

MPI

Maximum pressure 10 bar
Flow rates to 3000 l/min



Technical data

Filter housing (Materials)

- Insert assembly: Nylon (only for: MPI 100)
Aluminium (all the other)
- Diffuser: Zinc Plated Steel
- Valve: Steel

Pressure

- Working pressure: 10 bar (1 MPa)

Temperature

- From -25 °C to +110 °C

Bypass valve

- Opening pressure 1,75 bar ±10%
- Opening pressure 2,5 bar ±10% (excluded for MPI 850)

Δp Elements type

- Microfibre filter elements series MR: 10 bar
- Fluid flow through the filter element from IN to OUT.

Seals

- Standard NBR series A
- Optional FPM series V

MPI FILTERS ARE PROVIDED FOR VERTICAL MOUNTING

Weights (kg)

| Length | 1 | 2 | 3 | 4 |
|-----------|------|------|------|------|
| • MPI 100 | 0,90 | 1,00 | 1,20 | 1,50 |
| • MPI 250 | 2,20 | 2,50 | 2,90 | 4,30 |
| • MPI 630 | 3,40 | 3,90 | 4,30 | 5,40 |
| • MPI 850 | 15,2 | 18,2 | 21,2 | 25,2 |

Volumes (dm³)

| Length | 1 | 2 | 3 | 4 |
|-----------|------|------|------|------|
| • MPI 100 | 0,90 | 0,90 | 1,20 | 1,60 |
| • MPI 250 | 3,50 | 3,50 | 4,50 | 7,00 |
| • MPI 630 | 5,80 | 7,40 | 9,50 | 11,4 |
| • MPI 850 | 8,80 | 12,2 | 16,7 | 20,8 |

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.

| Length | Filtration | | | | | | | | |
|---------|------------|-----|-----|-----|-----|-----|-----|-------------|-----|
| | A03 | A06 | A10 | A16 | A25 | P10 | P25 | M25-M60-M90 | |
| MPI 100 | 1 | 26 | 29 | 72 | 80 | 106 | 160 | 185 | 280 |
| | 2 | 42 | 45 | 110 | 115 | 160 | 164 | 187 | 300 |
| | 3 | 63 | 72 | 130 | 155 | 175 | 215 | 245 | 300 |
| | 4 | 89 | 98 | 180 | 198 | 215 | 265 | 300 | 300 |
| | 5 | 115 | 125 | 200 | 218 | 240 | 280 | 300 | 300 |

Flow rate l/min

| Length | Filtration | | | | | | | | |
|---------|------------|-----|-----|-----|-----|-----|-----|-------------|-----|
| | A03 | A06 | A10 | A16 | A25 | P10 | P25 | M25-M60-M90 | |
| MPI 250 | 1 | 92 | 100 | 205 | 245 | 300 | 330 | 370 | 700 |
| | 2 | 120 | 145 | 310 | 410 | 420 | 462 | 517 | 700 |
| | 3 | 185 | 215 | 415 | 440 | 500 | 550 | 616 | 700 |
| | 4 | 255 | 295 | 550 | 615 | 750 | 825 | 700 | 700 |

Flow rate l/min

| Length | Filtration | | | | | | | | |
|---------|------------|-----|-----|------|------|------|------|-------------|------|
| | A03 | A06 | A10 | A16 | A25 | P10 | P25 | M25-M60-M90 | |
| MPI 630 | 1 | 160 | 198 | 360 | 410 | 510 | 561 | 628 | 1200 |
| | 2 | 235 | 250 | 555 | 600 | 1025 | 1128 | 1200 | 1200 |
| | 3 | 325 | 370 | 730 | 770 | 1200 | 1200 | 1200 | 1200 |
| | 4 | 370 | 400 | 870 | 990 | 1200 | 1200 | 1200 | 1200 |
| | 5 | 610 | 690 | 1180 | 1200 | 1200 | 1200 | 1200 | 1200 |

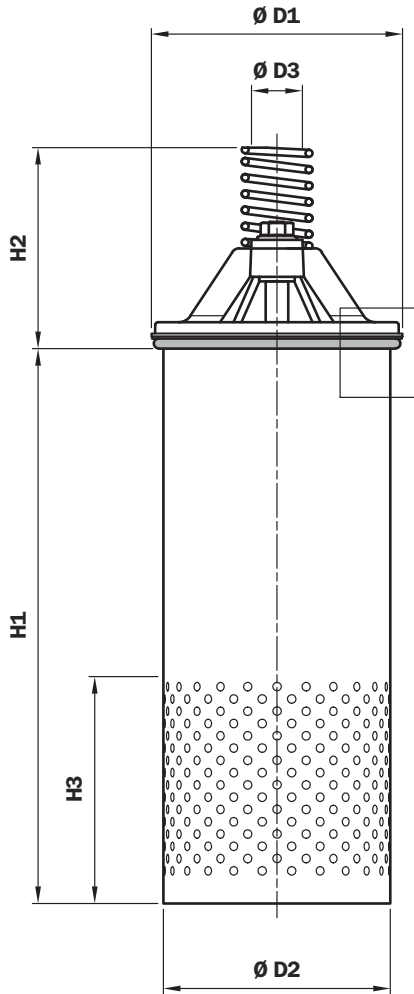
Flow rate l/min

| Length | Filtration | | | | | | | | |
|---------|------------|------|------|------|------|------|------|-------------|------|
| | A03 | A06 | A10 | A16 | A25 | P10 | P25 | M25-M60-M90 | |
| MPI 850 | 1 | 770 | 1030 | 1240 | 1550 | 2230 | 2600 | 2650 | 3000 |
| | 2 | 1170 | 1520 | 1680 | 1740 | 2440 | 2684 | 2900 | 3000 |
| | 3 | 1170 | 1910 | 1990 | 2010 | 3000 | 3000 | 3000 | 3000 |
| | 4 | 1170 | 2080 | 2300 | 2360 | 3000 | 3000 | 3000 | 3000 |

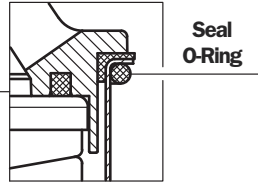
Flow rate l/min

MPI

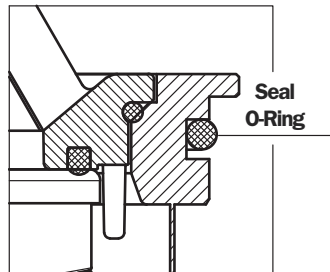
With diffuser



Version MPI 100



Version MPI 250 - 630 - 850

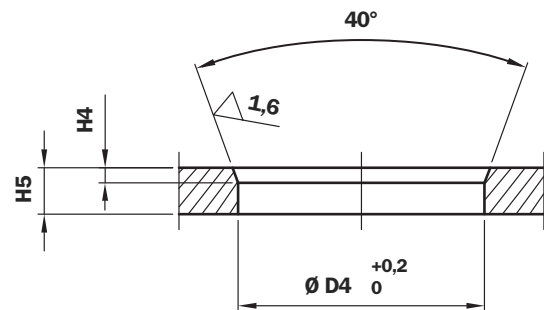
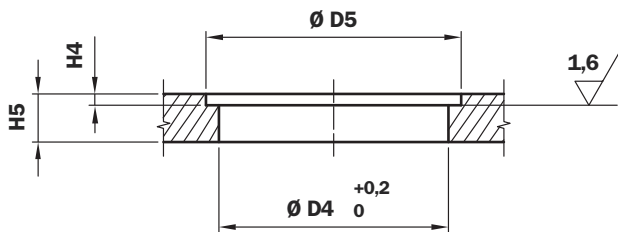


| Type | H1 mm | H2 mm | H3 mm | H4 mm | H5 mm |
|-----------|-------|-------|-------|-------|-------|
| MPI 100-1 | 198 | | | | |
| MPI 100-2 | 198 | | | | |
| MPI 100-3 | 248 | 62 | 80 | 4 | 12 |
| MPI 100-4 | 348 | | | | |
| MPI 100-5 | 448 | | | | |
| MPI 250-1 | 266 | | | | |
| MPI 250-2 | 266 | 81 | 90 | 4 | 15 |
| MPI 250-3 | 336 | | | | |
| MPI 250-4 | 524 | | | | |
| MPI 630-1 | 298 | | | | |
| MPI 630-2 | 378 | | | | |
| MPI 630-3 | 478 | 103 | 110 | 5 | 15 |
| MPI 630-4 | 568 | | | | |
| MPI 630-5 | 868 | | | | |
| MPI 850-1 | 427 | | 150 | | |
| MPI 850-2 | 642 | 145 | 150 | 5 | 17 |
| MPI 850-3 | 922 | | 250 | | |
| MPI 850-4 | 1187 | | 250 | | |

| Type | Ø D1 | Ø D2 | Ø D3 | Ø D4 | Ø D5 |
|-----------|------|------|------|-------|------|
| MPI 100-1 | | | | | |
| MPI 100-2 | | | | | |
| MPI 100-3 | 88,5 | 80 | 18 | 81 | 90 |
| MPI 100-4 | | | | | |
| MPI 100-5 | | | | | |
| MPI 250-1 | | | | | |
| MPI 250-2 | 155 | 132 | 25 | 145 | - |
| MPI 250-3 | | | | | |
| MPI 250-4 | | | | | |
| MPI 630-1 | | | | | |
| MPI 630-2 | | | | | |
| MPI 630-3 | 185 | 165 | 25 | 178 | - |
| MPI 630-4 | | | | | |
| MPI 630-5 | | | | | |
| MPI 850-1 | | | | | |
| MPI 850-2 | 260 | 250 | 40 | 250,5 | - |
| MPI 850-3 | | | | | |
| MPI 850-4 | | | | | |

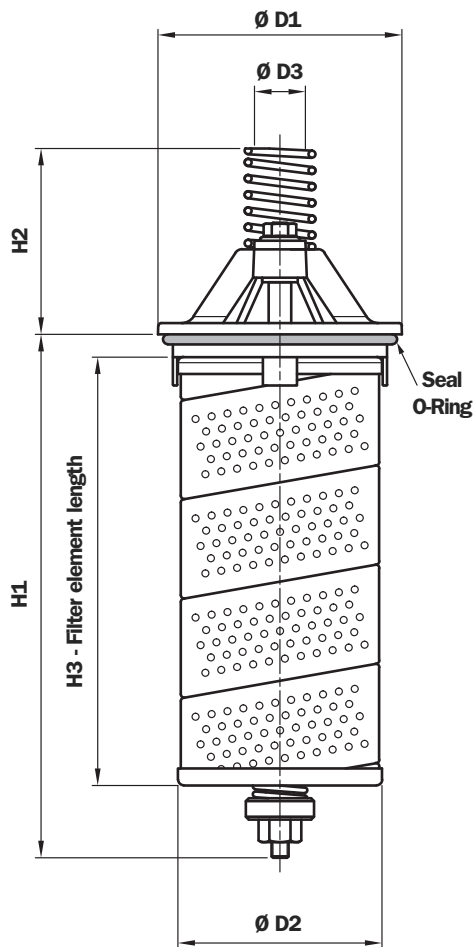
Filter seat
MPI 100

Filter seat
MPI 250 - 630 - 850

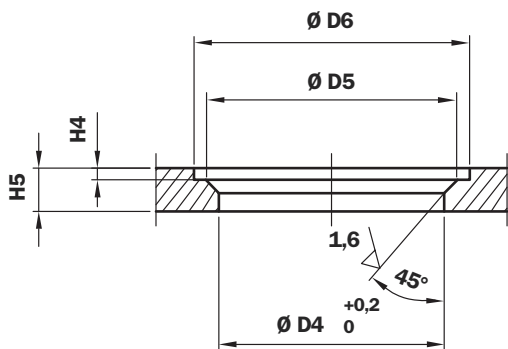


MPI

Without diffuser



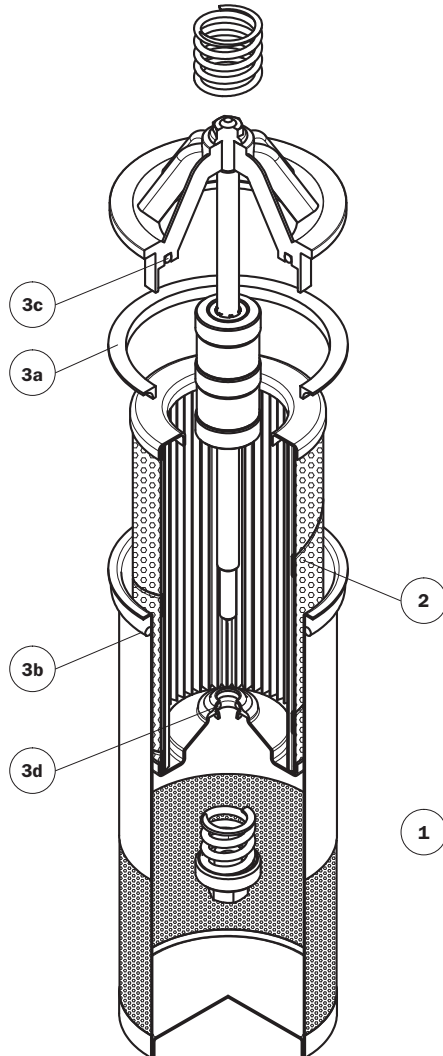
Filter seat



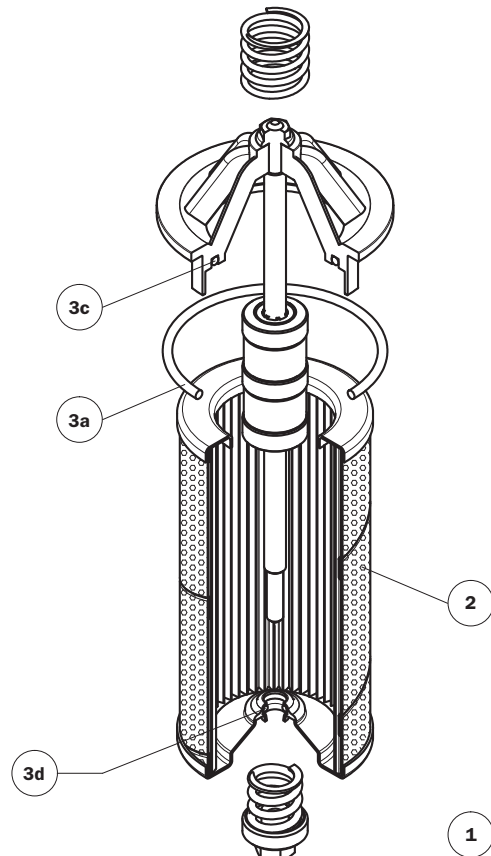
| Type | H1 mm | H2 mm | H3 mm | H4 mm | H5 mm |
|-----------|-------|-------|-------|-------|-------|
| MPI 100-1 | 141 | | 110 | | |
| MPI 100-2 | 185 | | 150 | | |
| MPI 100-3 | 235 | 57 | 200 | 4 | 12 |
| MPI 100-4 | 335 | | 300 | | |
| MPI 100-5 | 435 | | 400 | | |
| MPI 250-1 | 193 | | 140 | | |
| MPI 250-2 | 243 | 82 | 190 | 5 | 12 |
| MPI 250-3 | 313 | | 260 | | |
| MPI 250-4 | 516 | | 463 | | |
| MPI 630-1 | 275 | | 210 | | |
| MPI 630-2 | 355 | | 290 | | |
| MPI 630-3 | 455 | 105 | 390 | 7 | 15 |
| MPI 630-4 | 540 | | 478 | | |
| MPI 630-5 | 841 | | 779 | | |
| MPI 850-1 | 405 | | 327 | | |
| MPI 850-2 | 620 | 145 | 542 | 8 | 15 |
| MPI 850-3 | 900 | | 819 | | |
| MPI 850-4 | 1165 | | 1090 | | |

| Type | $\varnothing D1$ | $\varnothing D2$ | $\varnothing D3$ | $\varnothing D4$ | $\varnothing D5$ | $\varnothing D6$ |
|-----------|------------------|------------------|------------------|------------------|------------------|------------------|
| MPI 100-1 | | | | | | |
| MPI 100-2 | | | | | | |
| MPI 100-3 | 87 | 72 | 18 | 76 | 86 | 88 |
| MPI 100-4 | | | | | | |
| MPI 100-5 | | | | | | |
| MPI 250-1 | | | | | | |
| MPI 250-2 | 125 | 106 | 25 | 117 | 123,5 | 126 |
| MPI 250-3 | | | | | | |
| MPI 250-4 | | | | | | |
| MPI 630-1 | | | | | | |
| MPI 630-2 | | | | | | |
| MPI 630-3 | 150 | 126 | 25 | 139 | 149 | 151 |
| MPI 630-4 | | | | | | |
| MPI 630-5 | | | | | | |
| MPI 850-1 | | | | | | |
| MPI 850-2 | 230 | 203 | 40 | 217 | 227 | 231 |
| MPI 850-3 | | | | | | |
| MPI 850-4 | | | | | | |

With diffuser



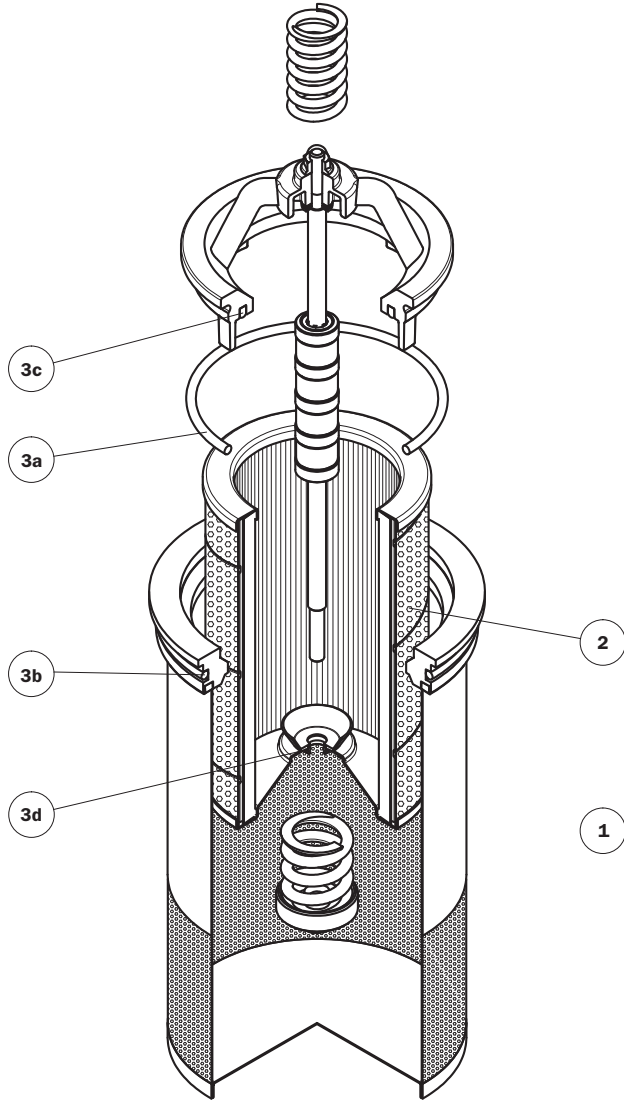
Without diffuser



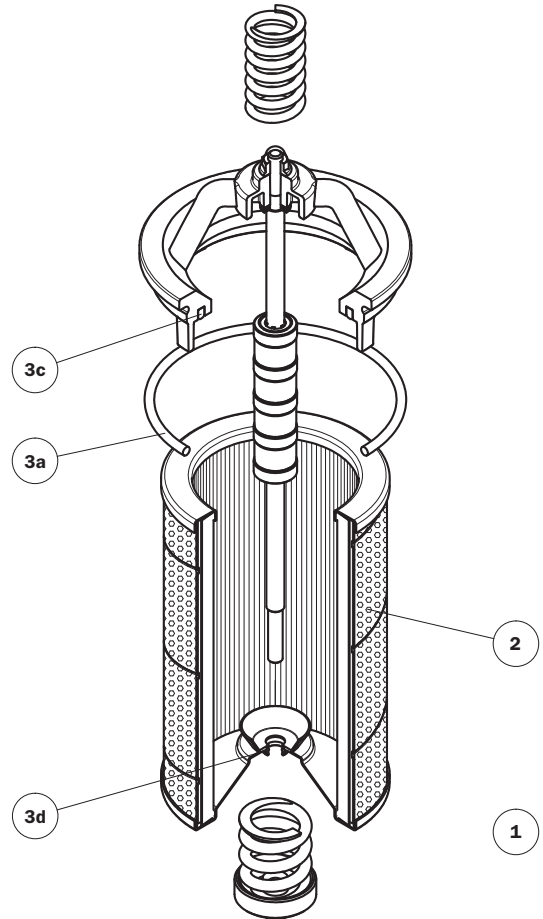
| Item | Description | Q.ty | FILTER Series MPI 100 | |
|------|--|------|----------------------------|-----------------|
| 1 | Filter assembly | 1 | See order table | |
| 2 | Filter element | 1 | See order table | |
| 3 | Seal Kit | 1 | NBR 02050145 | FPM 02050146 |
| 3a | Insert assembly external seal version with diffuser | 1 | 01026554 | 01026560 |
| | Insert assembly external seal version without diffuser | 1 | O-R 4275 Ø 69,44 x 3,53 | |
| 3b | Diffuser seal | 1 | O-R 4312 Ø 78,97 x 3,53 | |
| 3c | Insert assembly | 1 | 02019052 | 02019053 |
| 3d | Filter element seal | 1 | O-R Metric Ø 7,5 x 3 | |

Spare parts

With diffuser

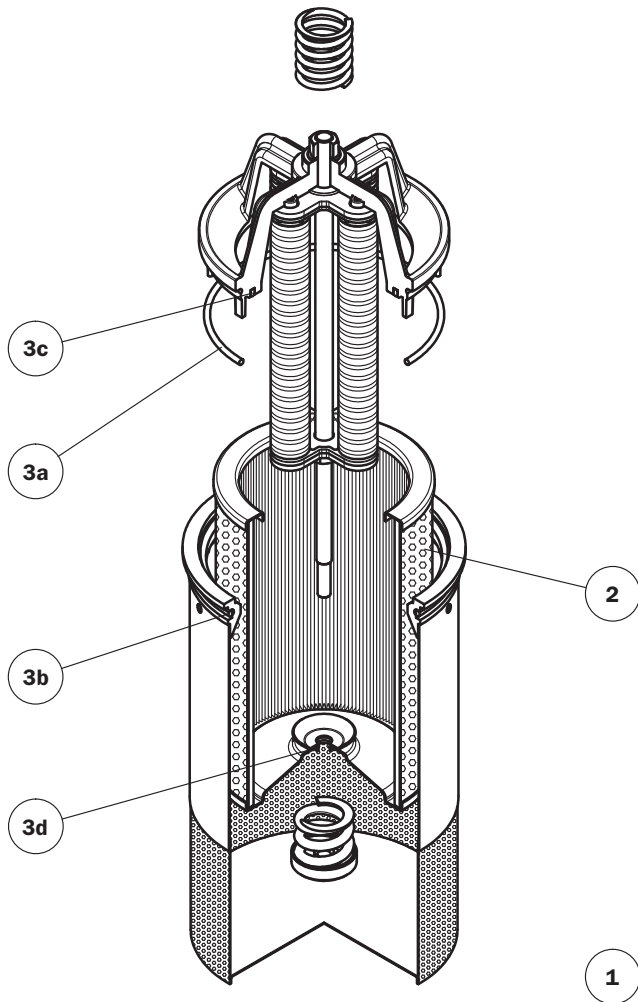


Without diffuser

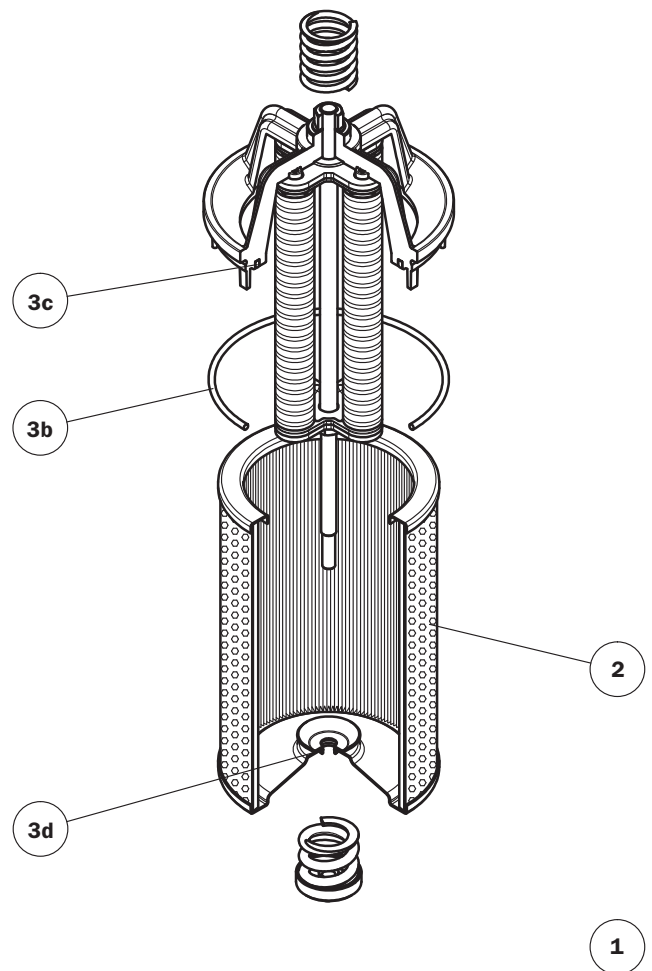


| Item | Description | Q.ty | FILTER Series MPI 250 | | FILTER Series MPI 630 | |
|------|-------------------------------|------|-----------------------------|----------|-----------------------------|----------|
| | | | NBR | FPM | NBR | FPM |
| 1 | Filter assembly | 1 | See order table | | See order table | |
| 2 | Filter element | 1 | See order table | | See order table | |
| 3 | Seal Kit | 1 | 02050147 | 02050148 | 02050112 | 02050113 |
| 3a | Insert assembly external seal | 1 | O-R 4437 Ø 110,70 x 3,53 | | O-R 210 Ø 133,40 x 5,34 | |
| 3b | Diffuser seal | 1 | O-R 210 Ø 133,40 x 5,34 | | O-R 6645 Ø 164,47 x 5,33 | |
| 3c | Insert assembly internal seal | 1 | 01026217 | 01026220 | 01026228 | 01026229 |
| 3d | Filter element seal | 1 | O-R 112 Ø 9,92 x 2,62 | | O-R 112 Ø 9,92 x 2,62 | |

With diffuser



Without diffuser



| Item | Description | Q.ty | FILTER Series MPI 850 | |
|------|-------------------------------|------|------------------------------|-----------------|
| 1 | Filter assembly | 1 | See order table | |
| 2 | Filter element | 1 | See order table | |
| 3 | Seal Kit | 1 | NBR 02050114 | FPM 02050115 |
| 3a | Insert assembly external seal | 1 | O-R Metric Ø 209,30 x 5,7 | |
| 3b | Diffuser seal | 1 | O-R 8925 Ø 234,30 x 6,99 | |
| 3c | Insert assembly internal seal | 1 | 01026248 | 01026249 |
| 3d | Filter element seal | 1 | O-R 117 Ø 13,10 x 2,62 | |

Ordering information MPI

Filter assembly

MPI

Example: MPI

| | | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5a | 6 | 7 |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

100 1 C D A A25 P01

Filter element

MR

Example: MR

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1 | 2 | 5b | 5 | 7 |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

100 1 A25 A P01

1 - Style

Filter

100
250
630
850

Filter element

100
250
630
850

2 - Filter length

100
250
630
850

| | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 1 | 2 | 3 | 4 | 5 |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 1 | 2 | 3 | 4 | |
| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | |

6 - Filter element

A03
A06
A10
A16
A25

Inorganic microfibre 3 µm
Inorganic microfibre 6 µm
Inorganic microfibre 10 µm
Inorganic microfibre 16 µm
Inorganic microfibre 25 µm

Absolute filtration
Inorganic
Microfibre
βx (c) ≥ 1000

M25
M60
M90

Wire mesh 25 µm
Wire mesh 60 µm
Wire mesh 90 µm

Nominal
Filtration

P10
P25

Resin - Impregnated paper
Resin - Impregnated paper

Nominal
Filtration

3 - By-pass valve

S Without bypass
C 1,75 bar
E 2,5 bar (not available for filter MPI 850)

7 - Option

P01 MP Filtri standard

4 - Execution

O Without diffuser and with magnetic column
D With diffuser and with magnetic column
E Without diffuser and without magnetic column
F With diffuser and without magnetic column

5 - Filter seals & Treatment

5a - Filter assembly

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

5b - Filter element

A NBR
V FPM

MP Filtri - The filter functions as described in this bulletin are valid exclusively for original MP Filtri filter elements and replacement parts. All rights reserved.

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