

# STR MPA-MPM

**S**UCTION FILTER



Flow rates to 900 l/min

# STR

These strainers are suitable for use in the suction line, submerged in the reservoir.

They are available for nominal flows up to 900 l/min (with oil at 30 mm<sup>2</sup>/s).

These filters are particularly suitable for applications where it is necessary to protect pumps from coarse particles of contamination.

STR series are available with or without a bypass valve.

MPA-MPM series are equipped with safety tie rod.

MPM series are supplied with an internal magnet column.

# MPA - MPM



Filter element:

- Materials
- STR series
- MPA-MPM series

Connection and End cap: Support tube: Bypass valve:

Nylon Galvanized Steel Nylon

Connection: End cap: Support tube:

Aluminium Galvanized Steel Galvanized Steel

Nut and tie rod:

Galvanized Steel

Element material  
Nominal filtration

M Series

Square wire mesh (filtration degree is defined in microns by the maximum diameter of a sphere corresponding to the mesh size).

- Filtering area  
Filter elements
- STR series
- MPA-MPM series

| Type STR | 050-1-2 | 070-1-2 | 070-3-4 | 100-1-5 | 100-2-3-4 | 140-1-2 | 140-3-4 | 140-5 | 140-6 |
|----------|---------|---------|---------|---------|-----------|---------|---------|-------|-------|
| M 60     | 290     | 470     | 720     | 1046    | 1850      | 2000    | 3550    | 3620  | 4160  |
| M 90     | 290     | 470     | 720     | 1046    | 1850      | 2000    | 3550    | 3620  | 4160  |
| M250     | 290     | 470     | 720     | 1046    | 1850      | 2000    | 3550    | 3620  | 4160  |

Values in cm²

| Type MPA MPM | 012-015 | 025-030 | 045-50 | 075-095 | 120-150 | 180-220 | 280-300 | 380-430 |
|--------------|---------|---------|--------|---------|---------|---------|---------|---------|
| M 60         | 280     | 480     | 770    | 1000    | 1820    | 1920    | 3450    | 4250    |
| M 90         | 280     | 480     | 770    | 1000    | 1820    | 1920    | 3450    | 4250    |
| M250         | 280     | 480     | 770    | 1000    | 1820    | 1920    | 3450    | 4250    |

Values in cm²

|                           |                                                                                                                                                        |                                                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Working Temperature       | STR series                                                                                                                                             | From -25°C to + 110°C                                                                                                                              |
|                           | MPA-MPM series                                                                                                                                         | From -40°C to + 120°C                                                                                                                              |
| Bypass valve              | For temperature outside this range, please consult our Sales Network Organization                                                                      |                                                                                                                                                    |
| Setting pressure          | Bypass valve, differential opening pressure: (STR series only)                                                                                         | B: 30 kPa ± 10%                                                                                                                                    |
| Compatibility with fluids | As per ISO 2943; suitable for mineral oils (types HH-HL-HM-HR-HV-HG as per ISO 6743/4)<br>synthetic fluids (types HS-HFDR-HFDS-HFDU as per ISO 6743/4) | For water-based emulsions (type HFAE-HFAS as per ISO 6743/4) and fluids other than those mentioned, please consult our Sales Network Organization. |

# Selection & installation information

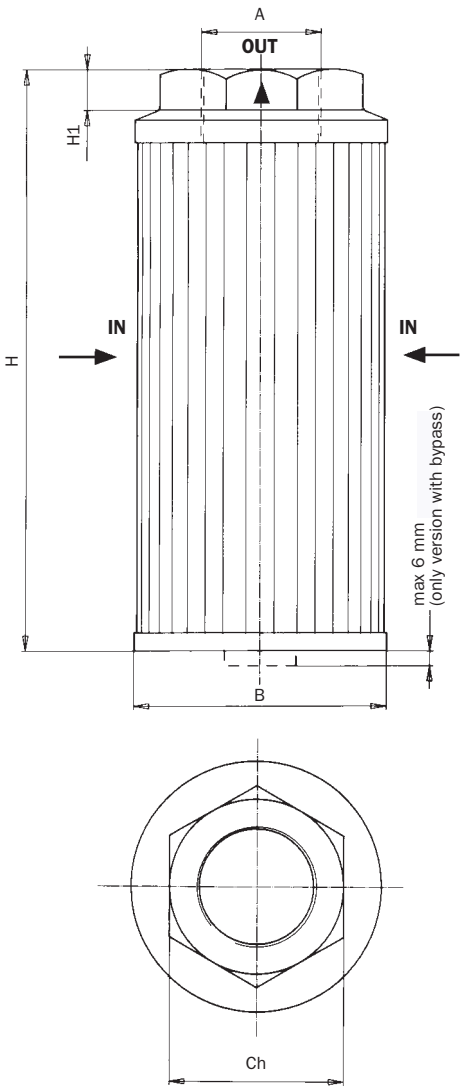
## Filter element types

### M series

Metal mesh media, available in 60,90 or 250 µm  
Example - **M60, M90 or M250**

1 bar = 100 kPa

The following filter setting recommendations are based using a mineral oil fluid at 30 mm<sup>2</sup>/s (cSt) with a maximum total filter pressure drop of **8 kPa (0,08 bar)**.

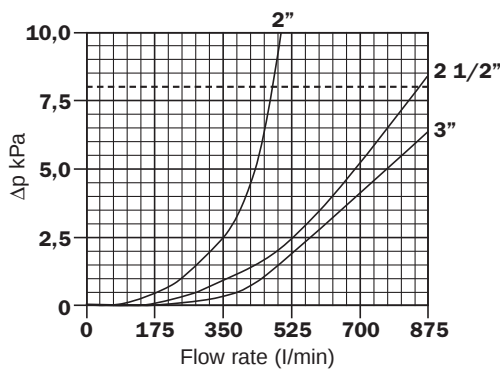
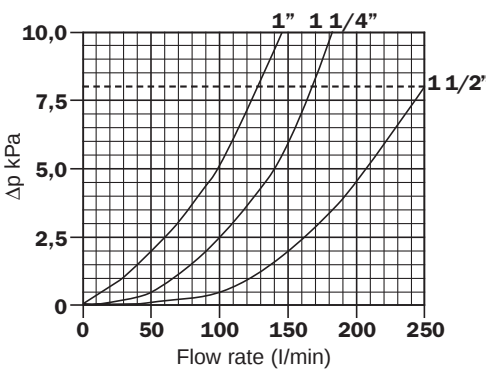
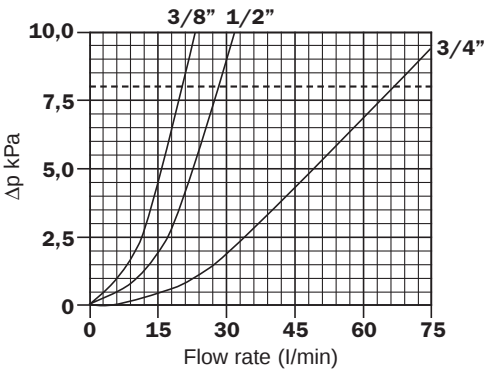


**STR**

## STR SERIES

| Type     | A          | B   | H   | H1 | Ch  | Weight<br>Max (kg) |
|----------|------------|-----|-----|----|-----|--------------------|
| 050-1 G1 | 3/8" BSP   | 52  | 78  | 10 | 30  | 0,16               |
| 050-1 G2 | 3/8" NPT   |     |     |    |     |                    |
| 050-2 G1 | 1/2" BSP   | 70  | 95  | 10 | 42  | 0,22               |
| 050-2 G2 | 1/2" NPT   |     |     |    |     |                    |
| 070-1 G1 | 1/2" BSP   | 140 | 140 | 15 | 69  | 0,30               |
| 070-1 G2 | 1/2" NPT   |     |     |    |     |                    |
| 070-2 G1 | 3/4" BSP   | 135 | 135 | 15 | 70  | 0,30               |
| 070-2 G2 | 3/4" NPT   |     |     |    |     |                    |
| 070-3 G1 | 1" BSP     | 225 | 225 | 20 | 101 | 0,68               |
| 070-3 G2 | 1" NPT     |     |     |    |     |                    |
| 100-1 G1 | 1 1/4" BSP | 270 | 270 | 20 | 101 | 1,25               |
| 100-1 G2 | 1 1/4" NPT |     |     |    |     |                    |
| 100-2 G1 | 1 1/4" BSP | 330 | 330 | 20 | 101 | 1,30               |
| 100-2 G2 | 1 1/4" NPT |     |     |    |     |                    |
| 100-3 G1 | 1 1/2" BSP | 330 | 330 | 20 | 101 | 1,30               |
| 100-3 G2 | 1 1/2" NPT |     |     |    |     |                    |
| 100-4 G1 | 2" BSP     | 330 | 330 | 20 | 101 | 1,30               |
| 100-4 G2 | 2" NPT     |     |     |    |     |                    |
| 100-5 G1 | 1 1/2" BSP | 330 | 330 | 20 | 101 | 1,30               |
| 100-5 G2 | 1 1/2" NPT |     |     |    |     |                    |
| 140-1 G1 | 1 1/2" BSP | 330 | 330 | 20 | 101 | 1,30               |
| 140-1 G2 | 1 1/2" NPT |     |     |    |     |                    |
| 140-2 G1 | 2" BSP     | 330 | 330 | 20 | 101 | 1,30               |
| 140-2 G2 | 2" NPT     |     |     |    |     |                    |
| 140-3 G1 | 2" BSP     | 330 | 330 | 20 | 101 | 1,30               |
| 140-3 G2 | 2" NPT     |     |     |    |     |                    |
| 140-4 G1 | 2 1/2" BSP | 330 | 330 | 20 | 101 | 1,30               |
| 140-4 G2 | 2 1/2" NPT |     |     |    |     |                    |
| 140-5 G1 | 3" BSP     | 330 | 330 | 20 | 101 | 1,30               |
| 140-5 G2 | 3" NPT     |     |     |    |     |                    |
| 140-6 G1 | 3" BSP     | 330 | 330 | 20 | 101 | 1,30               |
| 140-6 G2 | 3" NPT     |     |     |    |     |                    |

## Filter element pressure drop



# Ordering code example

STR

050-1

B

G1

M60

Example order

## Series

|     |          |
|-----|----------|
| STR | Strainer |
|-----|----------|

## Micron rating

|       |           |
|-------|-----------|
| M 60  |           |
| M 90  | Wire mesh |
| M 250 |           |

## Nominal sizes

|       |               |
|-------|---------------|
| 050-1 | 3/8" - H78    |
| 050-2 | 1/2" - H78    |
| 070-1 | 1/2" - H95    |
| 070-2 | 3/4" - H95    |
| 070-3 | 3/4" - H140   |
| 070-4 | 1" - H140     |
| 100-1 | 1 1/4" - H135 |
| 100-2 | 1 1/4" - H225 |
| 100-3 | 1 1/2" - H225 |
| 100-4 | 2" - H225     |
| 100-5 | 1 1/2" - H135 |
| 140-1 | 1 1/2" - H160 |
| 140-2 | 2" - H160     |
| 140-3 | 2" - H262     |
| 140-4 | 2 1/2" - H270 |
| 140-5 | 3" - H270     |
| 140-6 | 3" - H330     |

## Connections

|    |            |
|----|------------|
| G1 | BSP Thread |
| G2 | NPT Thread |

## Bypass valve

|   |                |
|---|----------------|
| S | Without bypass |
| B | With bypass    |

# Selection & installation information

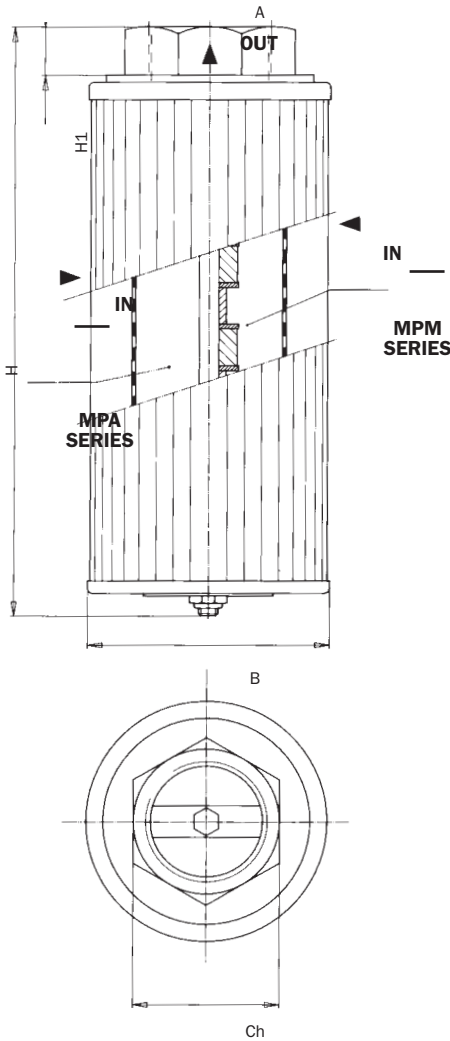
## Filter element types

### M series

Metal mesh media, available in 60,90 or 250 µm  
Example - **M60, M90 or M250**

1 bar = 100 kPa

The following filter setting recommendations are based using a mineral oil fluid at 30 mm<sup>2</sup>/s (cSt) with a maximum total filter pressure drop of **8 kPa (0,08 bar)**.

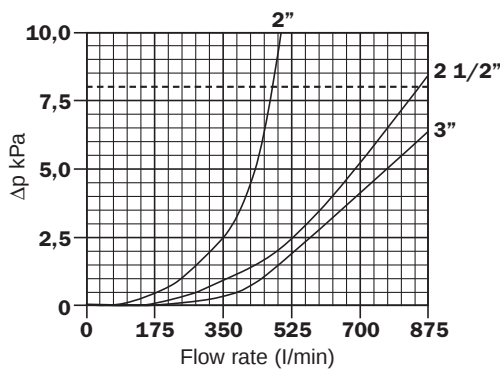
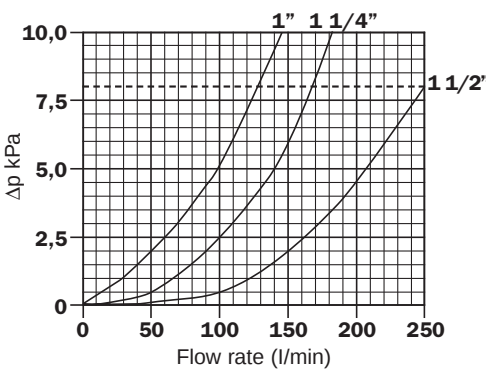
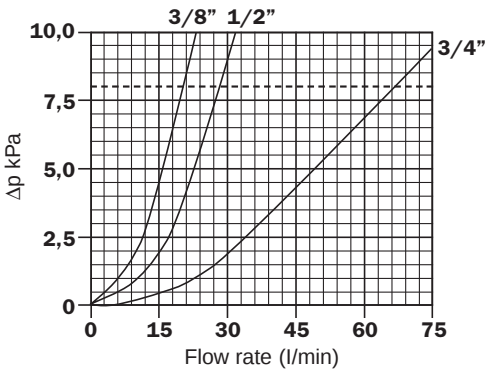


**MPA  
MPM**

## MPA - MPM SERIES

| Type   | A          | B   | H     | H1 | Ch  | Weight<br>Max (kg) |
|--------|------------|-----|-------|----|-----|--------------------|
| 012 G1 | 3/8" BSP   | 50  | 95    | 15 | 28  | 0,17               |
| 012 G2 | 3/8" NPT   |     |       |    |     |                    |
| 015 G1 | 1/2" BSP   | 50  | 95    | 15 | 28  | 0,17               |
| 015 G2 | 1/2" NPT   |     |       |    |     |                    |
| 025 G1 | 1/2" BSP   | 70  | 110   | 15 | 28  | 0,27               |
| 025 G2 | 1/2" NPT   |     |       |    |     |                    |
| 030 G1 | 3/4" BSP   | 70  | 111,5 | 17 | 42  | 0,36               |
| 030 G2 | 3/4" NPT   |     |       |    |     |                    |
| 045 G1 | 3/4" BSP   | 70  | 156,5 | 17 | 42  | 0,39               |
| 045 G2 | 3/4" NPT   |     |       |    |     |                    |
| 050 G1 | 1" BSP     | 70  | 156,5 | 17 | 42  | 0,35               |
| 050 G2 | 1" NPT     |     |       |    |     |                    |
| 075 G1 | 1" BSP     | 99  | 146,5 | 17 | 42  | 0,54               |
| 075 G2 | 1" NPT     |     |       |    |     |                    |
| 095 G1 | 1 1/4" BSP | 99  | 147   | 21 | 60  | 0,63               |
| 095 G2 | 1 1/4" NPT |     |       |    |     |                    |
| 120 G1 | 1 1/4" BSP | 99  | 237   | 21 | 60  | 0,95               |
| 120 G2 | 1 1/4" NPT |     |       |    |     |                    |
| 150 G1 | 1 1/2" BSP | 99  | 237   | 21 | 60  | 0,91               |
| 150 G2 | 1 1/2" NPT |     |       |    |     |                    |
| 180 G1 | 1 1/2" BSP | 136 | 172   | 21 | 60  | 0,98               |
| 180 G2 | 1 1/2" NPT |     |       |    |     |                    |
| 220 G1 | 2" BSP     | 136 | 160   | 13 | 80  | 1,00               |
| 220 G2 | 2" NPT     |     |       |    |     |                    |
| 280 G1 | 2" BSP     | 136 | 270   | 13 | 80  | 1,60               |
| 280 G2 | 2" NPT     |     |       |    |     |                    |
| 300 G1 | 2 1/2" BSP | 136 | 279   | 21 | 90  | 1,67               |
| 300 G2 | 2 1/2" NPT |     |       |    |     |                    |
| 380 G1 | 2" BSP     | 136 | 320   | 13 | 80  | 1,60               |
| 380 G2 | 2" NPT     |     |       |    |     |                    |
| 430 G1 | 3" BSP     | 136 | 333   | 22 | 106 | 1,93               |
| 430 G2 | 3" NPT     |     |       |    |     |                    |

## Filter element pressure drop



# Ordering code example

MPA

050

G1

M60

Example order

## Series

|     |                                       |
|-----|---------------------------------------|
| MPA | Complete strainer without int. magnet |
| MPM | Complete strainer with int. magnet    |

## Micron rating

|       |           |
|-------|-----------|
| M 60  |           |
| M 90  | Wire mesh |
| M 250 |           |

## Nominal sizes

|     |        |
|-----|--------|
| 012 | 3/8"   |
| 015 | 1/2"   |
| 025 | 1/2"   |
| 030 | 3/4"   |
| 045 | 3/4"   |
| 050 | 1"     |
| 075 | 1"     |
| 095 | 1 1/4" |
| 120 | 1 1/4" |
| 150 | 1 1/2" |
| 180 | 1 1/2" |
| 220 | 2"     |
| 280 | 2"     |
| 300 | 2 1/2" |
| 380 | 2"     |
| 430 | 3"     |

## Connections

|    |            |
|----|------------|
| G1 | BSP Thread |
| G2 | NPT Thread |

**MP Filtri** - Filtration products will only be guaranteed if original MP Filtri replacement elements and spares are used

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