1/8" NPT
G6	3/4" NPT	1/8" NPT
G7	SAE 6 - 9/16" - 18 UNF	1/8" NPT
G8	SAE 8 - 3/4" - 16 UNF	1/8" NPT
G9	SAE 12 - 1 1/16" - 12 UN	1/8" NPT

Filter Length	H mm	H1 mm
1	99	130
2	163	195
3	202	230

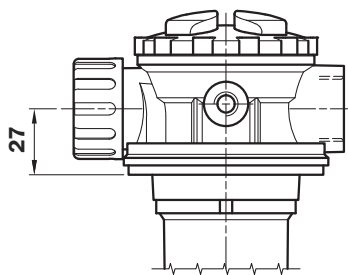
MPT 027



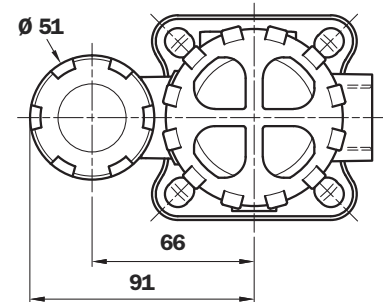
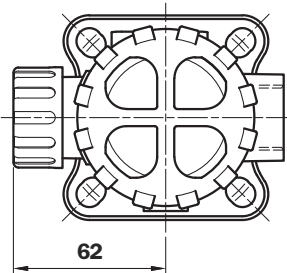
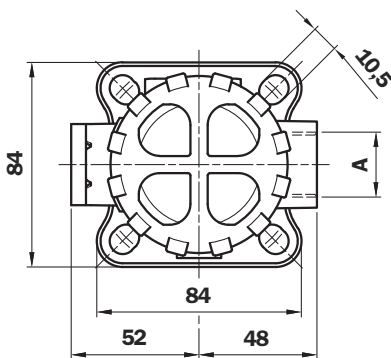
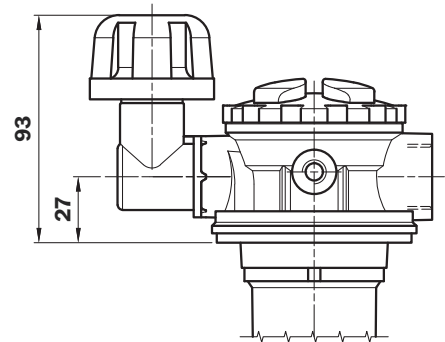
Version "S"
Without air breather



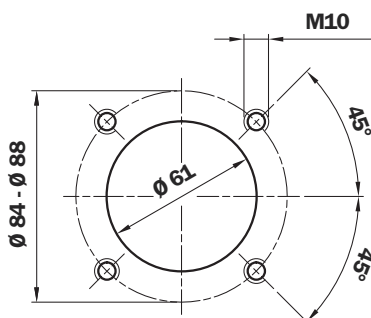
Version "C"
With air breather



Version "D" and "P"
Anti-splash and SAP50



Holes on the tank

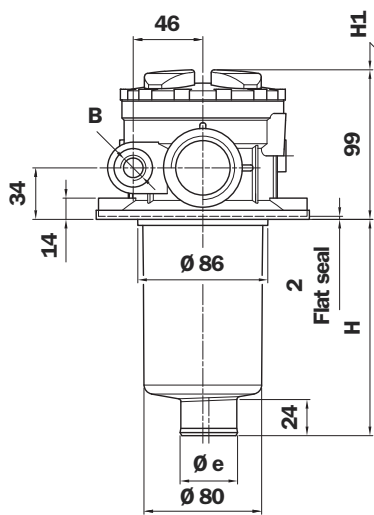


Thread connections

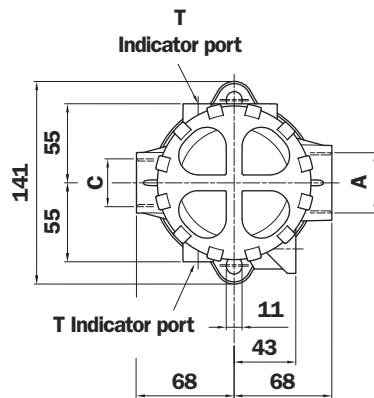
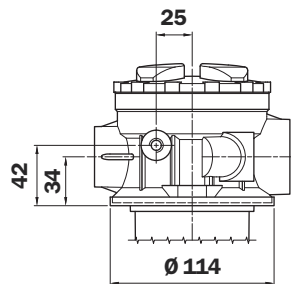
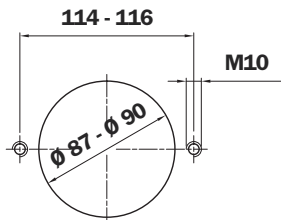
Type	A	T
G1	G 3/8"	G 1/8"
G2	G 1/2"	G 1/8"
G3	G 3/4"	G 1/8"
G4	3/8" NPT	1/8" NPT
G5	1/2" NPT	1/8" NPT
G6	3/4" NPT	1/8" NPT
G7	SAE 6 - 9/16" - 18 UNF	1/8" NPT
G8	SAE 8 - 3/4" - 16 UNF	1/8" NPT
G9	SAE 12 - 1 1/16" - 12 UN	1/8" NPT

Filter Length	H mm	H1 mm
1	99	130
2	163	195
3	202	230

MPT 120



Holes on the tank



Filter Length	H mm	H1 mm	Ø e mm
1	97	120	38
2	144	170	38
3	222	250	46,5
4	324	350	46,5

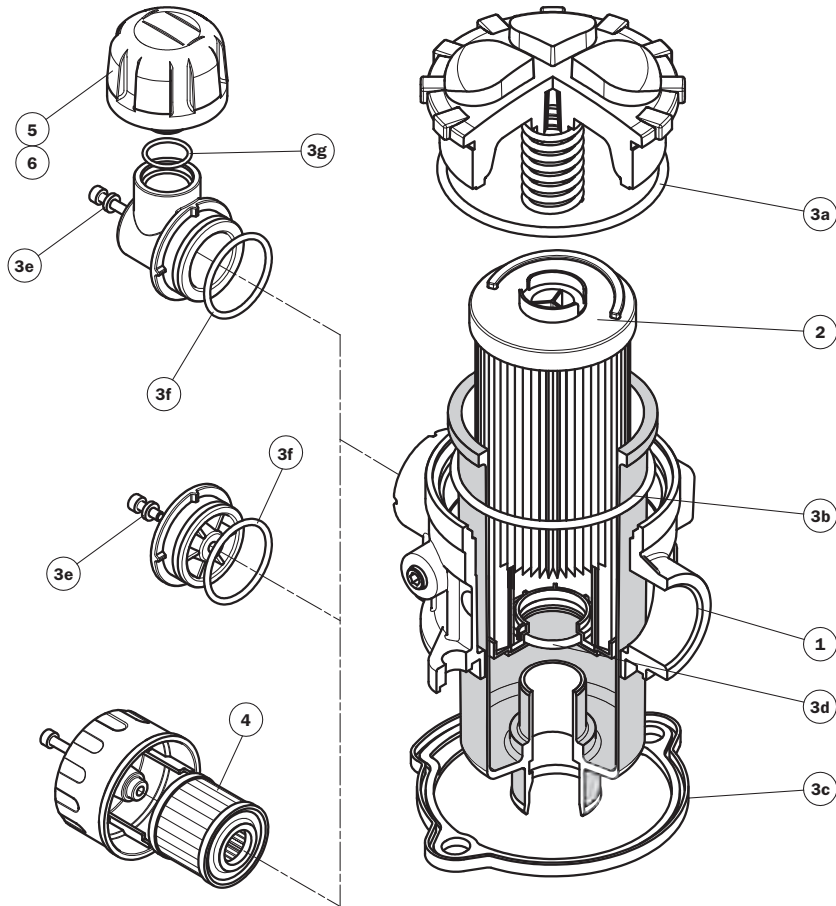
T indicator port
G 1/4" - 1/4" NPT
ON REQUEST

Thread connections A and C

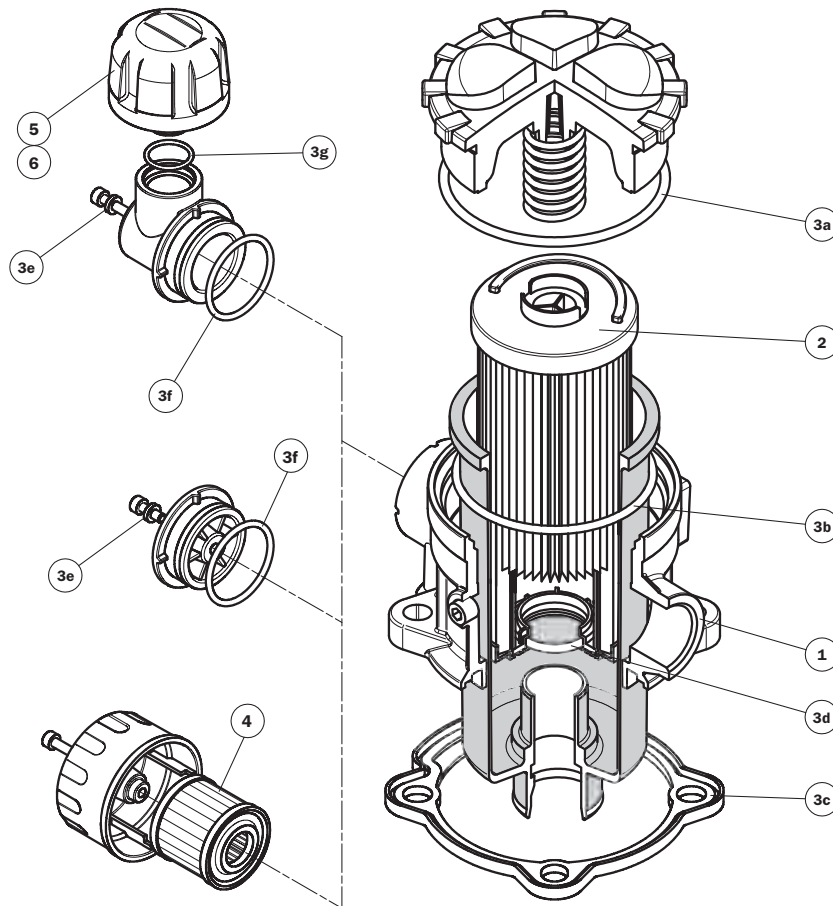
Type	A	C	T
G1	G 3/4"	G 3/4"	G 1/8"
G2	G 1"	G 1"	G 1/8"
G3	G 1 1/4"	G 3/4"	G 1/8"
G4	3/4" NPT	3/4" NPT	1/8" NPT
G5	1" NPT	1" NPT	1/8" NPT
G6	1 1/4" NPT	3/4" NPT	1/8" NPT
G7	SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN	1/8" NPT
G8	SAE 16 - 1 5/16" - 12 UN	SAE 16 - 1 5/16" - 12 UN	1/8" NPT
G9	SAE 20 - 1 5/8" - 12 UN	SAE 12 - 1 1/16" - 12 UN	1/8" NPT

Thread connections A	Thread connections B		
	0	1	2
G1 - G2 - G3	not machined	G 3/8"	G 1/2"
G4 - G5 - G6	not machined	3/8" NPT	1/2" NPT
G7 - G8 - G9	not machined	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF

Spare parts

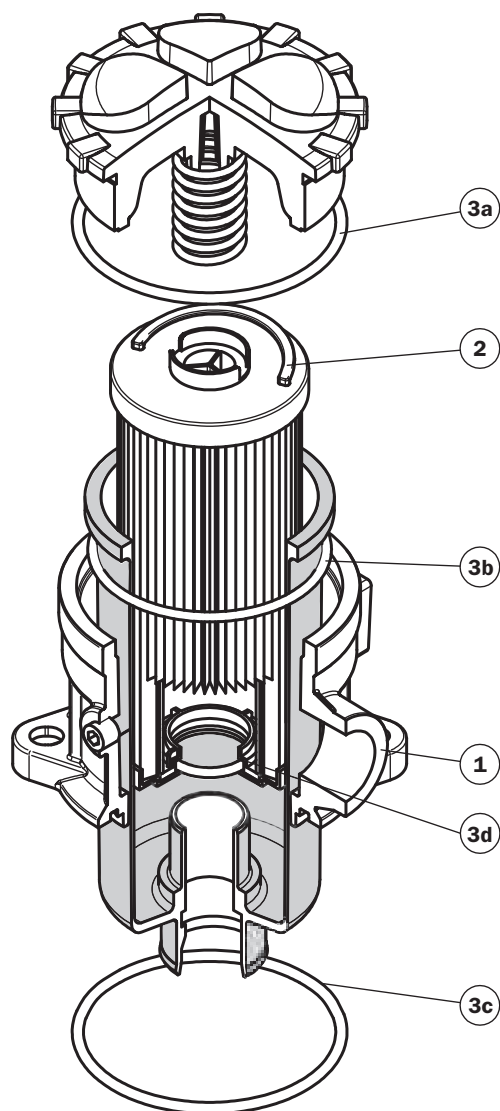


Item	Description	Q.ty	FILTER Series					
			MPT 025		MPT 027		MPT 110	
1	Filter assembly	1	See order table					
2	Filter element	1	See order table					
3	Seal Kit	1	NBR 02050557	FPM 02050558	NBR 02050559	FPM 02050560	NBR 02050561	FPM 02050562
3a	Cover seal	1	O-R Metric Ø 59 x 3		O-R Metric Ø 59 x 3		O-R Metric Ø 90 x 4	
3b	Bowl seal	1	O-R 3200 Ø 50,47 x 2,62		O-R 3200 Ø 50,47 x 2,62		O-R 4312 Ø 78,97 x 3,53	
3c	Head seal	1	01026268	01026298	01026260	01026343	01026351	01026352
3d	Filter element seal	1	Length 1-2	O-R 4087 Ø 21,82 x 3,53	Length 1-2	O-R 4087 Ø 21,82 x 3,53	Length 1-2	O-R 4112 Ø 28,17 x 3,53
			Length 3	O-R 3081 Ø 20,24 x 2,62	Length 3	O-R 3081 Ø 20,24 x 2,62	Length 3-4	O-R 4162 Ø 40,86 x 3,53
3e	Air breather screw seal	1	01026346	01026347	01026346	01026347	01026346	01026347
3f	Plug - Anti-splash seal	1	O-R 130 Ø 22,22 x 2,62		O-R 130 Ø 22,22 x 2,62		O-R 3131 Ø 32,99 x 2,62	
3g	SAP50 seal	1	O-R 2068 Ø 17,17 x 1,78		O-R 2068 Ø 17,17 x 1,78		O-R 2068 Ø 17,17 x 1,78	
4	Air breather filter element "C" version	1	10 µm A3L03		10 µm A3L03		10 µm A5L03	
5	Air breather filter element "D" version	1	10 µm SAP50G3L03A0P01		10 µm SAP50G3L03A0P01		10 µm SAP50G3L03A0P01	
6	Air breather filter element "P" version	1	10 µm SAP50G3L03A1P01		10 µm SAP50G3L03A1P01		10 µm SAP50G3L03A1P01	

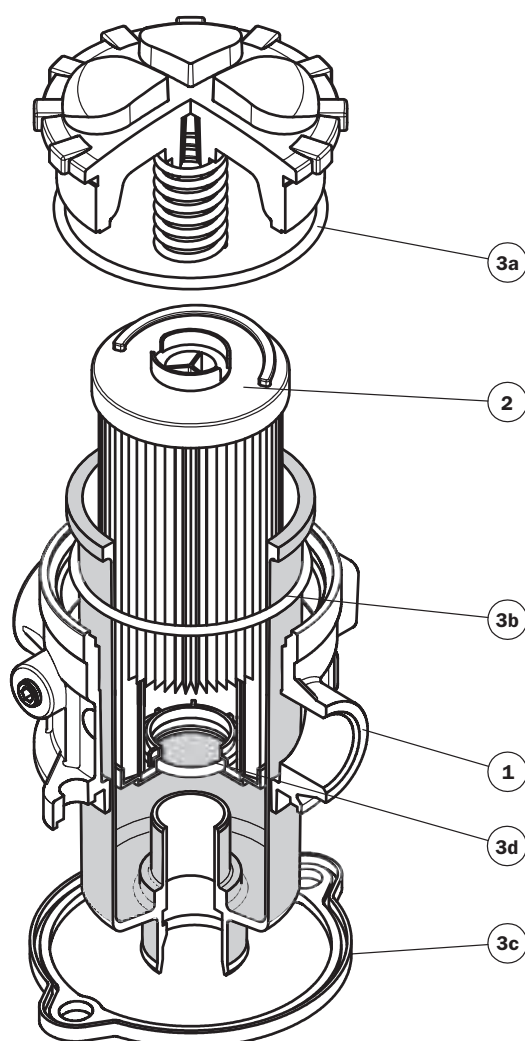


Item	Description	Q.ty	FILTER Series MPT 114	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050580	FPM 02050581
3a	Cover seal	1	O-R Metric Ø 90 x 4	
3b	Bowl seal	1	O-R 4312 Ø 78,97 x 3,53	
3c	Head seal	1	01026371	01026372
3d	Filter element seal	1	Length 1-2 Ø 28,17 x 3,53	O-R 4112
			Length 3-4 Ø 40,86 x 3,53	O-R 4162
3e	Air breather screw seal	1	01026346	01026347
3f	Plug - Anti-splash seal	1	O-R 3131 Ø 32,99 x 2,62	
3g	SAP50 seal	1	O-R 2068 Ø 17,17 x 1,78	
4	Air breather filter element "C" version	1	10 µm A5L03	
5	Air breather filter element "D" version	1	10 µm SAP50G3L03A0P01	
6	Air breather filter element "P" version	1	10 µm SAP50G3L03A1P01	

Spare parts



Item	Description	Q.ty	FILTER Series	
			MPT 101 S / 104 S	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050466	FPM 02050467
3a	Cover seal	1	O-R Metric Ø 90 x 4	
3b	Bowl seal	1	O-R 4312 Ø 78,97 x 3,53	
3c	Head seal	1	O-R Metric Ø 90 x 4	
3d	Filter element seal	1	Length 1-2	O-R 4112 Ø 28,17 x 3,53
			Length 3-4	O-R 4162 Ø 40,86 x 3,53



Item	Description	Q.ty	FILTER Series MPT 120	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050563	FPM 02050564
3a	Cover seal	1	O-R Metric Ø 90 x 4	
3b	Bowl seal	1	O-R 4312 Ø 78,97 x 3,53	
3c	Head seal	1	01026361	01026362
3d	Filter element seal	1	Length 1-2	O-R 4112 Ø 28,17 x 3,53
			Length 3-4	O-R 4162 Ø 40,86 x 3,53

Filter assembly

MPT

	1	2	3	4	5	6	9	10
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example 1: MPT	025	2	D	A	G3	A06	E	P01
Example 2: MPT	104	4	S	A	G1	M60	B	P01

Filter element

MF

	1	2	6	7	8	9	10
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example 1: MF	020	2	A06	H	B	E	P01
Example 2: MF	100	4	M60	N	B		P01

1 - Style

Filter	Filter element
025	020
027	020
101	100
104	100
114	100

2 - Filter length

025	1	2	3	
027	1	2	3	
101	1	2	3	4
104	1	2	3	4
114	1	2	3	4

3 - Air breather

S	Without air breather
C	(1) With air breather 10 µ
D	(1) Anti-splash and SAP50 10 µ air breather
P	(1) Anti-splash, SAP50 10 µ air breather and pressurization 0,5 bar

(1) Excluded MPT 101 - 104

4 - Filter seals & Treatment

A	NBR
V	FPM
W	NBR, Head anodized - filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)
Z	FPM, Head anodized - filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)

5 - Connections

Type	MPT 025-027	MPT 101-104-114
G1	G 3/8"	G 3/4"
G2	G 1/2"	G 1"
G3	G 3/4"	G 1 1/4"
G4	3/8" NPT	3/4" NPT
G5	1/2" NPT	1" NPT
G6	3/4" NPT	1 1/4" NPT
G7	SAE 6 - 9/16" - 18 UNF	SAE 12 - 1 1/16" - 12 UN
G8	SAE 8 - 3/4" - 16 UNF	SAE 16 - 1 5/16" - 12 UN
G9	SAE 12 - 1 1/16" - 12 UN	SAE 20 - 1 5/8" - 12 UN

6 - Filter element

A03	Inorganic microfibre 3 µm	Absolute filtration Inorganic Microfibre βx (c) ≥ 1000
A06	Inorganic microfibre 6 µm	
A10	Inorganic microfibre 10 µm	
A16	Inorganic microfibre 16 µm	
A25	Inorganic microfibre 25 µm	
M25	Wire mesh 25 µm	Nominal Filtration
M60	Wire mesh 60 µm	
M90	Wire mesh 90 µm	
P10	Resin - Impregnated paper	Nominal Filtration
P25	Resin - Impregnated paper	

7 - Δp Filter element

N	Δp 10 bar (only for filter element type Pxx and Mxx)
H	Δp 10 bar (only for filter element type Axx)
W*	Δp 10 bar (only for filter element type Axx and Mxx)

8 - Filter element seals

B	NBR
V	FPM

9 - By-pass valve

E	3 bar
B	1.75 bar (omit in the element code - only for 1.75 bar)

10 - Option

P01	MP Filtri standard
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* Compatible with fluid HFA, HFB, HFC

For Clogging Indicator:
See page 318

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Ordering information MPT 110 - 120

Filter assembly

MPT

	1	2	3	4	5	6	7	10	11
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example 1: MPT	110	2	C	A	G3	2	A06	E	P01
Example 2: MPT	120	3		A	G3	1	P10	B	P01

Filter element

MF

	1	2	7	8	9	10	11
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example 1: MF	100	2	A06	H	B	E	P01
Example 2: MF	100	3	P10	N	B		P01

1 - Style

Filter	Filter element
<input type="checkbox"/> 110	<input type="checkbox"/> 100
<input type="checkbox"/> 120	<input type="checkbox"/> 100

2 - Filter length

<input type="checkbox"/> 110	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
<input type="checkbox"/> 120	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

3 - Air breather (omit for MPT 120)

<input type="checkbox"/> S	Without air breather
<input type="checkbox"/> C	With air breather 10 μ
<input type="checkbox"/> D	Anti-splash and SAP50 10 μ air breather
<input type="checkbox"/> P	Anti-splash and SAP50 10 μ air breather pressurization 0,5 bar

4 - Filter seals & Treatment

<input type="checkbox"/> A	NBR
<input type="checkbox"/> V	FPM
<input type="checkbox"/> W	NBR, Head anodized - filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)
<input type="checkbox"/> Z	FPM, Head anodized - filter element compatible with fluid HFA, HFB, HFC (only for filter element type Axx and Mxx)

5 - Connections A - C

MPT 110 Connections A MPT 120 Connections A and C

Type	A	C
G1	G 3/4"	G 3/4"
G2	G 1"	G 1"
G3	G 1 1/4"	G 3/4"
G4	3/4" NPT	3/4" NPT
G5	1" NPT	1" NPT
G6	1 1/4" NPT	3/4" NPT
G7	SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN
G8	SAE 16 - 1 5/16" - 12 UN	SAE 16 - 1 5/16" - 12 UN
G9	SAE 20 - 1 5/8" - 12 UN	SAE 12 - 1 1/16" - 12 UN

6 - Connections B

Type	Connections A		
	G1 - G2 - G3	G4 - G5 - G6	G7 - G8 - G9
0	not machined	not machined	not machined
1	G 3/8"	3/8" NPT	SAE 6 - 9/16" - 18 UNF
2	G 1/2"	1/2" NPT	SAE 8 - 3/4" - 16 UNF

7 - Filter element

<input type="checkbox"/> A03	Inorganic microfibre 3 μ m	Absolute filtration Inorganic Microfibre $\beta_x(c) \geq 1000$
<input type="checkbox"/> A06	Inorganic microfibre 6 μ m	
<input type="checkbox"/> A10	Inorganic microfibre 10 μ m	
<input type="checkbox"/> A16	Inorganic microfibre 16 μ m	
<input type="checkbox"/> A25	Inorganic microfibre 25 μ m	
<input type="checkbox"/> M25	Wire mesh 25 μ m	Nominal Filtration
<input type="checkbox"/> M60	Wire mesh 60 μ m	
<input type="checkbox"/> M90	Wire mesh 90 μ m	
<input type="checkbox"/> P10	Resin - Impregnated paper	Nominal Filtration
<input type="checkbox"/> P25	Resin - Impregnated paper	

8 - Δp Filter element

<input type="checkbox"/> N	Δp 10 bar (only for filter element type Pxx and Mxx)
<input type="checkbox"/> H	Δp 10 bar (only for filter element type Axx)
<input type="checkbox"/> W*	Δp 10 bar (only for filter element type Axx and Mxx)

9 - Filter element seals

<input type="checkbox"/> B	NBR
<input type="checkbox"/> V	FPM

10 - By-pass valve

<input type="checkbox"/> E	3 bar
<input type="checkbox"/> B	1.75 bar (omit in the element code - only for 1.75 bar)

11 - Option

<input type="checkbox"/> P01	MP Filtri standard
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* Compatible with fluid HFA, HFB, HFC

For Clogging Indicator:
See page 318

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