

MPT

Multifunction

Multiport



Maximum pressure 8 bar
Flow rates to 300 l/min

Filter housing (Materials)

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

Pressure

- Working pressure: 8 bar

Temperature

- From -25 °C to +110 °C

Bypass valve

- Opening pressure 1.75 bar ±10%
- Opening pressure 3 bar ±10%

Δp Elements type

- Series N and H elements: 10 bar
- Oil flow from outside to inside.

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

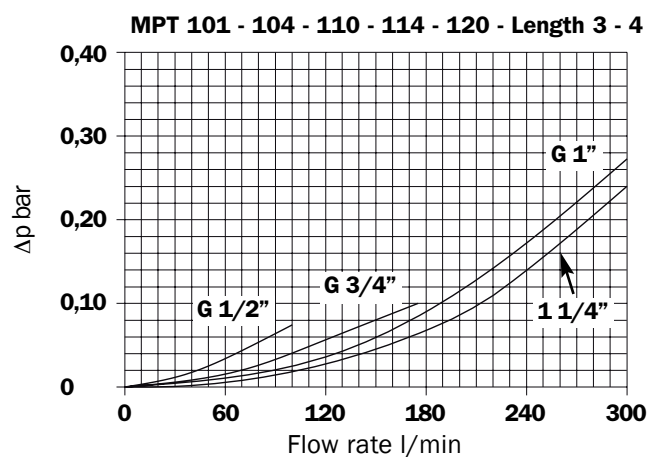
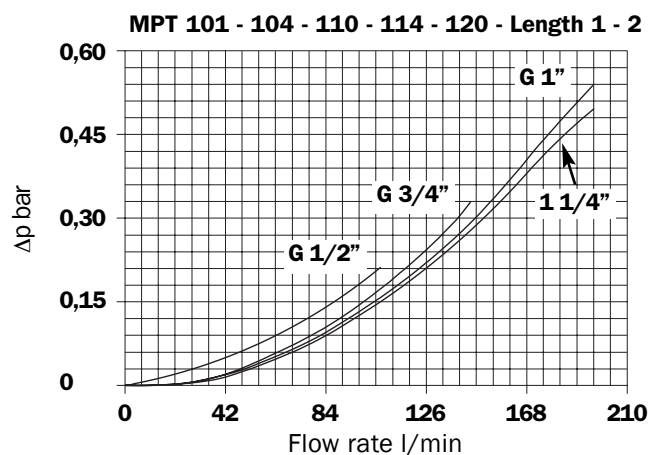
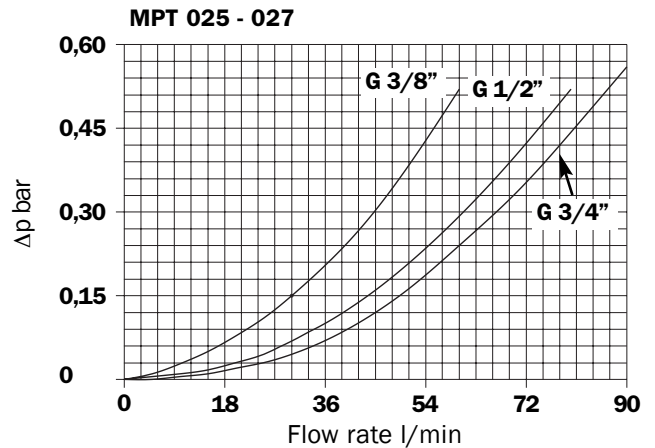
Compatibility (to ISO 2943)

- Housings compatible with:
Mineral oils, synthetic fluids.
Aqueous emulsions, water and glycol (series W required).
- The filter elements are compatible with:
Mineral oils, synthetic fluids.
Aqueous emulsions, water and glycol (series W required).
- NBR seals series A, compatible with:
Mineral oils, synthetic fluids.
Aqueous emulsions, water and glycol.
- FPM seals V series, compatible with:
Synthetic fluids type HS-HFDR-HFDS-HFDU

Filter housings Δp pressure drop

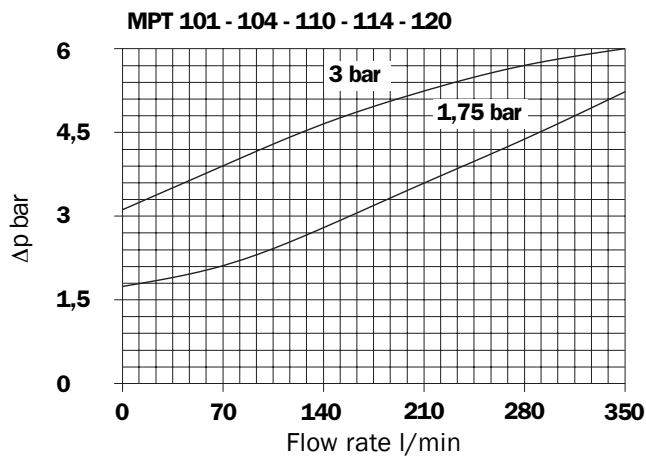
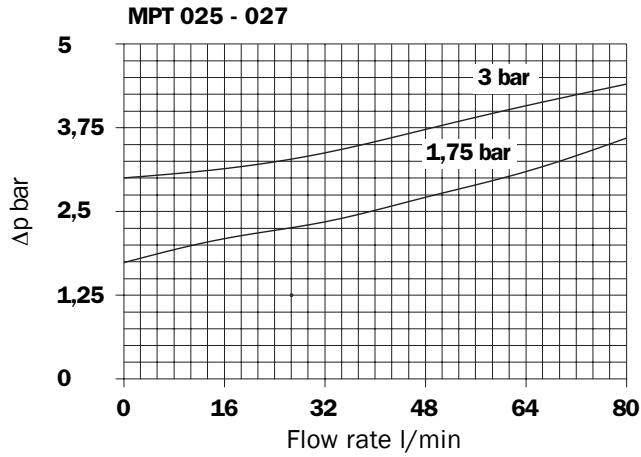
The curves are plotted utilising mineral oil with density of 0.86 kg/dm³ to ISO 3968.

Δp varies proportionally with density.



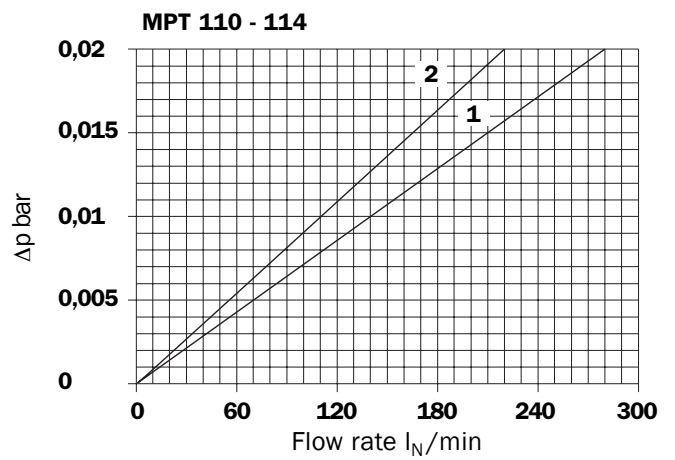
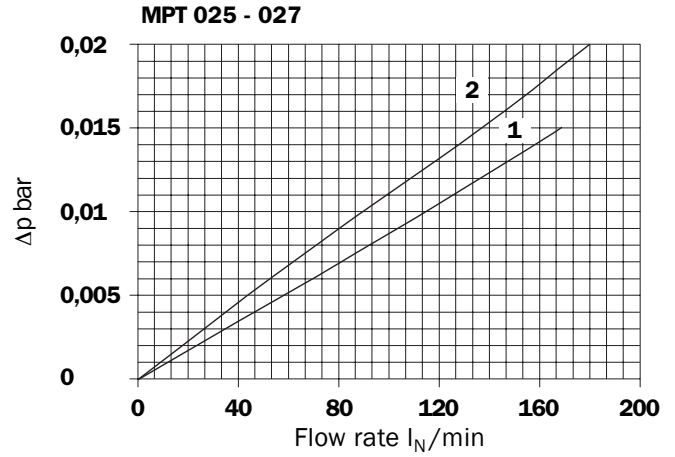
Valves

Bypass valve pressure drop



Air breather

Pressure drop



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

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	
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 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



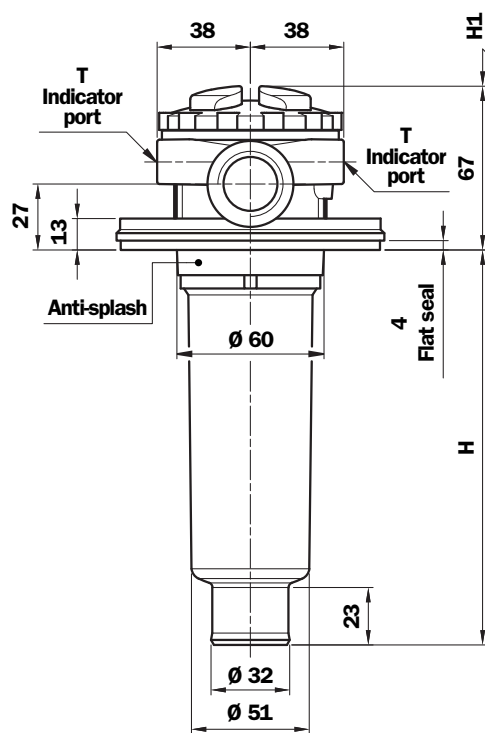
Multifunction
Air breather standard
Indicator Port



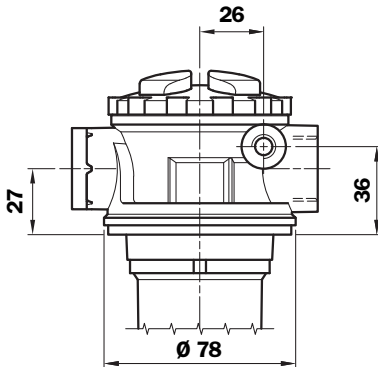
Multifunction
Air breather anti-splash & pressurized
Double Indicator Port

Dimensions

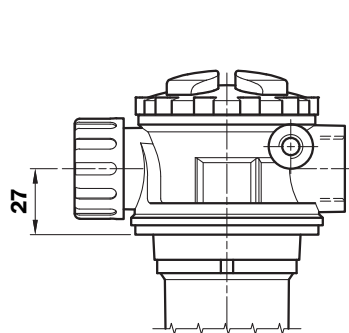
MPT 025



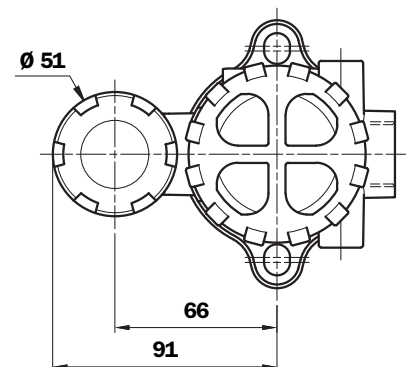
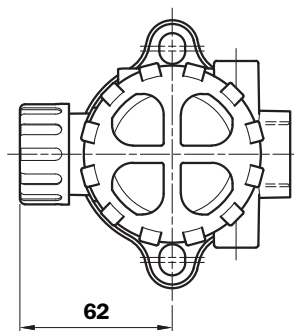
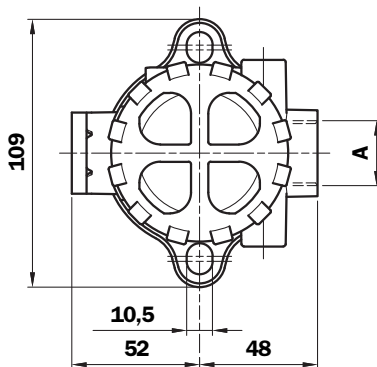
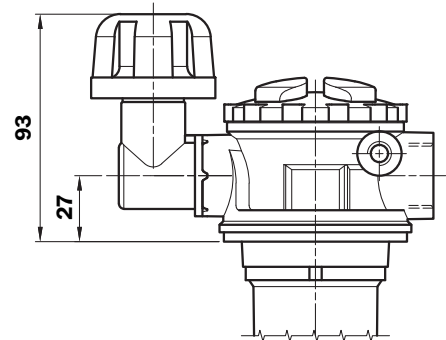
Version "S"
Without air breather



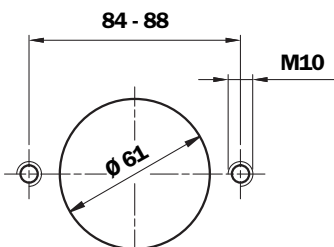
Version "C"
With air breather



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



Holes on the tank

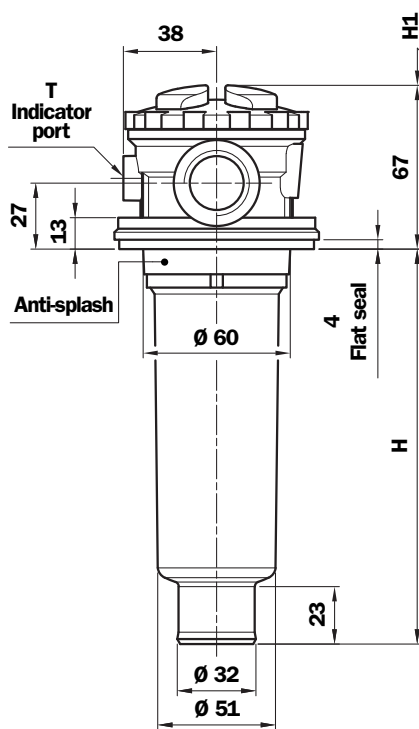


Thread connections

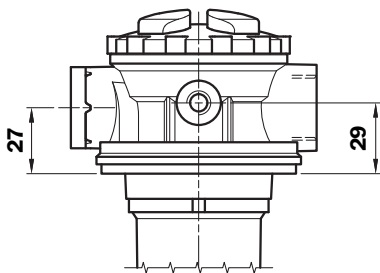
Type	A	T
G1	G 3/8"	G 1/8"
G2	G 1/2"	G 1/8"
G3	G 3/4"	G 1/8"
G4	3/8" NPT	1/8" NPT
G5	1/2" NPT	1/8" NPT
G6	3/4" NPT	1/8" NPT
G7	SAE 6 - 9/16" - 18 UNF	1/8" NPT
G8	SAE 8 - 3/4" - 16 UNF	1/8" NPT
G9	SAE 12 - 1 1/16" - 12 UN	1/8" NPT

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

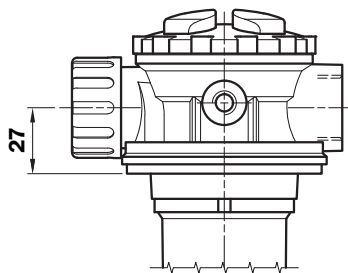
MPT 027



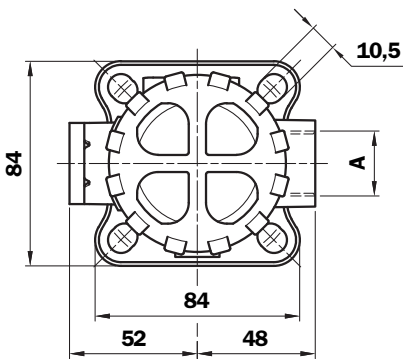
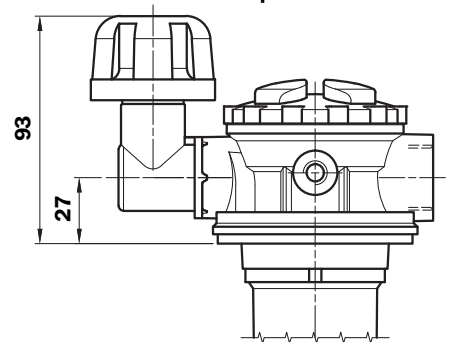
Version "S"
Without air breather



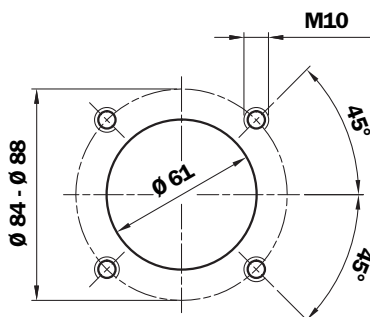
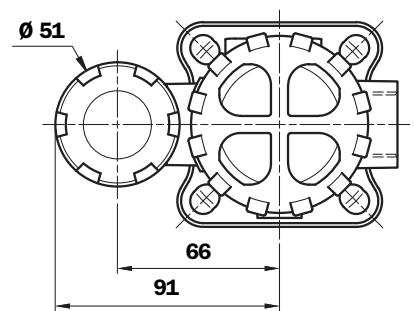
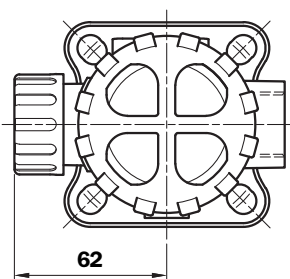
Version "C"
With air breather



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



Holes on the tank



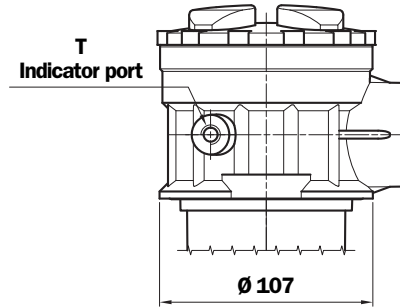
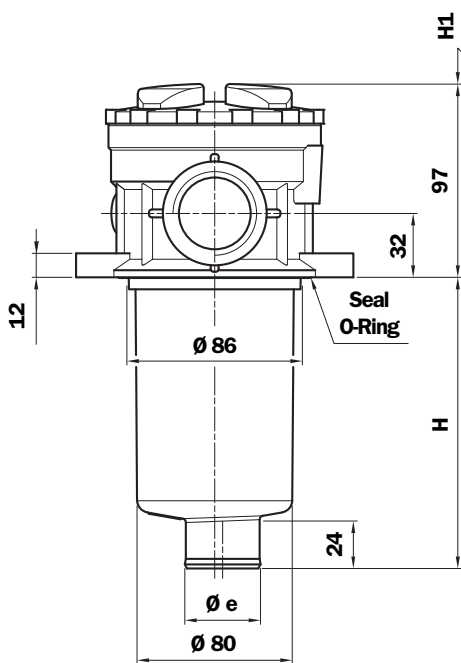
Thread connections

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

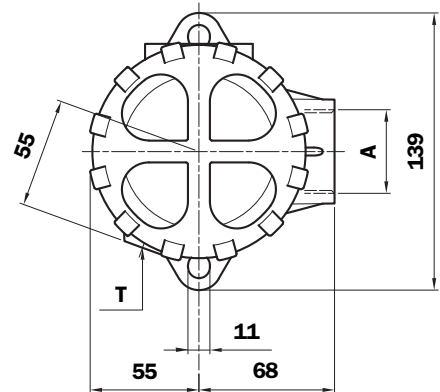
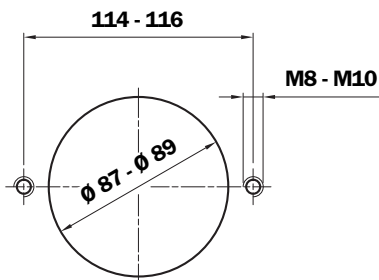
Filter Length	H mm	H1 mm
1	99	130
2	163	195
3	202	230

MPT 101

Without air breather



Holes on the tank



Thread connections

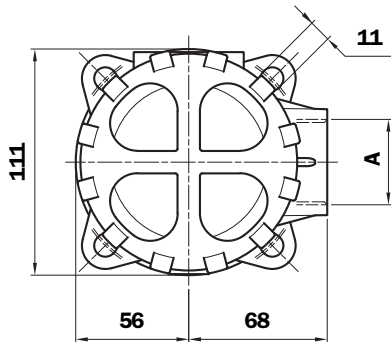
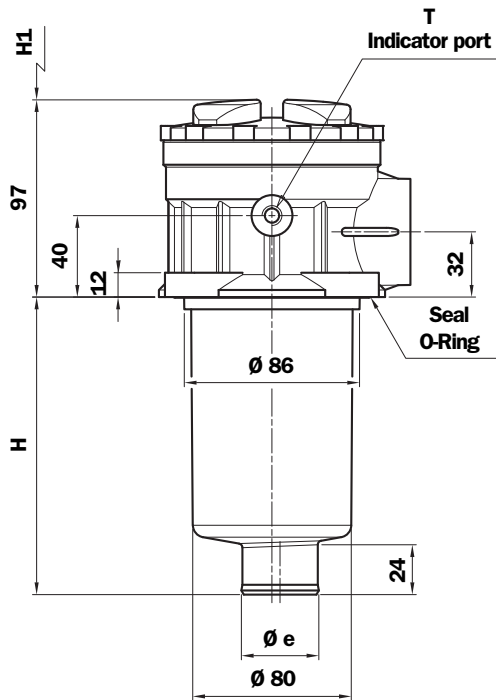
Type	A	T
G1	G 3/4"	G 1/8"
G2	G 1"	G 1/8"
G3	G 1 1/4"	G 1/8"
G4	3/4" NPT	1/8" NPT
G5	1" NPT	1/8" NPT
G6	1 1/4" NPT	1/8" NPT
G7	SAE 12 - 1 1/16" - 12 UN	1/8" NPT
G8	SAE 16 - 1 5/16" - 12 UN	1/8" NPT
G9	SAE 20 - 1 5/8" - 12 UN	1/8" NPT

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

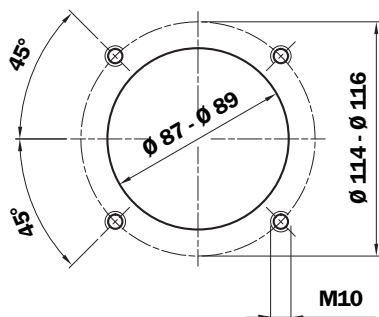
Filter Length	H mm	H1 mm	Ø e mm
1	99	120	38
2	146	170	38
3	224	250	46,5
4	326	350	46,5

MPT 104

Without air breather



Holes on the tank



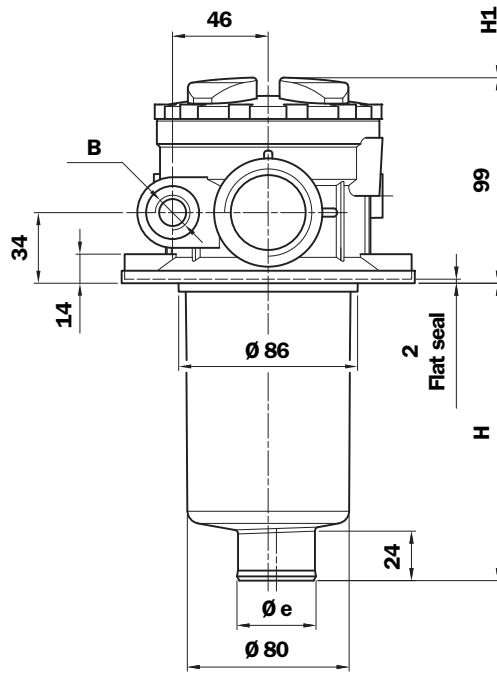
T indicator port
G 1/4" - 1/4" NPT
ON REQUEST

Thread connections

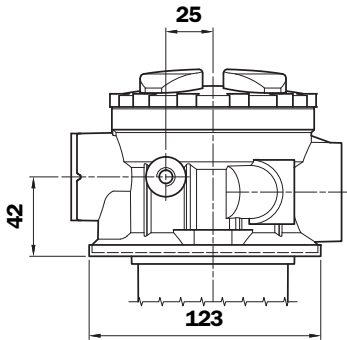
Type	A	T
G1	G 3/4"	G 1/8"
G2	G 1"	G 1/8"
G3	G 1 1/4"	G 1/8"
G4	3/4" NPT	1/8" NPT
G5	1" NPT	1/8" NPT
G6	1 1/4" NPT	1/8" NPT
G7	SAE 12-1 1/16" - 12 UN	1/8" NPT
G8	SAE 16-1 5/16" - 12 UN	1/8" NPT
G9	SAE 20-1 5/8" - 12 UN	1/8" NPT

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

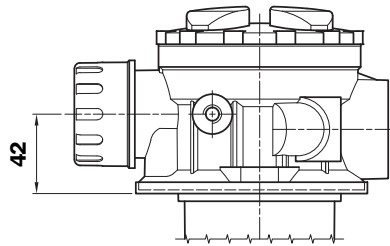
MPT 110



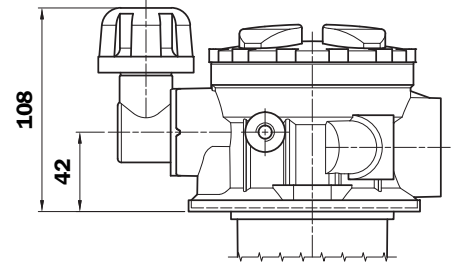
Version "S"
Without air breather



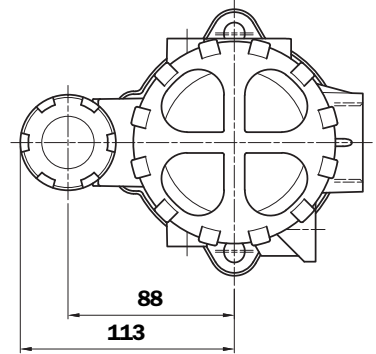
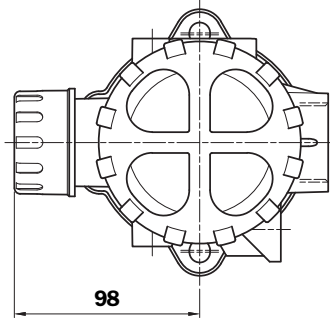
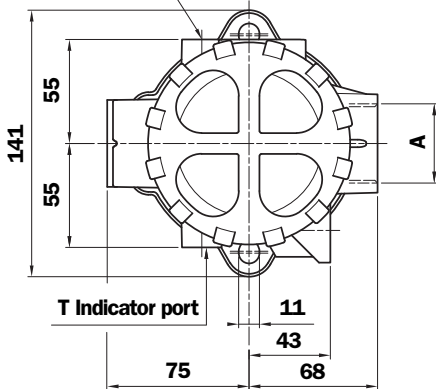
Version "C"
With air breather



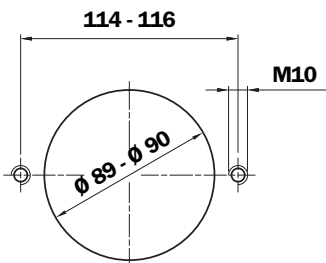
Version "D" and "P"
Anti-splash and SAP50



T Indicator port



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

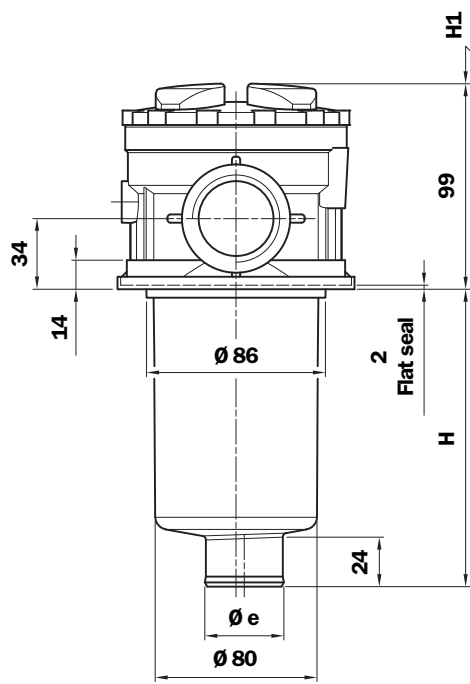
T indicator port
G 1/4" - 1/4" NPT
ON REQUEST

Thread connections A	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

Thread connections A

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

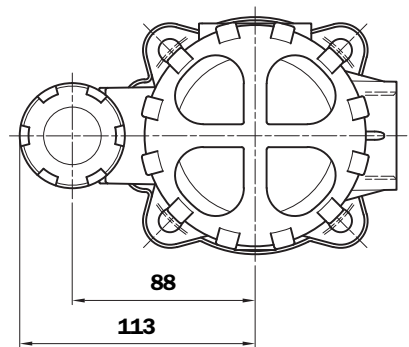
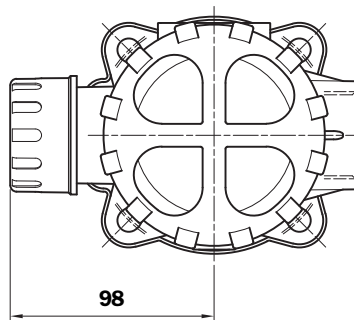
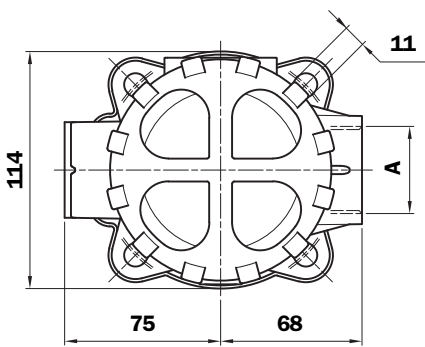
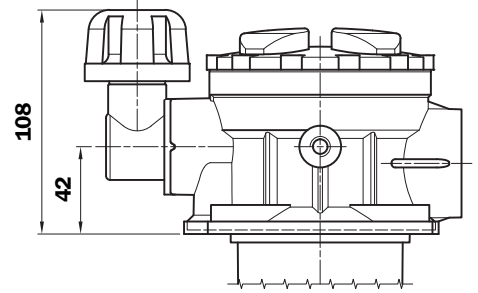
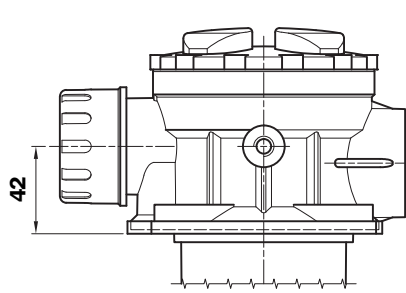
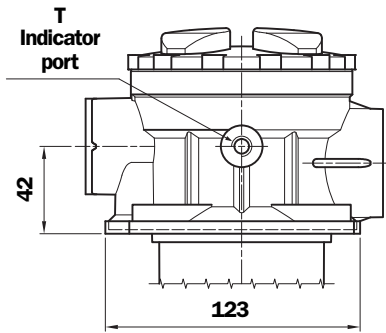
MPT 114



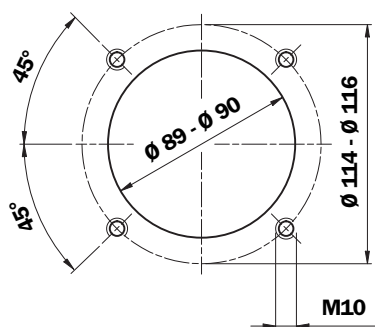
Version "S"
Without air breather

Version "C"
With air breather

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



Holes on the tank



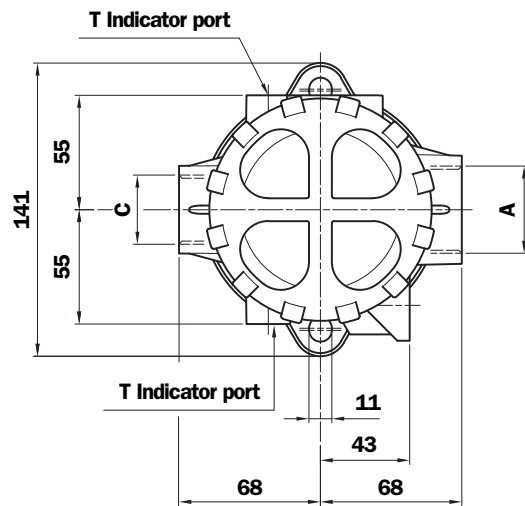
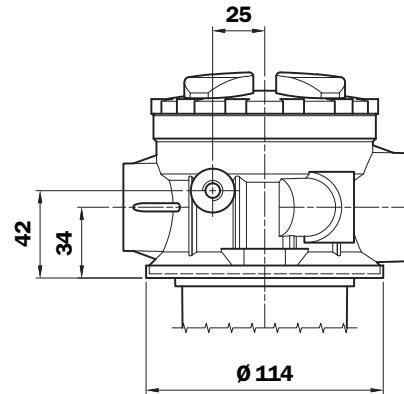
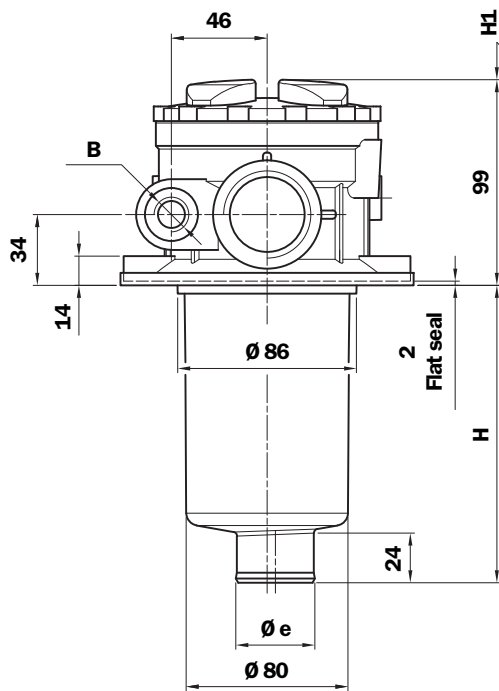
Filter Length	H mm	H1 mm	Ø e mm
1	97	120	38
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3	222	250	46,5
4	324	350	46,5

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

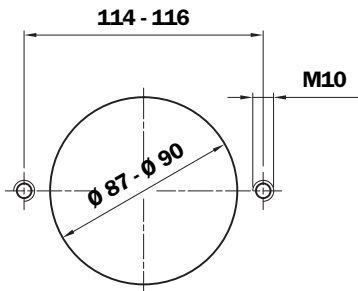
Thread connections A

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 120



Holes on the tank



Thread connections A and C

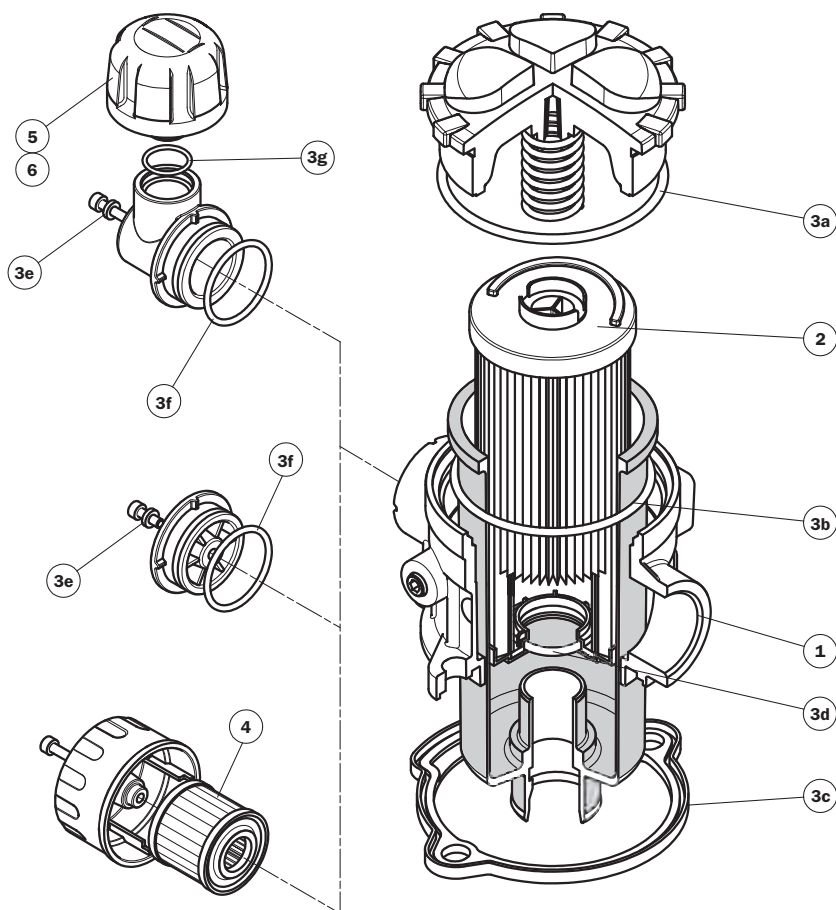
Type	A	C	T
G1	G 3/4"	G 3/4"	G 1/8"
G2	G 1"	G 1"	G 1/8"
G3	G 1 1/4"	G 3/4"	G 1/8"
G4	3/4" NPT	3/4" NPT	1/8" NPT
G5	1" NPT	1" NPT	1/8" NPT
G6	1 1/4" NPT	3/4" NPT	1/8" NPT
G7	SAE 12 - 1 1/16" - 12 UN	SAE 12 - 1 1/16" - 12 UN	1/8" NPT
G8	SAE 16 - 1 5/16" - 12 UN	SAE 16 - 1 5/16" - 12 UN	1/8" NPT
G9	SAE 20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

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

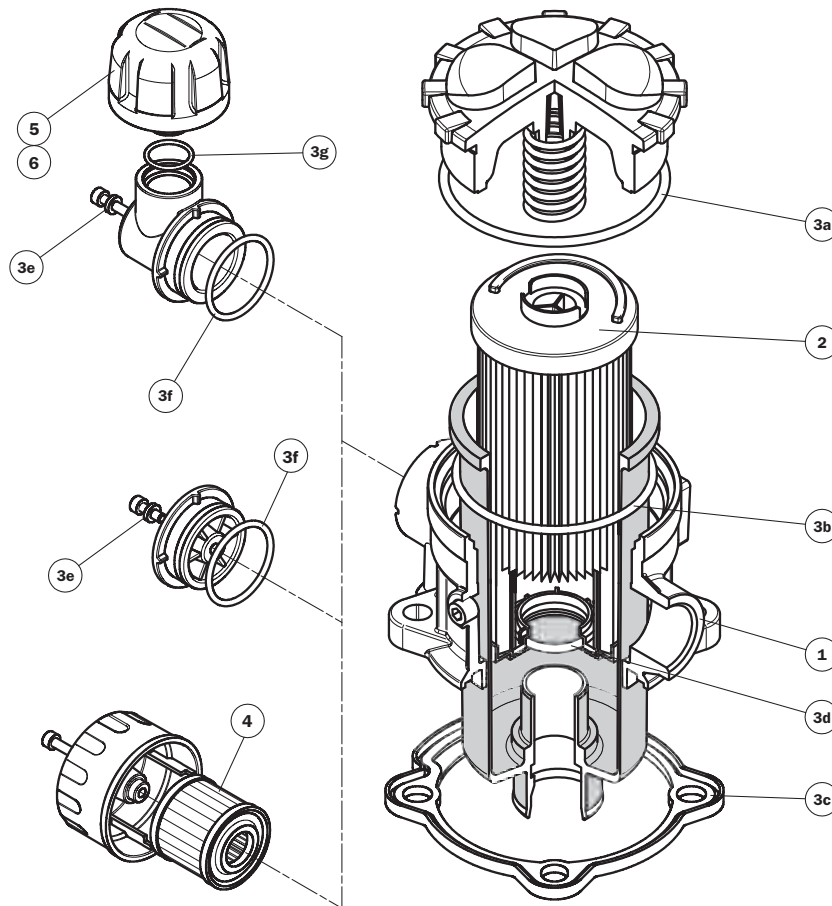
Thread connections A	Thread connections B		
	0	1	2
G1 - G2 - G3	not machined	G 3/8"	G 1/2"
G4 - G5 - G6	not machined	3/8" NPT	1/2" NPT
G7 - G8 - G9	not machined	SAE 6 - 9/16" - 18 UNF	SAE 8 - 3/4" - 16 UNF

Spare parts



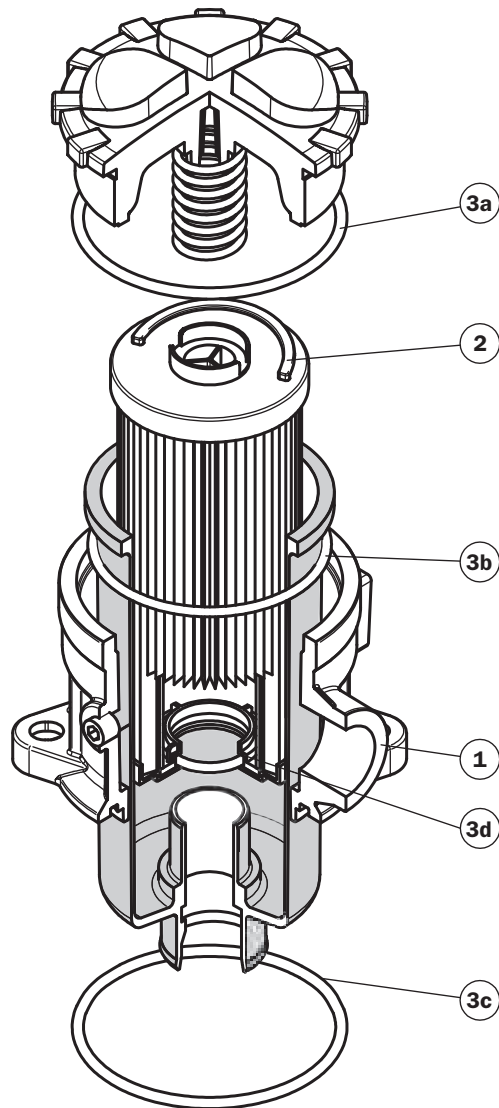
Item	Description	Q.ty	FILTER Series					
			MPT 025		MPT 027		MPT 110	
1	Filter assembly	1	See order table					
2	Filter element	1	See order table					
3	Seal Kit	1	NBR 02050557	FPM 02050558	NBR 02050559	FPM 02050560	NBR 02050561	FPM 02050562
3a	Cover seal	1	O-R Metric Ø 59 x 3		O-R Metric Ø 59 x 3		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 micron A3L03		10 micron A3L03		10 micron A3L03	
5	Air breather filter element "D" version	1	10 micron SAP50G3L03A0P01		10 micron SAP50G3L03A0P01		10 micron SAP50G3L03A0P01	
6	Air breather filter element "P" version	1	10 micron SAP50G3L03A1P01		10 micron SAP50G3L03A1P01		10 micron SAP50G3L03A1P01	

Spare parts

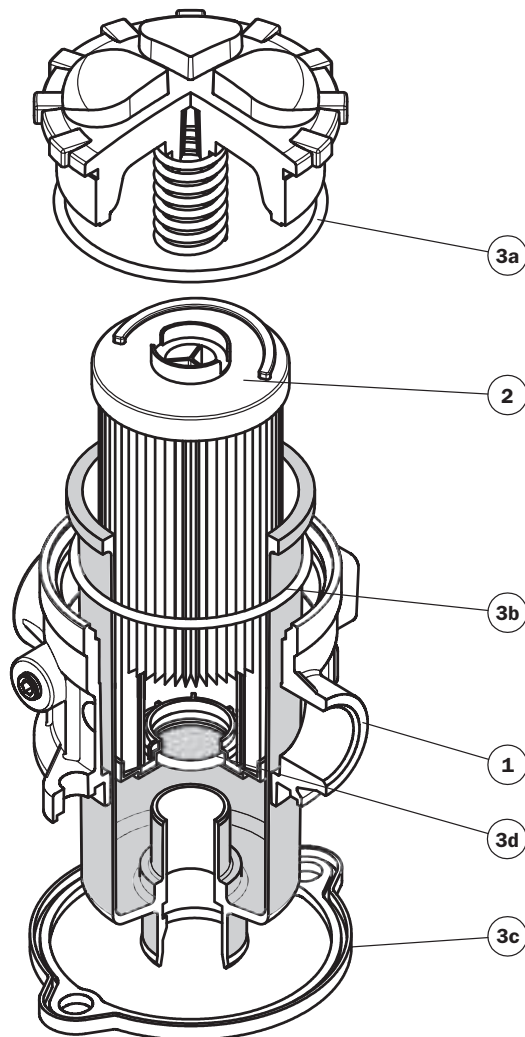


Item	Description	Q.ty	FILTER Series MPT 114	
1	Filter assembly	1	See order table	
2	Filter element	1	See order table	
3	Seal Kit	1	NBR 02050580	FPM 02050581
3a	Cover seal	1	O-R Metric Ø 90 x 4	
3b	Bowl seal	1	O-R 4312 Ø 78,97 x 3,53	
3c	Head seal	1	01026371	01026372
3d	Filter element seal	1	Length 1-2 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 micron A3L03	
5	Air breather filter element "D" version	1	10 micron SAP50G3L03A0P01	
6	Air breather filter element "P" version	1	10 micron 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

Ordering information MPT 025-027-101-104-114

Filter assembly

MPT

	1	2	3	4	5	6	9	10
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
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 μ	Absolute filtration $\beta_x(c) \geq 1000$
A06	Inorganic microfibre 6 μ	
A10	Inorganic microfibre 10 μ	
A16	Inorganic microfibre 16 μ	
A25	Inorganic microfibre 25 μ	
M25	Wire mesh	Nominal Filtration
M60	Wire mesh	
M90	Wire mesh	
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

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Ordering information MPT 110-120

Filter assembly

MPT

	1	2	3	4	5	6	7	10	11
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
Example 1: MF	100	2	A06	H	B	E	P01
Example 2: MF	100	3	P10	N	B		P01

1 - Style

Filter	Filter element
110	100
120	100

2 - Filter length

110	1	2	3	4
120	1	2	3	4

3 - Air breather (omit for MPT 120)

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

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 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

A03	Inorganic microfibre 3 μ	Absolute filtration $\delta x (c) \geq 1000$
A06	Inorganic microfibre 6 μ	
A10	Inorganic microfibre 10 μ	
A16	Inorganic microfibre 16 μ	
A25	Inorganic microfibre 25 μ	
M25	Wire mesh	Nominal Filtration
M60	Wire mesh	
M90	Wire mesh	
P10	Resin impregnated paper	Nominal Filtration
P25	Resin impregnated paper	

8 - 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)

9 - Filter element seals

B	NBR
V	FPM

10 - By-pass valve

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

11 - Option

P01	MP Filtri standard
------------	--------------------

* Compatible with fluid HFA, HFB, HFC

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