



## EFPL Series

### EVOTEK Medium Pressure Filters

#### Product Description

- Operating pressure up to 110 bar
- 160 l/min max. flow rate
- installation in pressure line
- application in Machine Tools, Power Units , construction and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

#### Technical Specifications

##### Application

Inline High Pressure Filter

##### Port Sizes:

Threaded Connections according to BSP and NPT standard in ½ " or 1" and SAE08/SAE12 threads

##### Flow Rate:

max. 160 l/min

##### Operating Pressure:

max. 110 bar

##### Burst Pressure:

min. 330 bar

##### Element Collapse Pressure:

10 bar (P series), 21 bar (M series), 30bar (Y series)

##### By-pass Opening Pressure:

$\Delta p = 6 \text{ bar} + 0.6 \text{ bar}$

##### Material

##### Seals:

NBR or FPM (-10°C to 100°C)

##### Filter Head:

Aluminum die-casting alloys

##### Filter Bowl:

Anodized aluminum alloy

##### Compatibility:

Suitable for mineral oils, lubrication oils, non-flam fluids, synthetic and rapidly biodegradable oils (for use with water or other fields please contact our technical department)

##### Tested according to ISO standards:

ISO2941 Collapse/burst resistance

ISO2942 Fabrication integrity

ISO2943 Material compatibility integrity

ISO3723 Method for end load test

ISO3724 Flow fatigue characteristics

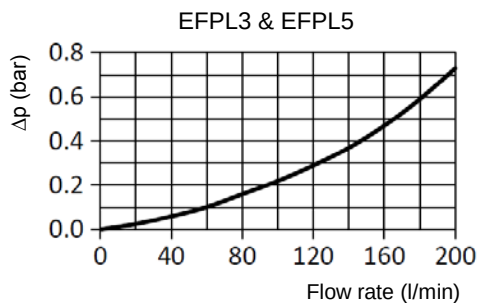
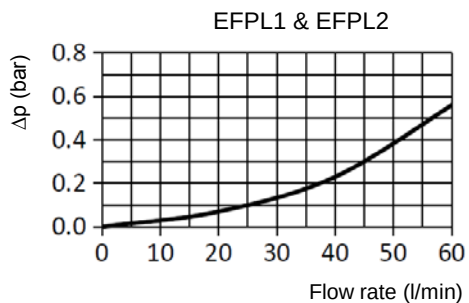
ISO3968 Pressure Drop vs. Flow Rate

ISO16889 Multi-Pass Test

## EFPL Medium Pressure Filter Series

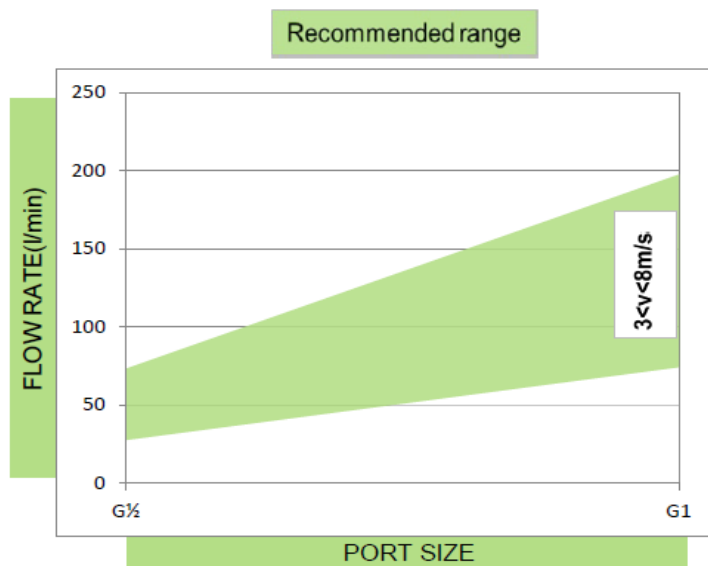
### Pressure Drop Graphs ( $\Delta p$ )

#### Pressure Drop of Filter Housing only

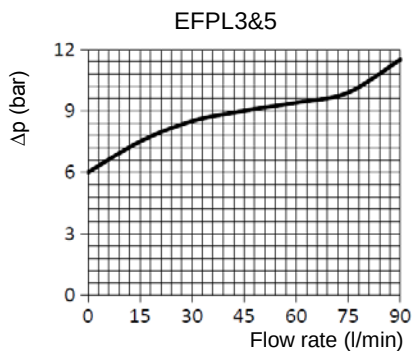
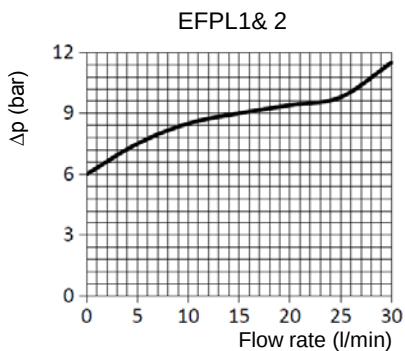


#### Graph of oil flow velocity

(we recommend to select size of the filter considering range of oil velocity between 3 to 8m/s for pressure series)



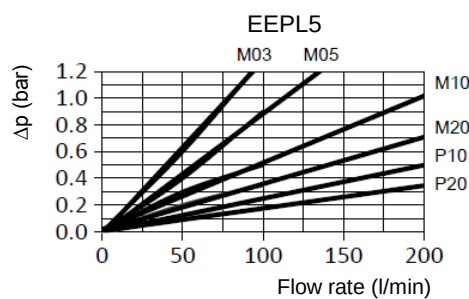
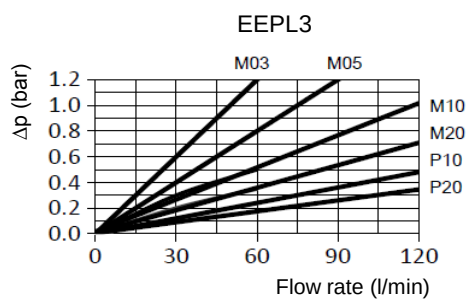
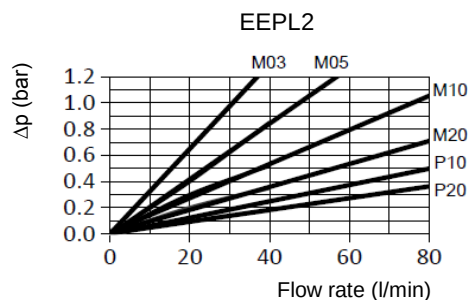
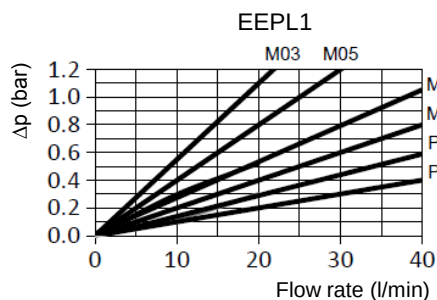
#### Pressure drop graph on by-pass valve



# EFPL Medium Pressure Filter Series

## Pressure Drop Graphs ( $\Delta p$ )

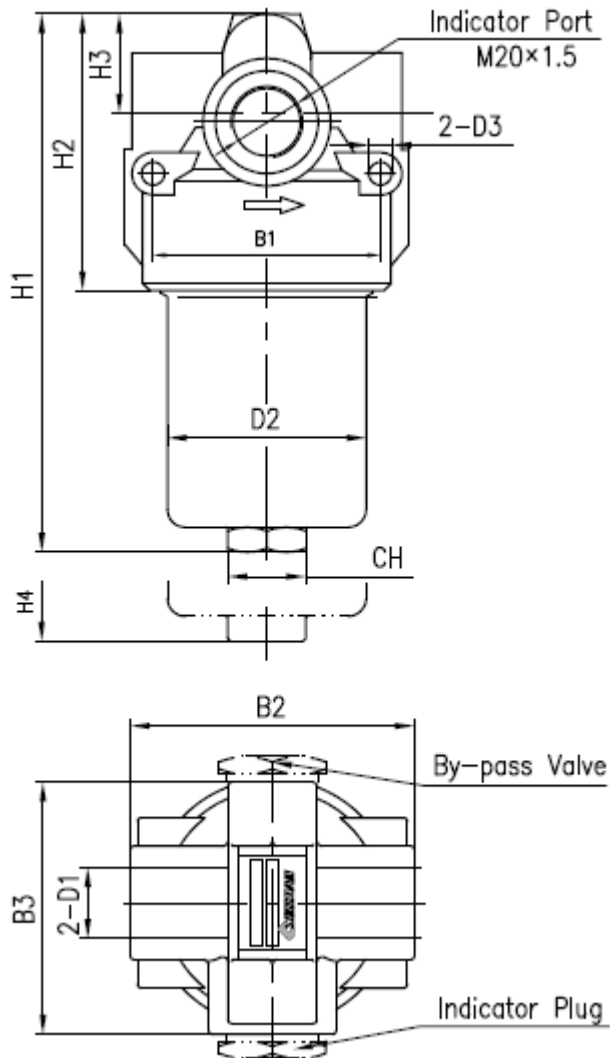
Pressure Drop with Clean Filter Elements (M and P filter media)



# EFPL Medium Pressure Filter Series

## Technical Drawings and Dimension

### EFPL1, EFPL2, EFPL3 & EFPL5



### Threaded Connection Ports

| Type  | Connection Port<br>(BSP/NPT/SAE) Height |      | H1  | H2  | H3 | H4 | B1 | B2  | B3 | D2 | D3  | CH |
|-------|-----------------------------------------|------|-----|-----|----|----|----|-----|----|----|-----|----|
|       | inch                                    | mm   |     |     |    |    |    |     |    |    |     |    |
| EFPL1 | ½"                                      | 12.7 | 157 | 78  | 28 | 60 | 64 | 76  | 75 | 55 | 6.5 | 22 |
| EFPL2 | SAE08                                   |      | 244 | 78  | 28 | 60 | 64 | 76  | 75 | 55 | 6.5 | 22 |
| EFPL3 | 1"                                      | 25.4 | 221 | 100 | 37 | 60 | 94 | 114 | 92 | 86 | 8.5 | 25 |
| EFPL5 | SAE16                                   |      | 277 | 100 | 37 | 60 | 94 | 114 | 92 | 86 | 8.5 | 25 |

# EFPL Medium Pressure Filter Series

## Order Codes

| Filter Assembly | A | B  | C  | D | - | E   | - | F   | Element Series | A | D | E   |
|-----------------|---|----|----|---|---|-----|---|-----|----------------|---|---|-----|
| EFPL            | 1 | BB | 11 | B | - | M20 | - | E50 | EEPL           | 1 | B | M20 |

Select the code for each filter (or element) feature according to your requirements and place it in the sequence (see example above) to create the corresponding product order code.

| A    |           |
|------|-----------|
| Size | Flow Rate |
| 1    | 30 l/min  |
| 2    | 60 l/min  |
| 3    | 110 l/min |
| 5    | 160 l/min |

| B Connection Ports |        |
|--------------------|--------|
| A08                | SAE08  |
| A16                | SAE16  |
| BB                 | BSP ½" |
| BD                 | BSP 1" |
| NB                 | NPT ½" |
| ND                 | NPT 1" |

| C By-pass Valve |         |
|-----------------|---------|
| 00              | No      |
| 11              | 6.0 bar |
| X               | special |

| D Seal |     |
|--------|-----|
| B      | NBR |
| V      | FPM |

| E Media Material |            | Filtration | Collapse Pressure |
|------------------|------------|------------|-------------------|
| P10              | Cellulose  | 10µm       | 10 bar            |
| P20              | Cellulose  | 20µm       | 10 bar            |
| M03              | Fibreglass | 5µm        | 21 bar            |
| M05              | Fibreglass | 7µm        | 21 bar            |
| M10              | Fibreglass | 12µm       | 21 bar            |
| M20              | Fibreglass | 21µm       | 21 bar            |
| Y25              | Wire Mesh  | 25µm       | 30 bar            |
| Y60              | Wire Mesh  | 60µm       | 30 bar            |

| F Indicator |                                         |                |
|-------------|-----------------------------------------|----------------|
| 00          | No                                      | Connection     |
| V50         | 5 bar visual                            | M20*1.5 Thread |
| E50         | 5 bar visual/electrical                 | M20*1.5 Thread |
| E50S        | 5 bar electrical                        | M20*1.5 Thread |
| E50T        | 5 bar electrical with thermostat (30°C) | M20*1.5 Thread |

## This image shows a single page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.