

MPT series

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



Description

Technical data

Return filter

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

MPT is a range of return filters with integrated breather filter, for protection of the reservoir against the system contamination.

They are directly fixed to the reservoir, in immersed or semi-immersed position.

The filter output must be always immersed into the fluid to avoid aeration or foam generation into the reservoir.

Available features:

- Female threaded connections up to 1 1/4", for a maximum flow rate of 300 l/min
- Multiple connections, to connect several return lines or drains
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve integrated into the filter element, to relieve excessive pressure drop across the filter media
- 2, 3 or 6 fixing holes for installation, to suit a variety of reservoir surfaces
- O-ring or Flat Seal to suit a variety of reservoir surfaces
- Screw-in cover with a special shape, to allow the filter element replacement without the use of specific tools
- Oil dipstick, to easily check the level of the fluid into the reservoir (sold as separate item)
- Extension tube, to be used in deep reservoirs (sold as separate item)
- Diffuser, to reduce the risk of aeration, foaming and noise (sold as separate item)
- Integrated breather filter, to clean the air that moves into the reservoir as result of the oil level fluctuation
- Integrated breather filter with pressurization valve, to clean the air that moves into the reservoir as result of the oil level fluctuation and to guarantee the pressurization into the reservoir
- Visual, electrical and electronic clogging indicators

Common applications:

- Light industrial equipment
- Mobile application

Filter housing materials

- Head: Aluminium
- Cover: Polyamide
- Bowl: Polyamide

Bypass valve

- Opening pressure 175 kPa (1.75 bar) $\pm 10\%$
- Opening pressure 300 kPa (3 bar) $\pm 10\%$

Δp element 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

Temperature

From -25 °C to +110 °C

Note

MPT filters are provided for vertical mounting



Weights [kg] and volumes [dm³]

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

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

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

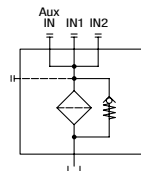
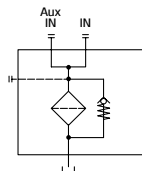
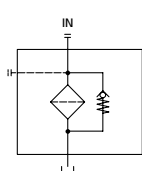
The reference fluid has a kinematic viscosity of 30 mm²/s (cSt) and a density of 0.86 kg/dm³.

For different pressure drop or fluid viscosity we recommend to use our selection software available on www.mpfiltri.com.

You can also calculate the right size using the formulas present on the FILTER SIZING paragraph at the beginning of the full catalogue or at the beginning of the filter family brochure. Please, contact our Sales Department for further additional information.

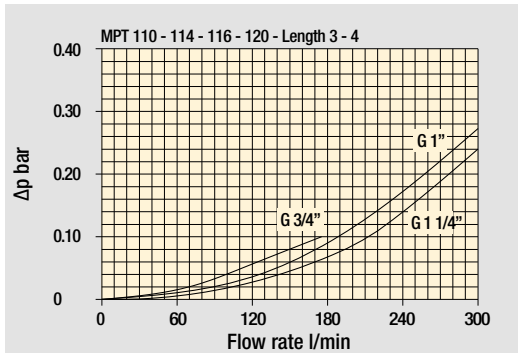
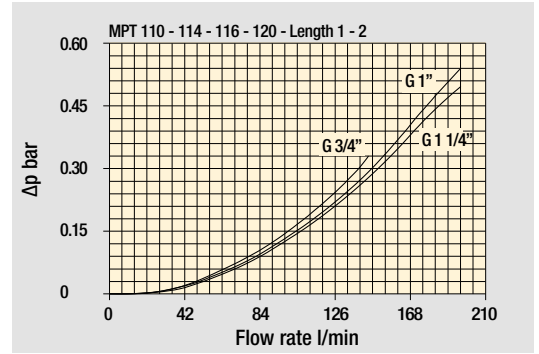
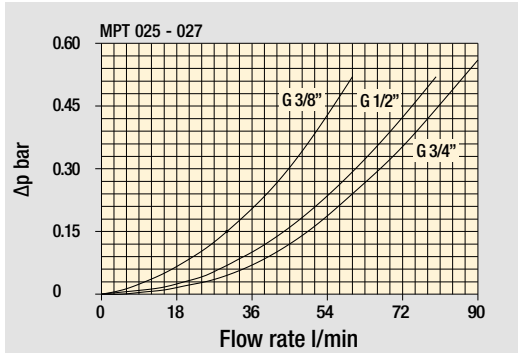
Hydraulic symbols

| Filter series | Style 1 connection | Style 2 connections | Style 3 connections |
|----------------|--------------------|---------------------|---------------------|
| MPT 025 | • | - | - |
| MPT 027 | • | - | - |
| MPT 110 | - | • | - |
| MPT 114 | • | - | - |
| MPT 116 | • | - | - |
| MPT 120 | - | - | • |

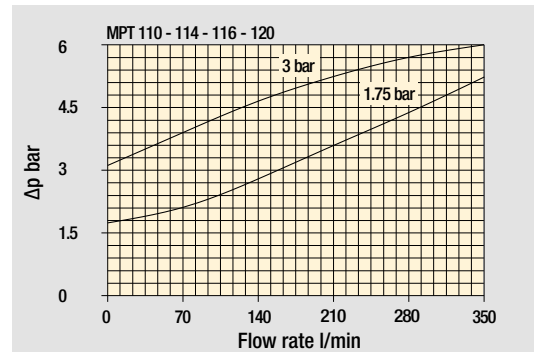
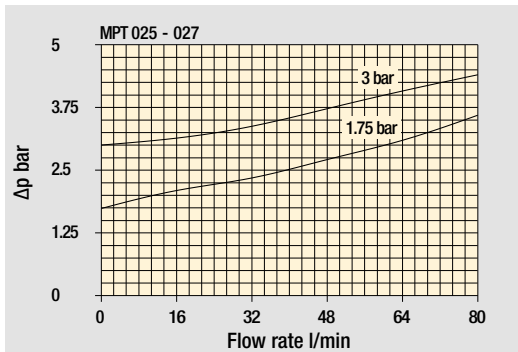


Pressure drop

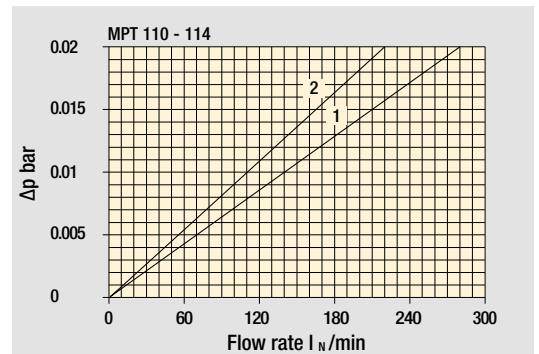
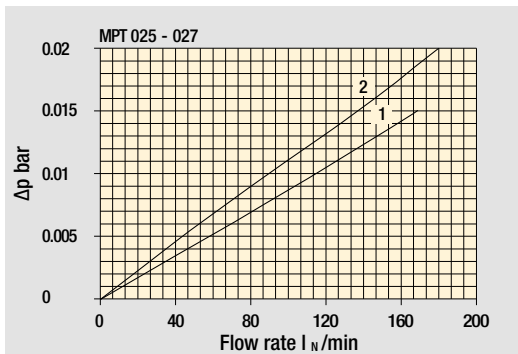
Filter housings Δp pressure drop



Bypass valve pressure drop



Air breather pressure drop







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

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

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

Multiport - Multifunction

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

MPT 120

Triple IN port
Option: double drain port



MPT MPT025 - MPT027

Designation & Ordering code

COMPLETE FILTER

| | | | | | | | | | | | | | |
|---|---------------|--|--|--------------------------|---|-------------------------------|---|----|-----|---------------------|-----|--------------------|-----|
| Series and size | | Configuration example 1: | | MPT025 | 1 | S | A | G3 | A10 | E | P01 | | |
| MPT025 | MPT027 | Filter element with standard spigot | | Configuration example 2: | | MPT027 | 3 | C | W | G6 | A03 | B | P01 |
| Length | | | | | | | | | | | | | |
| 1 | | 2 | | 3 | | | | | | | | | |
| Air breather | | | | | | | | | | | | | |
| S | | Without air breather | | | | | | | | | | | |
| C | | With air breather 10 µm | | | | | | | | | | | |
| D | | With anti-splash and air breather SAP050 10 µm | | | | | | | | | | | |
| P | | With anti-splash and air breather SAP050 10 µm, pressurization 0.5 bar | | | | | | | | | | | |
| Seals and treatments | | | | | | | | | | | | | |
| | | Filtration rating | | | | | | | | | | | |
| | | Axx | | Mxx | | Pxx | | | | | | | |
| A | | NBR | | • | | • | | • | | | | | |
| V | | FPM | | • | | • | | • | | | | | |
| W | | NBR head anodized | | • | | • | | - | | | | | |
| Z | | FPM head anodized | | • | | • | | - | | | | | |
| Connections | | | | | | | | | | | | | |
| G1 | | G 3/8" | | G6 | | 3/4" NPT | | | | | | | |
| G2 | | G 1/2" | | G7 | | SAE 6 - 9/16" - 18 UNF | | | | | | | |
| G3 | | G 3/4" | | G8 | | SAE 8 - 3/4" - 16 UNF | | | | | | | |
| G4 | | 3/8" NPT | | G9 | | SAE 12 - 1 1/16" - 12 UN | | | | | | | |
| G5 | | 1/2" NPT | | | | | | | | | | | |
| Filtration rating (filter media) | | | | | | | | | | | | | |
| A03 | | Inorganic microfiber 3 µm | | M25 | | Wire mesh 25 µm | | | | | | | |
| A06 | | Inorganic microfiber 6 µm | | M60 | | Wire mesh 60 µm | | | | | | | |
| A10 | | Inorganic microfiber 10 µm | | M90 | | Wire mesh 90 µm | | | | | | | |
| A16 | | Inorganic microfiber 16 µm | | P10 | | Resin impregnated paper 10 µm | | | | | | | |
| A25 | | Inorganic microfiber 25 µm | | P25 | | Resin impregnated paper 25 µm | | | | | | | |
| | | | | | | | | | | Bypass valve | | Execution | |
| | | | | | | | | | | E | | P01 | |
| | | | | | | | | | | 3 bar | | MP Filtri standard | |
| | | | | | | | | | | B | | Pxx | |
| | | | | | | | | | | 1.75 bar | | Customized | |

FILTER ELEMENT

| | | | | | | | | | | | |
|---|-------------------------------------|----------------------------|--------------------------|------------|-------|-------------------------------|-----|---|---|---------------------|--|
| Element series and size | | Configuration example 1: | | MF020 | 1 | A10 | H | B | E | P01 | |
| MF020 | Filter element with standard spigot | | Configuration example 2: | | MF020 | 3 | A03 | N | B | P01 | |
| Element length | | | | | | | | | | | |
| 1 | | 2 | | 3 | | | | | | | |
| Filtration rating (filter media) | | | | | | | | | | | |
| A03 | | Inorganic microfiber 3 µm | | M25 | | Wire mesh 25 µm | | | | | |
| A06 | | Inorganic microfiber 6 µm | | M60 | | Wire mesh 60 µm | | | | | |
| A10 | | Inorganic microfiber 10 µm | | M90 | | Wire mesh 90 µm | | | | | |
| A16 | | Inorganic microfiber 16 µm | | P10 | | Resin impregnated paper 10 µm | | | | | |
| A25 | | Inorganic microfiber 25 µm | | P25 | | Resin impregnated paper 25 µm | | | | | |
| Element Δp | | | | | | | | | | | |
| | | Filter media | | | | | | | | | |
| | | Axx | | Mxx | | Pxx | | | | | |
| N | | 10 bar | | - | | • | | • | | | |
| H | | 10 bar | | • | | - | | - | | | |
| | | | | | | | | | | Seals | |
| | | | | | | | | | | B | |
| | | | | | | | | | | NBR | |
| | | | | | | | | | | V | |
| | | | | | | | | | | FPM | |
| | | | | | | | | | | Bypass valve | |
| | | | | | | | | | | E | |
| | | | | | | | | | | 3 bar | |
| | | | | | | | | | | Pxx | |
| | | | | | | | | | | 1.75 bar | |
| | | | | | | | | | | Execution | |
| | | | | | | | | | | P01 | |
| | | | | | | | | | | MP Filtri standard | |
| | | | | | | | | | | Pxx | |
| | | | | | | | | | | Customized | |

CLOGGING INDICATORS

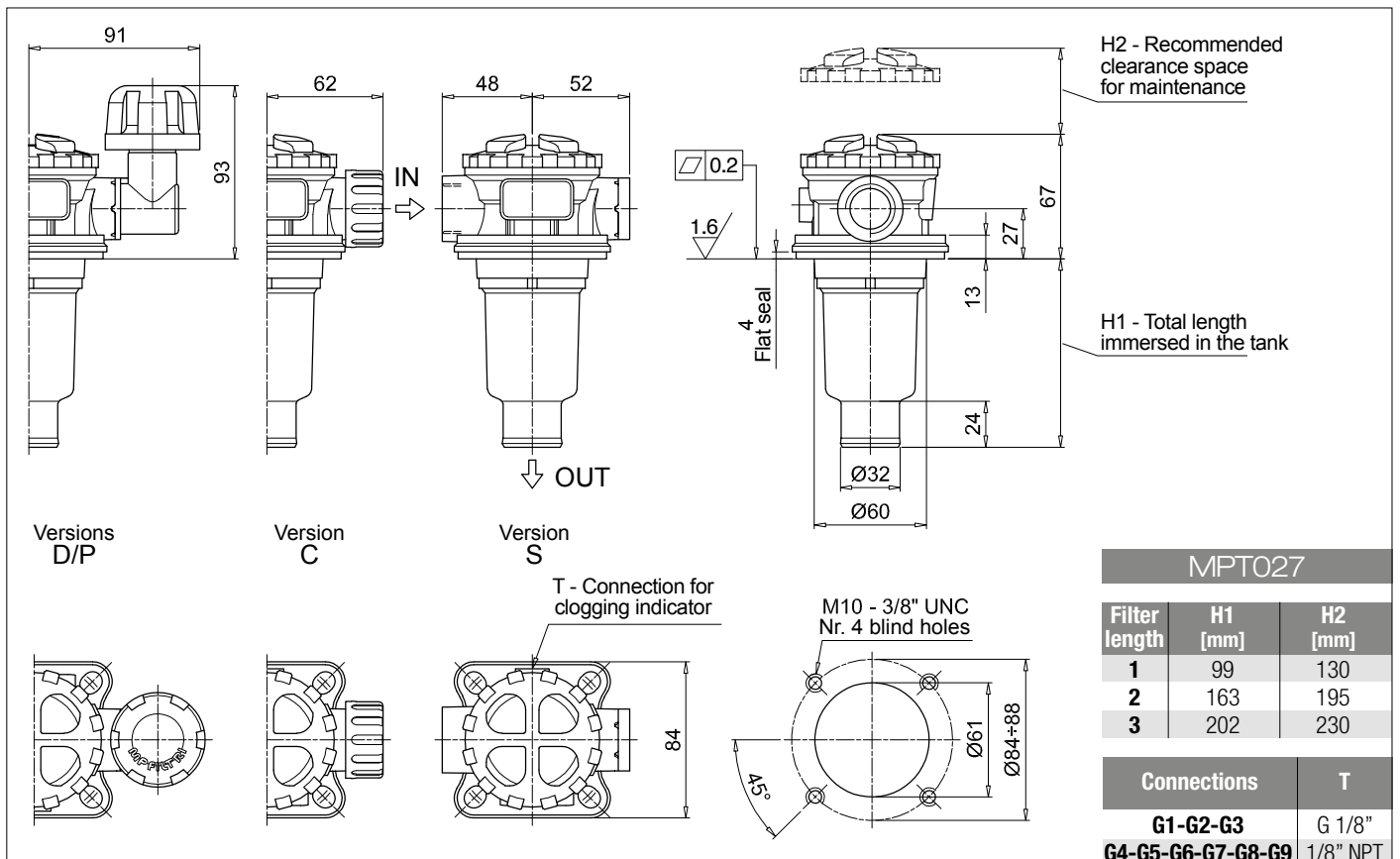
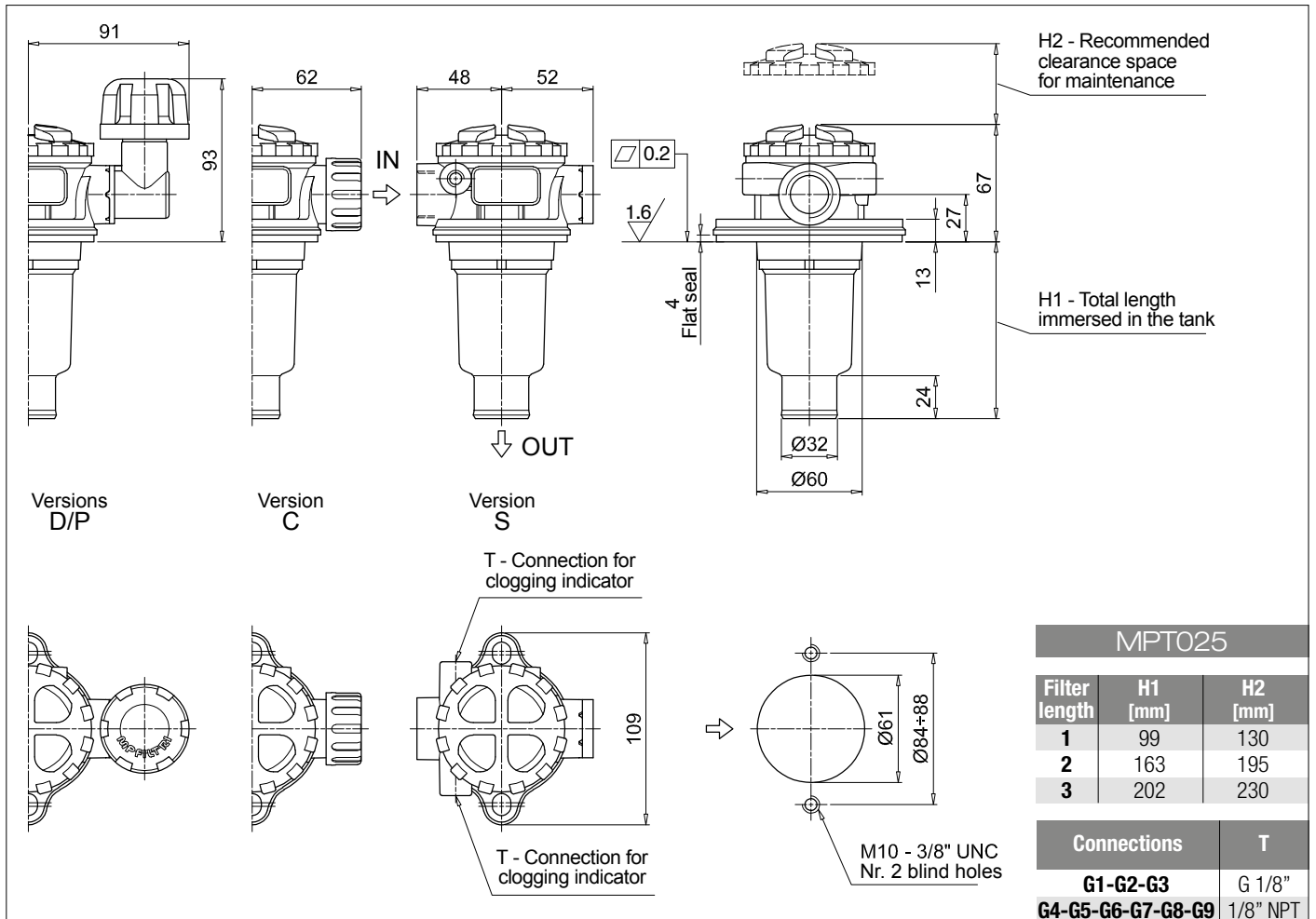
See page 710-711

| | | | |
|------------|--|------------|--|
| BVA | Axial pressure gauge | BEA | Electrical pressure indicator |
| BVR | Radial pressure gauge | BEM | Electrical pressure indicator |
| BVP | Visual pressure indicator with automatic reset | BLA | Electrical / visual pressure indicator |
| BVQ | Visual pressure indicator with manual reset | | |

ADDITIONAL FEATURES

See page 266

| | |
|------------|----------------|
| TE | Extension tube |
| DPT | Dipstick |



Designation & Ordering code

COMPLETE FILTER

| | | | | | | | | | | | |
|---|--|-------------------|---|------------------------------------|-----|------------------------|-----------------------|-------------------------------|--|--|--|
| Series and size | | | Configuration example 1: MPT110 1 S A G1 0 A06 E P01 | | | | | | | | |
| MPT110 Filter element with standard spigot | | | Configuration example 2: MPT110 3 P V G4 1 M25 B P01 | | | | | | | | |
| Length | | | | | | | | | | | |
| 1 2 3 4 | | | | | | | | | | | |
| Air breather | | | | | | | | | | | |
| S Without air breather | | | | | | | | | | | |
| C With air breather 10 µm | | | | | | | | | | | |
| D With anti-splash and air breather SAP050 10 µm | | | | | | | | | | | |
| P With anti-splash and air breather SAP050 10 µm, pressurization 0.5 bar | | | | | | | | | | | |
| Seals and treatments | | | Filtration rating | | | | | | | | |
| | | | Axx | Mxx | Pxx | | | | | | |
| A NBR | | | • | • | • | | | | | | |
| V FPM | | | • | • | • | | | | | | |
| W NBR head anodized | | | • | • | - | | | | | | |
| Z FPM head anodized | | | • | • | - | | | | | | |
| Main Connections | | Aux size 1 | Aux size 2 | Main Connections | | Aux size 1 | Aux size 2 | | | | |
| G1 G 3/4" | | G 3/8" | G 1/2" | G6 1 1/4" NPT | | 3/8" NPT | 1/2" NPT | | | | |
| G2 G 1" | | | | G7 SAE 12 - 1 1/16" - 12 UN | | SAE 6 - 9/16" - 18 UNF | SAE 8 - 3/4" - 16 UNF | | | | |
| G3 G 1 1/4" | | | | G8 SAE 16 - 1 5/16" - 12 UN | | | | | | | |
| G4 3/4" NPT | | 3/8" NPT | 1/2" NPT | G9 SAE 20 - 1 5/8" - 12 UN | | | | | | | |
| G5 1" NPT | | | | | | | | | | | |
| Aux connection - see previous table | | | | | | | | | | | |
| 0 Not machined | | | 1 Aux size 1 | 2 Aux size 2 | | | | | | | |
| Filtration rating (filter media) | | | | | | | | | | | |
| A03 Inorganic microfiber 3 µm | | | M25 Wire mesh 25 µm | | | | | | | | |
| A06 Inorganic microfiber 6 µm | | | M60 Wire mesh 60 µm | | | | | | | | |
| A10 Inorganic microfiber 10 µm | | | M90 Wire mesh 90 µm | | | | | | | | |
| A16 Inorganic microfiber 16 µm | | | P10 Resin impregnated paper 10 µm | | | | | | | | |
| A25 Inorganic microfiber 25 µm | | | P25 Resin impregnated paper 25 µm | | | | | | | | |
| | | | | | | Bypass valve | | Execution | | | |
| | | | | | | E 3 bar | | P01 MP Filtri standard | | | |
| | | | | | | B 1.75 bar | | Pxx Customized | | | |

FILTER ELEMENT

| | | | | | | | | |
|--|--|--|---|-----|-----|---------------------|--|-------------------------------|
| Element series and size | | | Configuration example 1: MF100 1 A06 H B E P01 | | | | | |
| MF100 Filter element with standard spigot | | | Configuration example 2: MF100 3 M25 N V P01 | | | | | |
| Element length | | | | | | | | |
| 1 2 3 4 | | | | | | | | |
| Filtration rating (filter media) | | | | | | | | |
| A03 Inorganic microfiber 3 µm | | | M25 Wire mesh 25 µm | | | | | |
| A06 Inorganic microfiber 6 µm | | | M60 Wire mesh 60 µm | | | | | |
| A10 Inorganic microfiber 10 µm | | | M90 Wire mesh 90 µm | | | | | |
| A16 Inorganic microfiber 16 µm | | | P10 Resin impregnated paper 10 µm | | | | | |
| A25 Inorganic microfiber 25 µm | | | P25 Resin impregnated paper 25 µm | | | | | |
| Element Δp | | | Filter media | | | Seals | | |
| | | | Axx | Mxx | Pxx | B NBR | | |
| N 10 bar | | | - | • | • | E 3 bar | | |
| H 10 bar | | | • | - | - | V FPM | | |
| | | | | | | Bypass valve | | Execution |
| | | | | | | E 3 bar | | P01 MP Filtri standard |
| | | | | | | - 1.75 bar | | Pxx Customized |

CLOGGING INDICATORS

See page 710-711

| | |
|---|---|
| BVA Axial pressure gauge | BEA Electrical pressure indicator |
| BVR Radial pressure gauge | BEM Electrical pressure indicator |
| BVP Visual pressure indicator with automatic reset | BLA Electrical / visual pressure indicator |
| BVQ Visual pressure indicator with manual reset | |

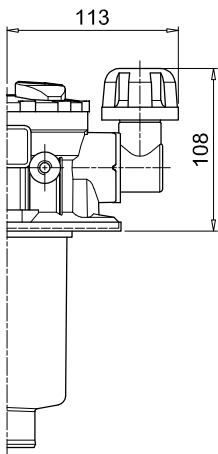
ADDITIONAL FEATURES

See page 266

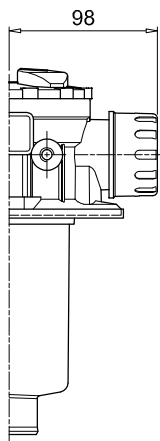
| | |
|---|---------------------|
| TE Extension tube | DPT Dipstick |
| DFS Diffuser with fast lock connection | |

| MPT110 | | | | |
|---------------|---------|---------|--------|--------|
| Filter length | H1 [mm] | H2 [mm] | D [mm] | I [mm] |
| 1 | 97 | 120 | 38 | 4 |
| 2 | 144 | 170 | 38 | 4 |
| 3 | 222 | 250 | 47 | - |
| 4 | 324 | 350 | 47 | 2.5 |

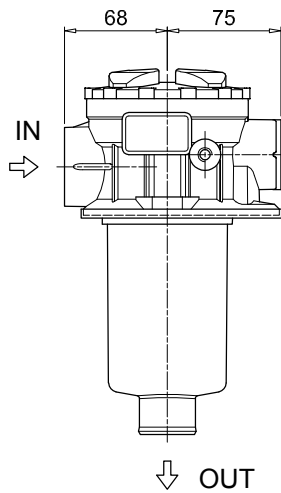
| Connections | T |
|-------------------|----------|
| G1-G2-G3 | G 1/8" |
| G4-G5-G6-G7-G8-G9 | 1/8" NPT |



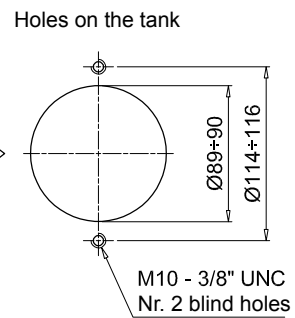
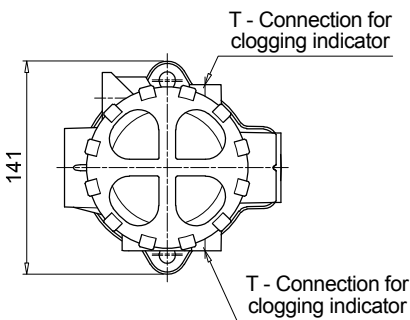
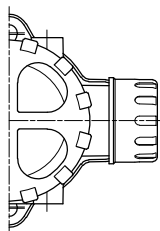
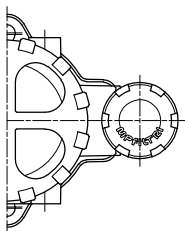
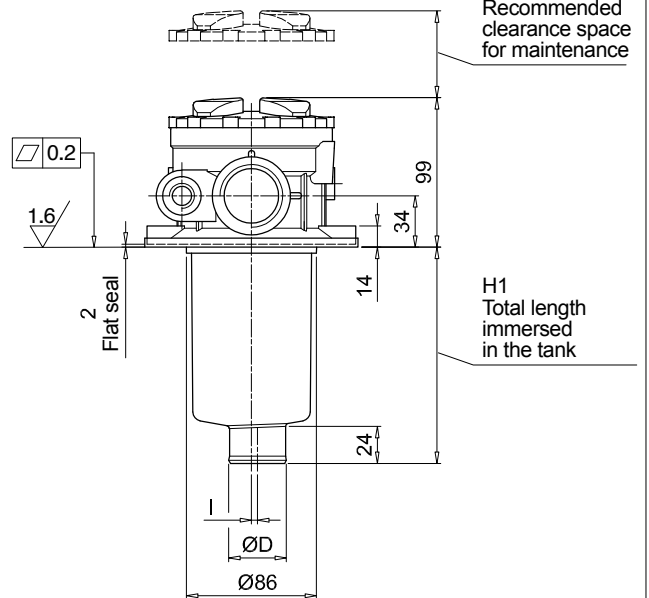
Versions D/P



Version C



Version S



Designation & Ordering code

COMPLETE FILTER

| | | | | | | | | | |
|--|--|--|-----|---------------------|--|-------------------------------|--|--|--|
| Series and size | | Configuration example 1: MPT114 4 S A G3 A10 E P01 | | | | | | | |
| MPT114 Filter element with standard spigot | | Configuration example 2: MPT114 3 C W G6 A03 B P01 | | | | | | | |
| Length | | | | | | | | | |
| 1 2 3 4 | | | | | | | | | |
| Air breather | | | | | | | | | |
| S Without air breather | | | | | | | | | |
| C With air breather 10 µm | | | | | | | | | |
| D With anti-splash and air breather SAP050 10 µm | | | | | | | | | |
| P With anti-splash and air breather SAP050 10 µm pressurization 0.5 bar | | | | | | | | | |
| Seals and treatments | | Filtration rating | | | | | | | |
| | | Axx | Mxx | Pxx | | | | | |
| A NBR | | • | • | • | | | | | |
| V FPM | | • | • | • | | | | | |
| W NBR head anodized | | • | • | - | | | | | |
| Z FPM head anodized | | • | • | - | | | | | |
| Connections | | | | | | | | | |
| G1 G 3/4" | | G6 1 1/4" NPT | | | | | | | |
| G2 G 1" | | G7 SAE 12 - 1 1/16" - 12 UN | | | | | | | |
| G3 G 1 1/4" | | G8 SAE 16 - 1 5/16" - 12 UN | | | | | | | |
| G4 3/4" NPT | | G9 SAE 20 - 1 5/8" - 12 UN | | | | | | | |
| G5 1" NPT | | | | | | | | | |
| Filtration rating (filter media) | | | | | | | | | |
| A03 Inorganic microfiber 3 µm | | M25 Wire mesh 25 µm | | | | | | | |
| A06 Inorganic microfiber 6 µm | | M60 Wire mesh 60 µm | | | | | | | |
| A10 Inorganic microfiber 10 µm | | M90 Wire mesh 90 µm | | | | | | | |
| A16 Inorganic microfiber 16 µm | | P10 Resin impregnated paper 10 µm | | | | | | | |
| A25 Inorganic microfiber 25 µm | | P25 Resin impregnated paper 25 µm | | | | | | | |
| | | | | Bypass valve | | Execution | | | |
| | | | | E 3 bar | | P01 MP Filtri standard | | | |
| | | | | B 1.75 bar | | Pxx Customized | | | |

FILTER ELEMENT

| | | | | | | | | | | |
|--|--|---|-----|-----|--------------|--|---------------------|--|-------------------------------|--|
| Element series and size | | Configuration example 2: MF100 4 A10 H B E P01 | | | | | | | | |
| MF100 Filter element with standard spigot | | Configuration example 1: MF100 3 A03 N B P01 | | | | | | | | |
| Element length | | | | | | | | | | |
| 1 2 3 4 | | | | | | | | | | |
| Filtration rating (filter media) | | | | | | | | | | |
| A03 Inorganic microfiber 3 µm | | M25 Wire mesh 25 µm | | | | | | | | |
| A06 Inorganic microfiber 6 µm | | M60 Wire mesh 60 µm | | | | | | | | |
| A10 Inorganic microfiber 10 µm | | M90 Wire mesh 90 µm | | | | | | | | |
| A16 Inorganic microfiber 16 µm | | P10 Resin impregnated paper 10 µm | | | | | | | | |
| A25 Inorganic microfiber 25 µm | | P25 Resin impregnated paper 25 µm | | | | | | | | |
| Element Δp | | Filter media | | | Seals | | Bypass valve | | Execution | |
| | | Axx | Mxx | Pxx | | | | | | |
| N 10 bar | | - | • | • | B NBR | | E 3 bar | | P01 MP Filtri standard | |
| H 10 bar | | • | - | - | V FPM | | - 1.75 bar | | Pxx Customized | |

CLOGGING INDICATORS

See page 710-711

| | |
|---|---|
| BVA Axial pressure gauge | BEA Electrical pressure indicator |
| BVR Radial pressure gauge | BEM Electrical pressure indicator |
| BVP Visual pressure indicator with automatic reset | BLA Electrical / visual pressure indicator |
| BVQ Visual pressure indicator with manual reset | |

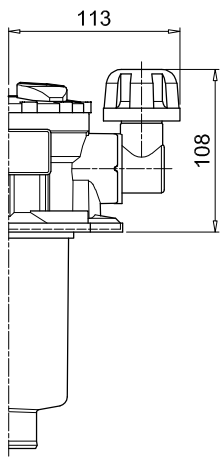
ADDITIONAL FEATURES

See page 266

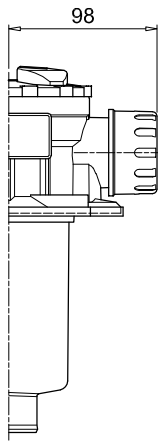
| | |
|---|---------------------|
| TE Extension tube | DPT Dipstick |
| DFS Diffuser with fast lock connection | |

| MPT114 | | | | |
|---------------|---------|---------|--------|--------|
| Filter length | H1 [mm] | H2 [mm] | D [mm] | I [mm] |
| 1 | 97 | 120 | 38 | 4 |
| 2 | 144 | 170 | 38 | 4 |
| 3 | 222 | 250 | 47 | - |
| 4 | 324 | 350 | 47 | 2.5 |

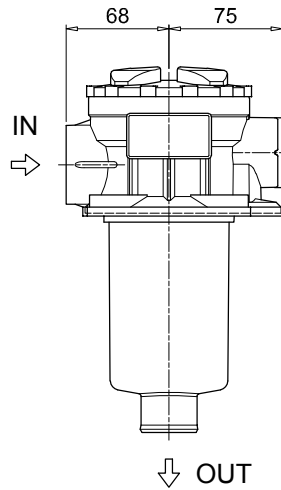
| Connections | T |
|-------------------|----------|
| G1-G2-G3 | G 1/8" |
| G4-G5-G6-G7-G8-G9 | 1/8" NPT |



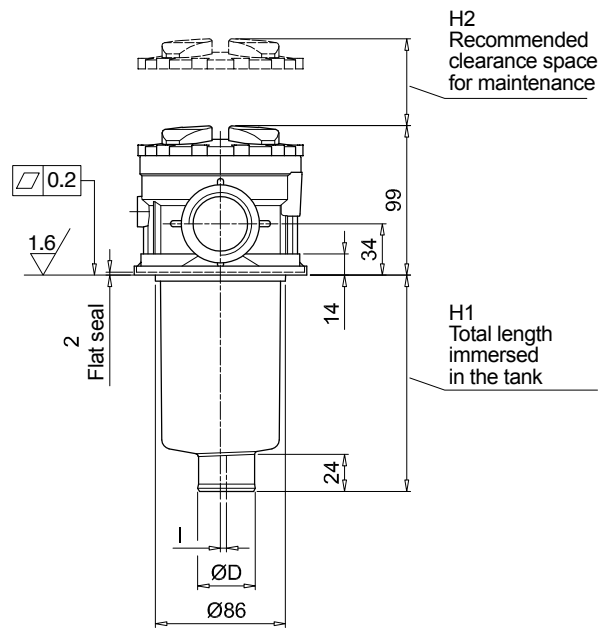
Versions D/P



Version C

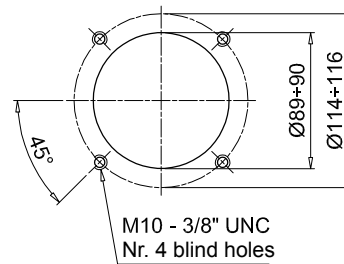
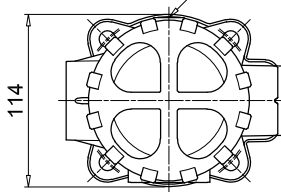
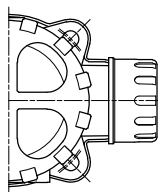
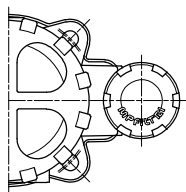


Version S



T - Connection for clogging indicator

Holes on the tank



Designation & Ordering code

COMPLETE FILTER

| | | | | | | | | | |
|---|--------------------------|--------|---|---|---|----|-----|---|-----|
| Series and size | Configuration example 1: | MPT116 | 1 | S | A | G1 | M90 | E | P01 |
| MPT116 Filter element with standard spigot | Configuration example 2: | MPT116 | 2 | S | Z | G9 | A03 | B | P01 |

| | | | | |
|---------------|---|---|---|---|
| Length | 1 | 2 | 3 | 4 |
|---------------|---|---|---|---|

| | |
|---------------------|------------------------|
| Air breather | S Without air breather |
|---------------------|------------------------|

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

Flat seal on the head on request

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

| | | |
|---|---------------------------------------|--|
| Filtration rating (filter media) | A03 Inorganic microfiber 3 µm | M25 Wire mesh 25 µm |
| | A06 Inorganic microfiber 6 µm | M60 Wire mesh 60 µm |
| | A10 Inorganic microfiber 10 µm | M90 Wire mesh 90 µm |
| | A16 Inorganic microfiber 16 µm | P10 Resin impregnated paper 10 µm |
| | A25 Inorganic microfiber 25 µm | P25 Resin impregnated paper 25 µm |

| | |
|---------------------|------------------------|
| Bypass valve | Execution |
| E 3 bar | P01 MP Filtri standard |
| B 1.75 bar | Pxx Customized |

FILTER ELEMENT

| | | | | | | | | |
|--|--------------------------|-------|---|-----|---|---|---|-----|
| Element series and size | Configuration example 2: | MF100 | 1 | M90 | N | B | E | P01 |
| MF100 Filter element with standard spigot | Configuration example 1: | MF100 | 2 | A03 | H | V | | P01 |

| | | | | |
|-----------------------|---|---|---|---|
| Element length | 1 | 2 | 3 | 4 |
|-----------------------|---|---|---|---|

| | | |
|---|---------------------------------------|--|
| Filtration rating (filter media) | A03 Inorganic microfiber 3 µm | M25 Wire mesh 25 µm |
| | A06 Inorganic microfiber 6 µm | M60 Wire mesh 60 µm |
| | A10 Inorganic microfiber 10 µm | M90 Wire mesh 90 µm |
| | A16 Inorganic microfiber 16 µm | P10 Resin impregnated paper 10 µm |
| | A25 Inorganic microfiber 25 µm | P25 Resin impregnated paper 25 µm |

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

| | | |
|--------------|---------------------|------------------------|
| Seals | Bypass valve | Execution |
| B NBR | E 3 bar | P01 MP Filtri standard |
| V FPM | - 1.75 bar | Pxx Customized |

CLOGGING INDICATORS

See page 710-711

| | |
|---|---|
| BVA Axial pressure gauge | BEA Electrical pressure indicator |
| BVR Radial pressure gauge | BEM Electrical pressure indicator |
| BVP Visual pressure indicator with automatic reset | BLA Electrical / visual pressure indicator |
| BVQ Visual pressure indicator with manual reset | |

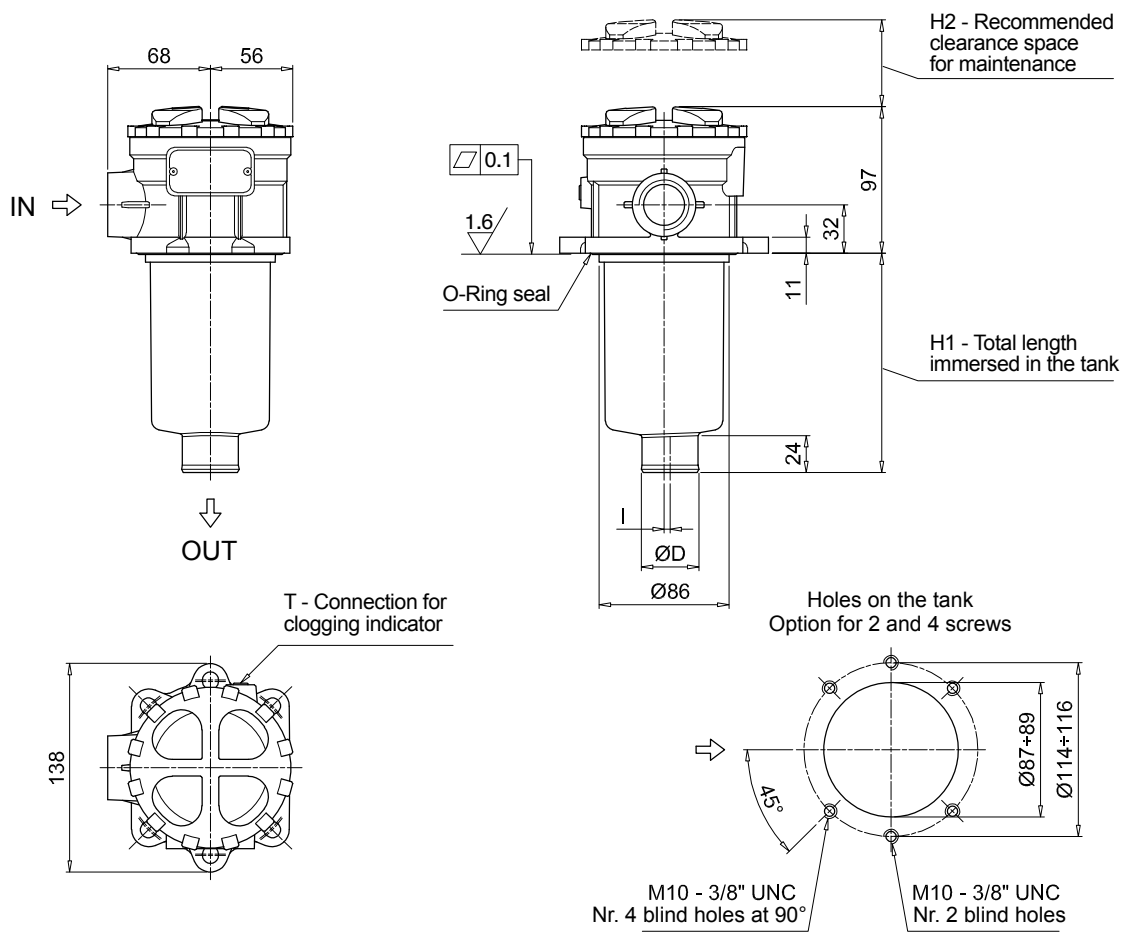
ADDITIONAL FEATURES

See page 266

| | |
|---|---------------------|
| TE Extension tube | DPT Dipstick |
| DFS Diffuser with fast lock connection | |

| MPT116 | | | | |
|---------------|---------|---------|--------|--------|
| Filter length | H1 [mm] | H2 [mm] | D [mm] | I [mm] |
| 1 | 99 | 120 | 38 | 4 |
| 2 | 146 | 170 | 38 | 4 |
| 3 | 224 | 250 | 47 | - |
| 4 | 326 | 350 | 47 | 2.5 |

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



Designation & Ordering code

COMPLETE FILTER

| | | | | | | | | | |
|---|--------------------------|--------|---|---|----|---|-----|---|-----|
| Series and size | Configuration example 1: | MPT120 | 1 | A | G1 | 0 | A06 | E | P01 |
| MPT120 Filter element with standard spigot | Configuration example 2: | MPT120 | 3 | V | G4 | 1 | M25 | B | P01 |

| | | | | |
|---------------|---|---|---|---|
| Length | 1 | 2 | 3 | 4 |
|---------------|---|---|---|---|

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

| Main Connections | Rear connections | Aux size 1 | Aux size 2 |
|------------------------------------|--------------------------|------------------------|-----------------------|
| G1 G 3/4" | G 3/4" | G 3/8" | G 1/2" |
| G2 G 1" | G 1" | | |
| G3 G 1 1/4" | G 3/4" | 3/8" NPT | 1/2" NPT |
| G4 3/4" NPT | 3/4" NPT | | |
| G5 1" NPT | 1" NPT | SAE 6 - 9/16" - 18 UNF | SAE 8 - 3/4" - 16 UNF |
| 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 | | |

| | | | |
|--|---------------------|---------------------|--|
| Aux connection - see previous table | | | |
| 0 Not machined | 1 Aux size 1 | 2 Aux size 2 | |

| Filtration rating (filter media) | |
|---------------------------------------|--|
| A03 Inorganic microfiber 3 µm | M25 Wire mesh 25 µm |
| A06 Inorganic microfiber 6 µm | M60 Wire mesh 60 µm |
| A10 Inorganic microfiber 10 µm | M90 Wire mesh 90 µm |
| A16 Inorganic microfiber 16 µm | P10 Resin impregnated paper 10 µm |
| A25 Inorganic microfiber 25 µm | P25 Resin impregnated paper 25 µm |

| Bypass valve | Execution |
|-------------------|-------------------------------|
| E 3 bar | P01 MP Filtri standard |
| B 1.75 bar | Pxx Customized |

FILTER ELEMENT

| | | | | | | | | |
|--|--------------------------|-------|---|-----|---|---|---|-----|
| Element series and size | Configuration example 1: | MF100 | 1 | A06 | H | B | E | P01 |
| MF100 Filter element with standard spigot | Configuration example 2: | MF100 | 3 | M25 | N | V | | P01 |

| | | | | |
|-----------------------|---|---|---|---|
| Element length | 1 | 2 | 3 | 4 |
|-----------------------|---|---|---|---|

| Filtration rating (filter media) | |
|---------------------------------------|--|
| A03 Inorganic microfiber 3 µm | M25 Wire mesh 25 µm |
| A06 Inorganic microfiber 6 µm | M60 Wire mesh 60 µm |
| A10 Inorganic microfiber 10 µm | M90 Wire mesh 90 µm |
| A16 Inorganic microfiber 16 µm | P10 Resin impregnated paper 10 µm |
| A25 Inorganic microfiber 25 µm | P25 Resin impregnated paper 25 µm |

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

| Seals | Bypass valve | Execution |
|--------------|----------------|-------------------------------|
| B NBR | E 3 bar | P01 MP Filtri standard |
| V FPM | - 1.75 bar | Pxx Customized |

CLOGGING INDICATORS

See page 710-711

| | |
|---|---|
| BVA Axial pressure gauge | BEA Electrical pressure indicator |
| BVR Radial pressure gauge | BEM Electrical pressure indicator |
| BVP Visual pressure indicator with automatic reset | BLA Electrical / visual pressure indicator |
| BVQ Visual pressure indicator with manual reset | |

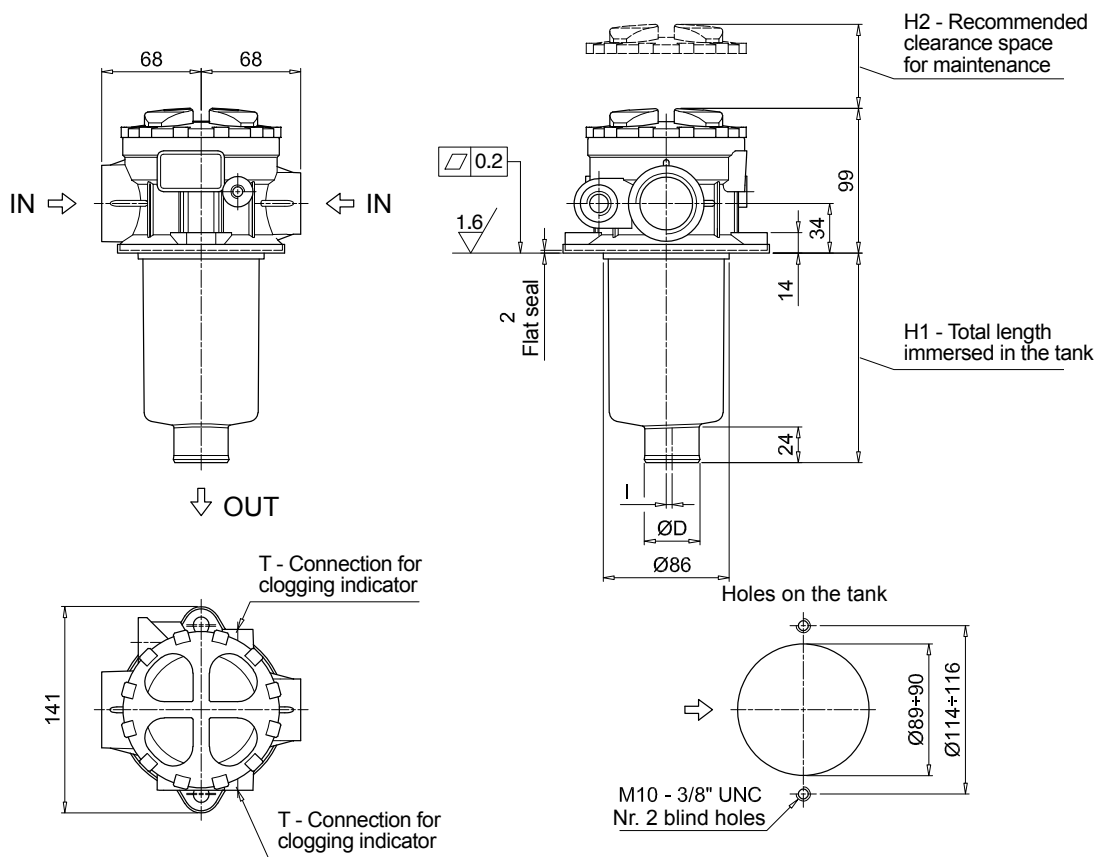
ADDITIONAL FEATURES

See page 266

| | |
|---|---------------------|
| TE Extension tube | DPT Dipstick |
| DFS Diffuser with fast lock connection | |

| MPT120 | | | | |
|---------------|---------|---------|--------|--------|
| Filter length | H1 [mm] | H2 [mm] | D [mm] | I [mm] |
| 1 | 97 | 120 | 38 | 4 |
| 2 | 147 | 170 | 38 | 4 |
| 3 | 222 | 250 | 47 | - |
| 4 | 324 | 350 | 47 | 2.5 |

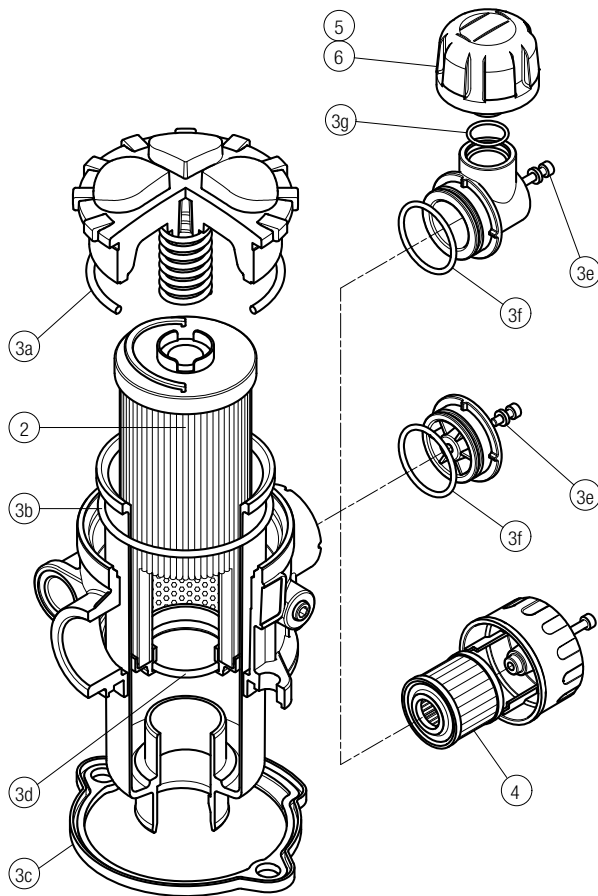
| Connections | T |
|--------------------------|----------|
| G1-G2-G3 | G 1/8" |
| G4-G5-G6-G7-G8-G9 | 1/8" NPT |



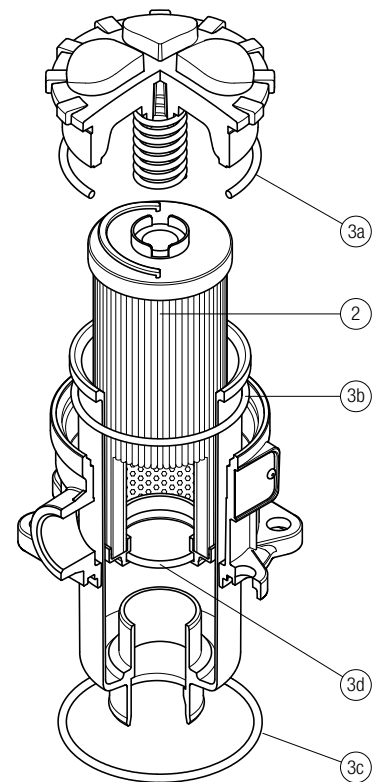
MPT SPARE PARTS

Order number for spare parts

MPT 025 - 027 - 110



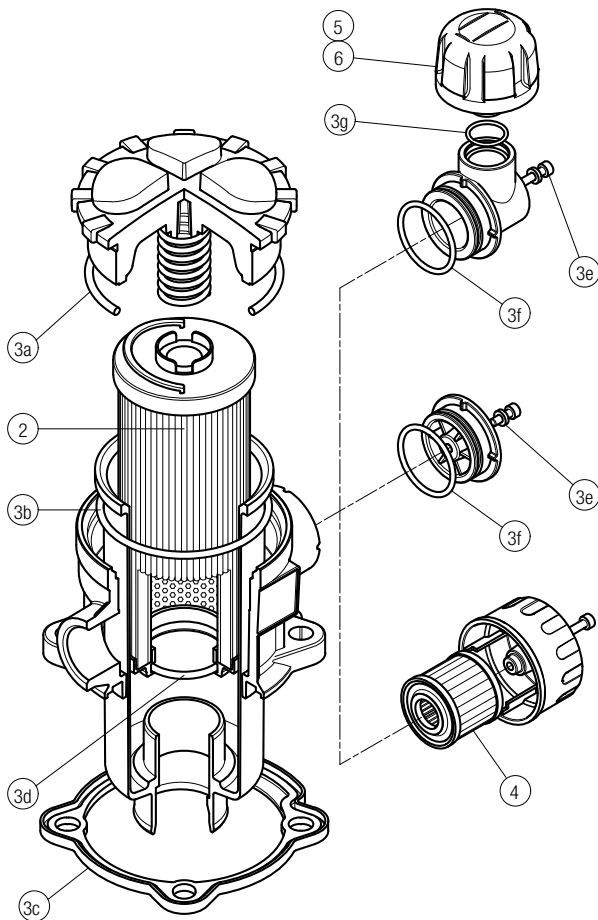
MPT 116



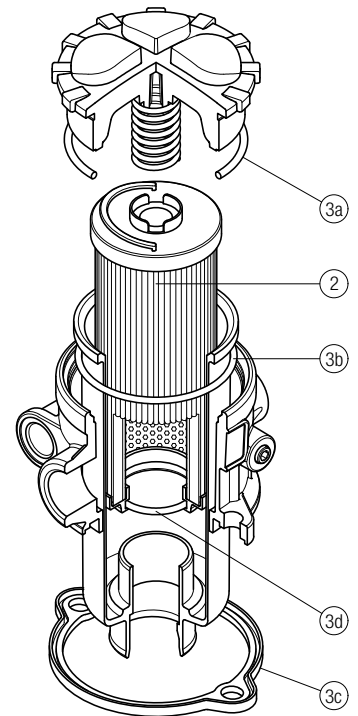
| Item: | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | |
|---------------|-----------------|----------------------|-------------|-------------|-----------------------|-----------------------|
| Filter series | Filter element | Seal Kit code number | | C | D | P |
| | | NBR | FPM | | | |
| MPT 025 | See order table | 02050557 | 02050558 | 10 µm A3L03 | 10 µm SAP50G3L03A0P01 | 10 µm SAP50G3L03A1P01 |
| MPT 027 | | 02050559 | 02050560 | 10 µm A3L03 | 10 µm SAP50G3L03A0P01 | 10 µm SAP50G3L03A1P01 |
| MPT 110 | | 02050561 | 02050562 | 10 µm A5L03 | 10 µm SAP50G3L03A0P01 | 10 µm SAP50G3L03A1P01 |

| Item: | Q.ty: 1 pc. | Q.ty: 1 pc. | |
|---------------|-----------------|----------------------|----------|
| Filter series | Filter element | Seal Kit code number | |
| | | NBR | FPM |
| MPT 116 | See order table | 02050466 | 02050467 |

MPT 114



MPT 120



| Item: | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | Q.ty: 1 pc. | |
|----------------|-----------------|----------------------|--|----------------|--------------------------|--------------------------|
| Filter series | Filter element | Seal Kit code number | Air breather filter element - version: | | | |
| | | NBR | FPM | C | D | P |
| MPT 114 | See order table | 02050580 | 02050581 | 10 µm A5L03 | 10 µm SAP50G3L03A0P01 | 10 µm SAP50G3L03A1P01 |

| Item: | Q.ty: 1 pc. | Q.ty: 1 pc. | |
|----------------|-----------------|----------------------|----------|
| Filter series | Filter element | Seal Kit code number | |
| | | NBR | FPM |
| MPT 120 | See order table | 02050563 | 02050564 |

Accessories

POLYAMIDE EXTENSION TUBE

H1 - Total length immersed in the tank

Configuration example: **TE** **40** **A** **250**

| Series | Size | Material | Length | H [mm] |
|-----------|------|----------|------------|--------|
| TE | | | 200 | 200 |
| | | | 250 | 250 |
| | | | 300 | 300 |
| | | | 350 | 350 |
| | | | 400 | 400 |
| | | | 450 | 450 |
| | | | 500 | 500 |

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

STEEL EXTENSION TUBE

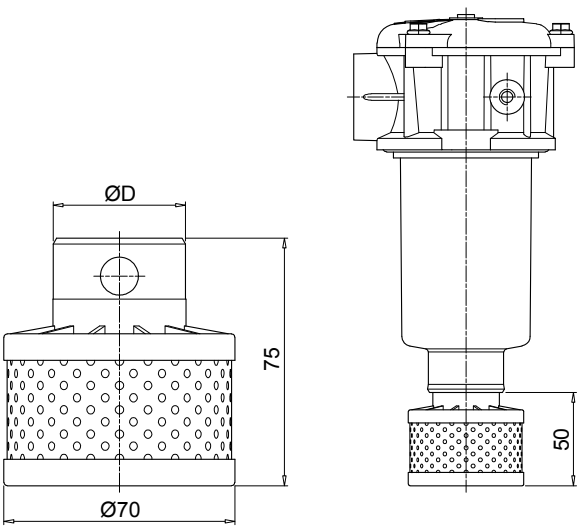
H1 - Total length immersed in the tank

Configuration example: **MPF191** **2** **A** **F1** **A10** **H** **B** **S60**

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

| Filter series | | Filter size | | Filter length | Ø D [mm] | | |
|---------------|-----|-------------|-----|---------------|----------|----|---|
| | | | | | 52 | 65 | |
| MPF | 400 | 410 | 450 | 451 | 2 | • | - |
| | | | | | 1 | • | - |
| | | | | | 2 | - | • |
| | | | | | 3 | - | • |
| | | | | | 1 | - | • |

DIFFUSER WITH FAST LOCK CONNECTION

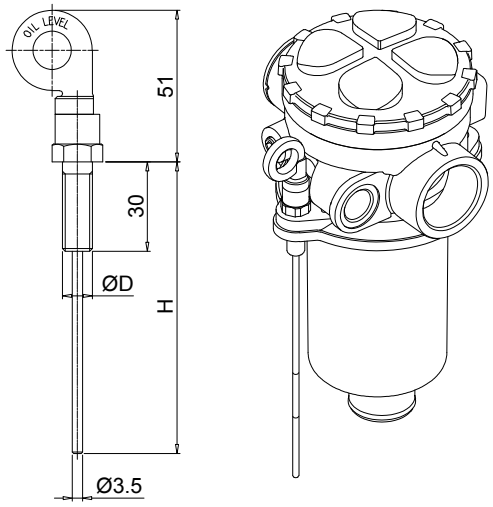


Configuration example: **DFS 32 A 075**

| Series | | DFS |
|-----------|----------|---------------------|
| Size | ø D [mm] | |
| 32 | 32 | |
| 40 | 40 | |
| Version | | A Standard |
| Length | | 075 Standard |

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

DIPSTICK



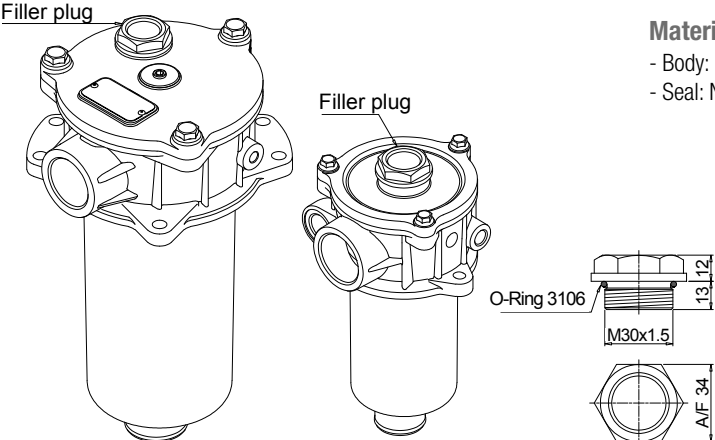
Configuration example: **DPT 20 M10 A P01**

| Series | | DPT |
|------------|---------------------------------|------------|
| Length | H [mm] | |
| 15 | 134 | |
| 20 | 184 | |
| 25 | 234 | |
| 30 | 284 | |
| 35 | 334 | |
| Fastening | | |
| M8 | Fastening with screws ø D = M8 | |
| M10 | Fastening with screws ø D = M10 | |
| Seals | | |
| A | NBR | |
| V | FPM | |
| Execution | | |
| P01 | MP Filtri standard | |
| Pxx | Customized | |

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

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

FILLER PLUG



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

| Series | | DPT |
|------------|---------------------------------|------------|
| Length | H [mm] | |
| 15 | 134 | |
| 20 | 184 | |
| 25 | 234 | |
| 30 | 284 | |
| 35 | 334 | |
| Fastening | | |
| M8 | Fastening with screws ø D = M8 | |
| M10 | Fastening with screws ø D = M10 | |
| Seals | | |
| A | NBR | |
| V | FPM | |
| Execution | | |
| P01 | MP Filtri standard | |
| Pxx | Customized | |

Materials
 - Body: Polyamide
 - Seal: NBR

Technical data
 Tightening torque: 15 N·m

O-Ring 3106 / M30x1.5 / 13 12 / A/F 34

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