

Protect the performance of your system with MYclean. Quality and efficiency are fundamental for MP Filtri: this exclusive new filter element possesses polygon shape geometry and specific seal that ensures only original spare parts can be used - ensuring correct operation and higher system reliability.







With exclusive filter element you are sure that only MP Filtri filter elements can be used, ensuring the best cleaning level of the oil

due to the use of originals filter elements.



The products identified as MPLX are protected by:

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





# MPLX series

Maximum working pressure up to 1 MPa (10 bar) - Flow rate up to 1800 l/min



Description Technical data

# Return filter

# Maximum working pressure up to 1 MPa (10 bar) Flow rate up to 1800 l/min

MPLX is a range of return filters for protection of the reservoir against the system contamination.

Completely interchangeable with Pall 8420 & 8520, they are directly fixed to the reservoir, in immersed or semi-immersed position.

The use of the diffuser is recommended, to place the filter output always immersed into the fluid to avoid aeration or foam generation into the reservoir.

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

#### **Available features:**

- Flanged connections up to 3", for a maximum flow rate of 1800 l/min
- Fine filtration rating, to get a good cleanliness level into the reservoir
- Bypass valve, to relieve excessive pressure drop across the filter media
- 6 fixing holes for installation, to suit a variety of reservoir surfaces
- Diffuser, to reduce the risk of aeration, foaming and noise
- Filler plug, to fill cleaned fluid into the tank without an additional connection
- Visual, electrical and electronic differential clogging indicators
- MYclean interface connection for the filter element, to protect the product against non-original spare parts

#### **Common applications:**

- Heavy duty industrial equipment
- Heavy duty mobile equipment

#### **Filter housing materials**

- Head: Anodized aluminium
- Cover: Anodized aluminium
- Bowl: Phosphatized steel
- Bypass valve: Steel

#### **Bypass valve**

- Opening pressure 450 kPa (4.5 bar) ±10%

#### Δp element type

- Microfiber filter elements: 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

MPLX filters are provided for vertical mounting

# Weights [kg] and volumes [dm³]

| Filter series | Weights [kg] | Volumes [dm³] |  |  |  |  |  |  |
|---------------|--------------|---------------|--|--|--|--|--|--|
|               | Length 2     | Length 2      |  |  |  |  |  |  |
| MPLX 250      | 8.95         | 2.90          |  |  |  |  |  |  |
| MPLX 660      | 20.20        | 11.00         |  |  |  |  |  |  |



# GENERAL INFORMATION MPLX

### Flow rates [I/min]

|               |        | Filter element design - N Series |     |     |     |      |                   |            |  |  |  |  |
|---------------|--------|----------------------------------|-----|-----|-----|------|-------------------|------------|--|--|--|--|
| Filter series | Length | A03                              | A06 | A10 | A16 | A25  | M25<br>M60<br>M90 | P10<br>P25 |  |  |  |  |
| MPLX 250      | 2      | 157                              | 155 | 281 | 312 | 325  | 583               | 392        |  |  |  |  |
| MPLX 660      | 2      | 376                              | 384 | 820 | 925 | 1018 | 1732              | 1332       |  |  |  |  |

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

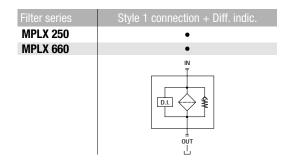
The reference fluid has a kinematic viscosity of 30 mm<sup>2</sup>/s (cSt) and a density of 0.86 kg/dm<sup>3</sup>.

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

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.

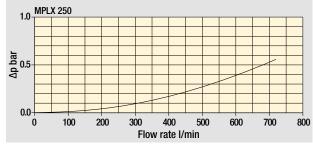
0.5 MPLX 660

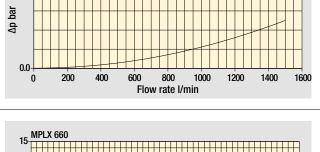
Hydraulic symbols



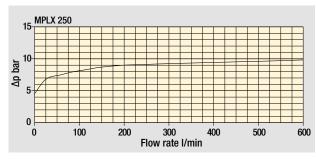
### Pressure drop

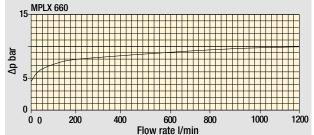
Filter housings  $\Delta p$  pressure drop







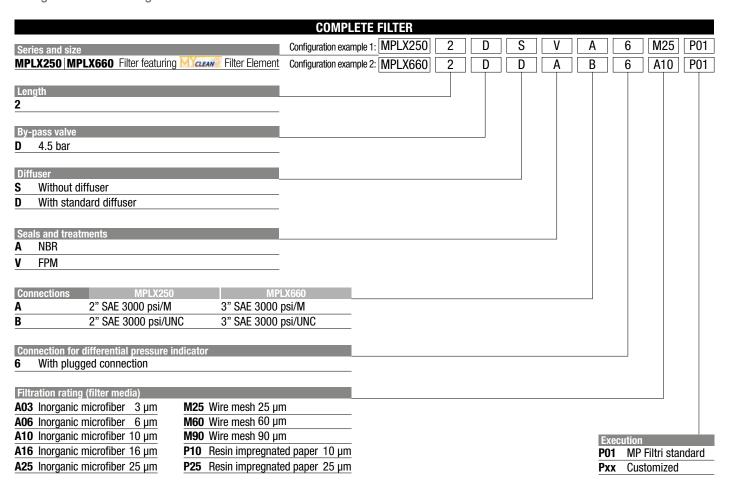


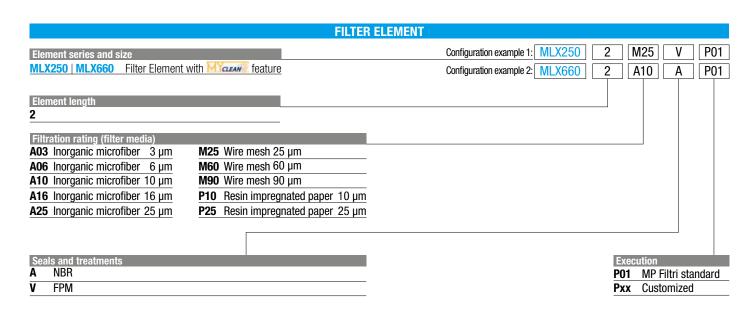


The curves are plotted using mineral oil with density of 0.86 kg/dm³ in compliance with ISO 3968. Δp varies proportionally with density.

# MPLX mplx250 - mplx660

### Designation & Ordering code



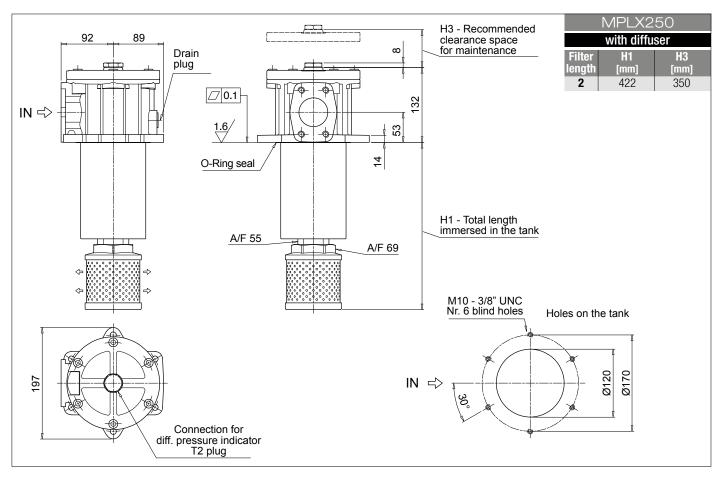


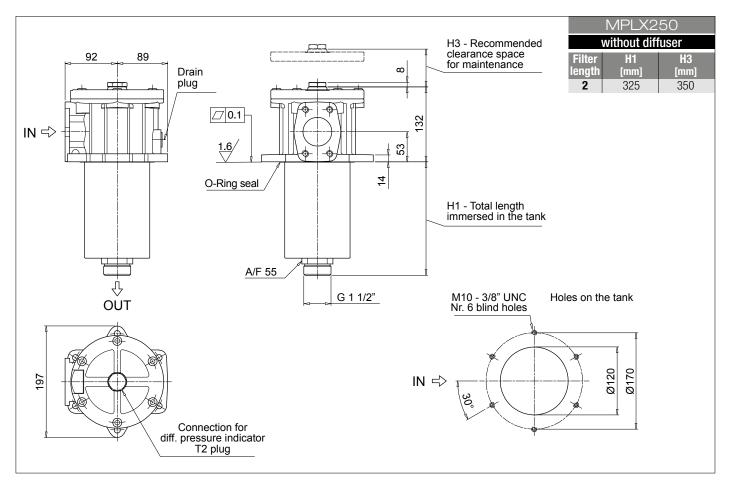
|     | CLOGO   | See page | 720-721 |   |     |          |
|-----|---|----------|---------|---|-----|----------|
| DEA | Electrical differential pressure indicator          |          | -       | Electrical / visual differential pressure indicat |     |          |
| DEM | Electrical differential pressure indicator          | _        | DTA     | Electronic differential pressure indicator        |     |          |
| DEU | Electrical differential pressure indicator          |          | DVA     | Visual differential pressure indicator            |     |          |
| DLA | Electrical / visual differential pressure indicator | _        | DVM     | Visual differential pressure indicator            |     |          |
|     |   | PLUGS    |         |   | See | page 747 |
| T2  | Plug  | I LOGO   |         |   | 000 | pago 111 |

Return filters

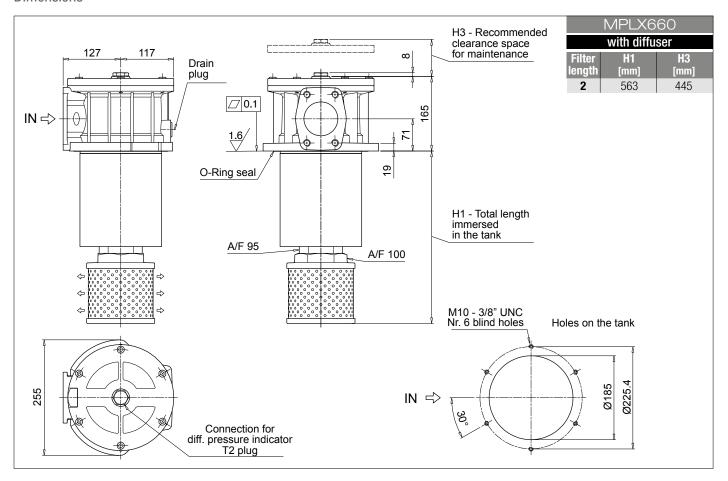


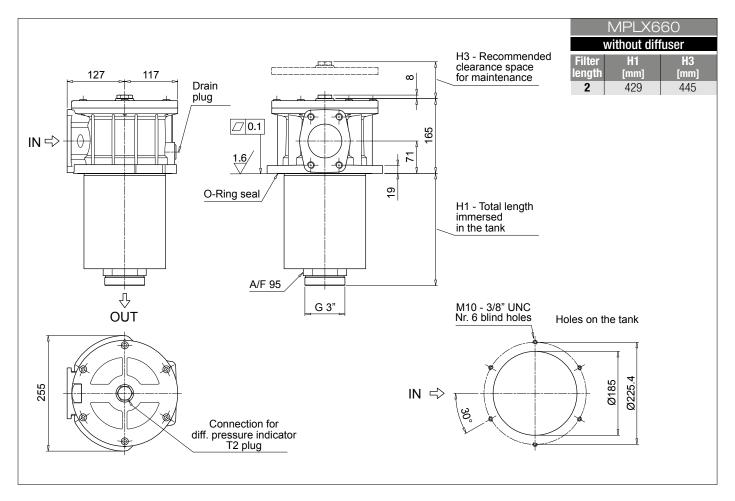
#### **Dimensions**





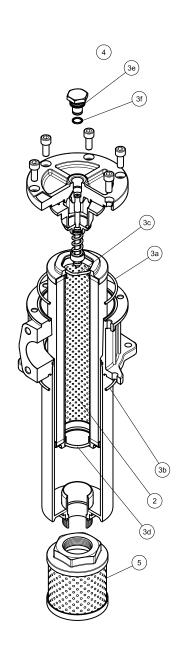
#### **Dimensions**





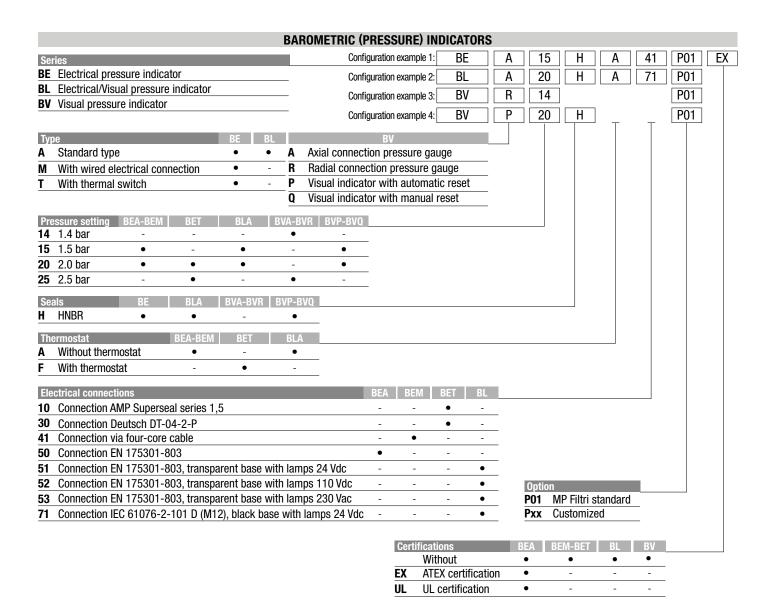
(118)

Order number for spare parts



|          | Q.ty: 1 pc.    | Q.ty:              | 1 pc.    | Q.ty:         | 1 pc.        | Q.ty: 1 pc.       |  |  |  |  |
|----------|----------------|--------------------|----------|---------------|--------------|-------------------|--|--|--|--|
| Item:    | 2              | <b>3</b> (3a ÷ 3f) |          | 4             |              | 5                 |  |  |  |  |
| Filter   | Filter         | Seal Kit code      | number   | Indicator cor | nection plug | Diffuser          |  |  |  |  |
| series   | element        | NBR                | FPM      | NBR           | FPM          | Dillusti          |  |  |  |  |
| MPLX 250 | See            | 02050745           | 02050746 | TOLL          | TOV          | STD 100 C 115 P01 |  |  |  |  |
| MPLX 660 | order<br>table | 02050747           | 02050748 | T2H           | T2V          | STD 150 E 155 P01 |  |  |  |  |

## Designation & Ordering code



Designation & Ordering code

| DIFFERENTIAL PRESSURE INDICATORS |   |                     |              |            |           |       |     |            |            |           |      |      |      |
|----------------------------------|---|---------------------|--------------|------------|-----------|-------|-----|------------|------------|-----------|------|------|------|
| Ser                              | ies   | Confi               | guration exa | ample 1:   | DE        | М     | 20  | Н          |            | F         | 50   | P01  |      |
|                                  | Electrical differential pressure indicator              | Confid              | guration exa | ample 2:   | DE        | U     | 50  | V          | 一一         | A         | 50   | P01  | UL   |
|                                  | Electrical/Visual differential pressure indicator       |                     | guration exa |            | DL        | Е     | 20  |            |            |           | 71   | P01  |      |
|                                  | Electrical differential pressure indicator              |                     | guration exa | . [        | DT        | Α     | 20  |            |            |           | 70   | P01  |      |
| DV                               | Visual differential pressure indicator                  |                     | _            |            |           |       |     |            |            | <u> </u>  | 10   |      |      |
|                                  |   | Config              | guration exa | ample 5: [ | DV        | M     | 20  | <u> </u>   |            | Т         | Т    | P01  |      |
| Typ                              | e DE DL DT  |                     | DV           |            | l         |       |     |            |            |           |      |      |      |
| Typ<br>A                         | Standard type • • •                                     | A With autor        |              | ot .       |           |       |     |            |            |           |      |      |      |
|                                  | With wired electrical connection                        | M With man          |              | <i>,</i> ı | -         |       |     |            |            |           |      |      |      |
|                                  | Standard type 210 bar, UL certified •                   | S With autor        |              | et .       | =         |       |     |            |            |           |      |      |      |
| _                                | For high power supply - • -                             |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  | Compact version •                                       | -                   |              |            |           |       |     |            |            |           |      |      |      |
| Dro                              | ssure setting   DEA   DEM   DEU   DES   DL   DT         | DVA DVM             | DVS          |            |           |       |     |            |            |           |      |      |      |
|                                  | 1.2 bar •   |                     | •            |            |           |       |     |            |            |           |      |      |      |
|                                  | 2.0 bar • • • • •                                       | • •                 |              |            |           |       |     |            |            |           |      |      |      |
|                                  | 2.5 bar   |                     | •            |            |           |       |     |            |            |           |      |      |      |
| Sea                              | IS DEA DEM DEU DES DL DT                                | DVA DVM             | DVS          |            |           |       |     |            |            |           |      |      |      |
|                                  | HNBR • • - • • •  | • •                 | •            |            |           |       |     |            |            |           |      |      |      |
|                                  | FPM • • - • •   | • •                 | -            |            |           |       |     |            |            |           |      |      |      |
| The                              | rmostat DEA DEM DEU DE                                  | S DLA DLE           | DT           |            |           |       |     |            |            |           |      |      |      |
|                                  | Without thermostat • • • •                              | • •                 | -            |            |           |       |     |            |            | J         |      |      |      |
| F                                | With thermostat - •                                     | - •                 | •            |            |           |       |     |            |            |           |      |      |      |
| Elec                             |   |                     | DEA          | DEM   I    | DEU   DES | DIA   | DIE | DT         |            |           |      |      |      |
|                                  | ctrical connections Connection AMP Superseal series 1.5 |                     | DEA          | DEWI       | - •       | DLA - | DLE | ַ וע       |            |           |      |      |      |
|                                  | Connection AMP Timer Junior                             |                     | _            | •          |           |       |     |            |            |           |      |      |      |
|                                  | Connection Deutsch DT-04-2-P                            |                     | -            | •          | - •       | -     | -   |            |            |           |      |      |      |
|                                  | Connection Deutsch DT-04-3-P                            |                     | -            | •          |           | -     | -   | -          |            |           |      |      |      |
| 50                               | Connection EN 175301-803                                |                     | •            | -          | • -       | -     | •   | -          |            |           |      |      |      |
|                                  | Connection EN 175301-803, transparent base with la      |                     | -            | -          |           | •     | -   |            |            |           |      |      |      |
|                                  | Connection EN 175301-803, transparent base with la      | amps 110 Vdc        | -            | -          |           | •     | -   | -          |            |           |      |      |      |
|                                  | Connection IEC 61076-2-101 D (M12)                      | :Ha lawara 0.4 Vala | -            | -          |           | -     | -   | •          |            |           |      |      |      |
|                                  | Connection IEC 61076-2-101 D (M12), black base wi       | tn lamps 24 vac     | -            | -          |           | •     | -   |            |            |           |      |      |      |
| OU                               | CONTRECTION Stud #10-32 ONF                             |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  |   |                     |              |            |           |       |     | Oution     |            |           |      |      |      |
|                                  |   |                     |              |            |           |       |     | Option P01 |            | tri stand | dard |      |      |
|                                  |   |                     |              |            |           |       |     |            | Custor     |           |      |      |      |
|                                  |   |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  |   |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  |   |                     |              |            |           |       |     |            | cations    |           | DE   | J OT | HERS |
|                                  |   |                     |              |            |           |       |     |            | Vithout    |           | -    |      | •    |
|                                  |   |                     |              |            |           |       |     | UL U       | L certi    | fication  | •    |      |      |
|                                  |   |                     | DLUGG        |            |           |       |     |            |            |           |      |      |      |
|                                  |   |                     | PLUGS        |            |           |       |     |            |            |           |      |      |      |
| Ser                              |   |                     |              |            |           |       |     | Cor        | nfiguratio | n exampl  | e    | Γ2   | H    |
|                                  | Plug  |                     |              |            |           |       |     |            |            |           |      |      |      |
| 14                               | Plug  |                     |              |            |           |       |     |            |            |           |      |      |      |
| Sea                              |   |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  | NBR - •   |                     |              |            |           |       |     |            |            |           |      |      |      |
|                                  | HNBR • -  |                     |              |            |           |       |     |            |            |           |      |      |      |
| V                                | FPM • -   |                     |              |            |           |       |     |            |            |           |      |      |      |