



## EFPG Series

### EVOTEK Medium Pressure Filters

#### Product Description

- Operating pressure up to 70 bar
- 660 l/min max. flow rate
- installation in pressure line
- application in Off-line Filter Loops, Machine Tools , Mobile Equipment, Injection Molding, Oil Patch Drilling Equipment and agricultural machines
- compliant with industry relevant ISO standards(see ISO test below)

#### Technical Specifications

##### Application

Inline Medium Pressure Filter

##### Port Sizes:

Threaded Connections according to BSP and NPT standard in ½ " to 1½" and SAE08/SAE12/SAE20/SAE24 threads  
SAE DN40/DN50 3000psi

##### Flow Rate:

max. 660 l/min

##### Operating Pressure:

max. 70 bar

##### Burst Pressure:

min. 210 bar

##### Element Collapse Pressure:

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 (-25°C to 100°C)

##### Filter Head:

Aluminium

##### Filter Bowl:

Aluminium

##### 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)

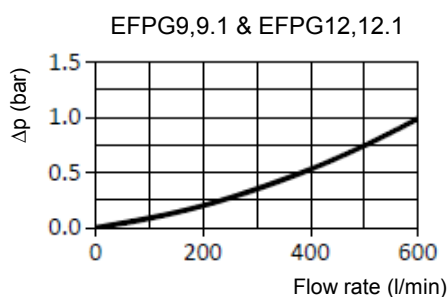
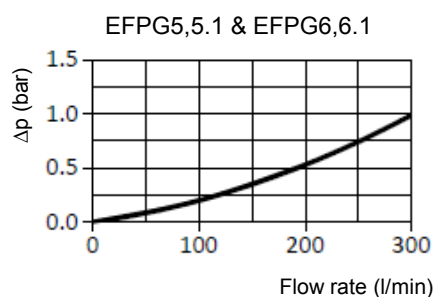
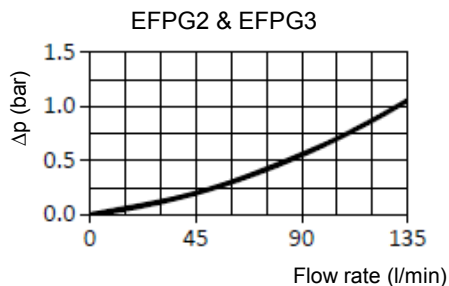
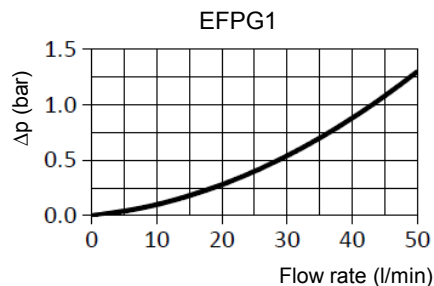
##### Tested according to ISO standards:

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

## EFPG High Medium Filter Series

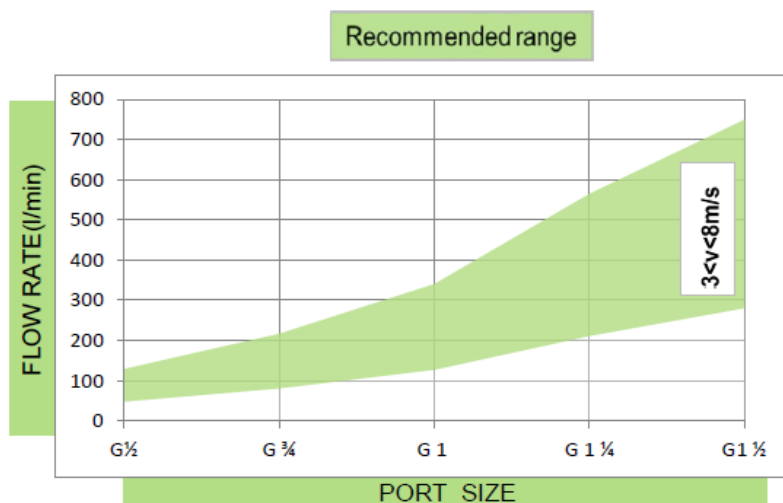
### Pressure Drop Graphs ( $\Delta p$ )

#### Pressure Drop of Filter Housing only

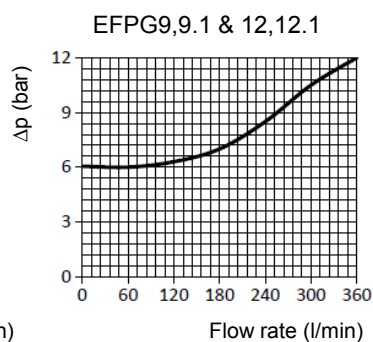
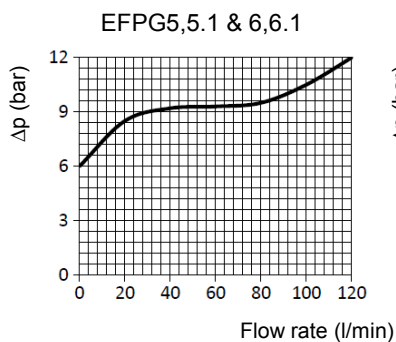
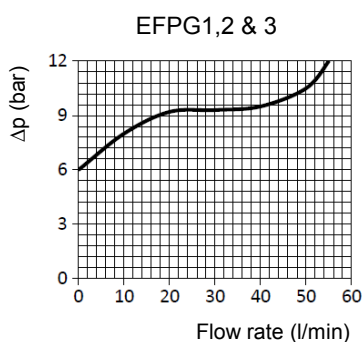


#### Graph of oil flow velocity

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



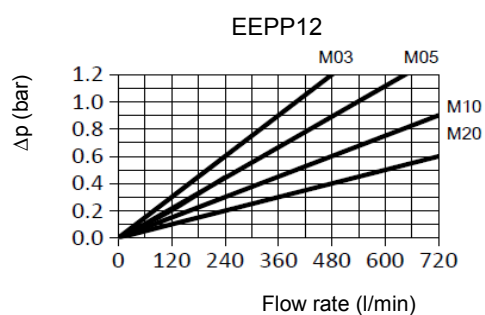
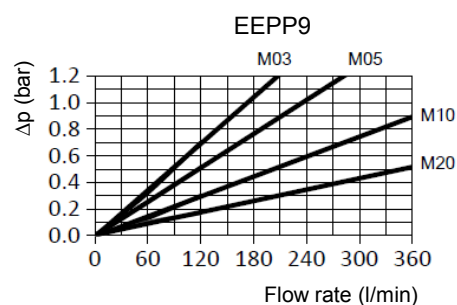
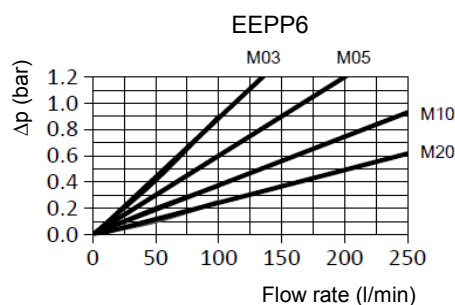
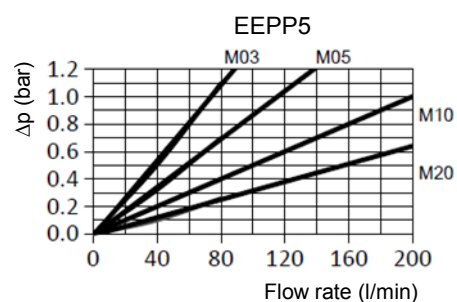
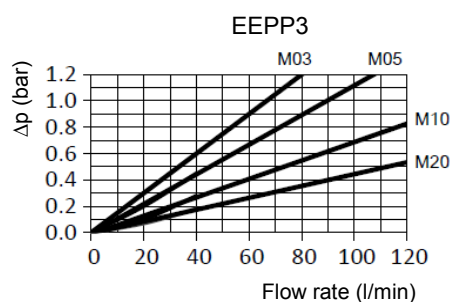
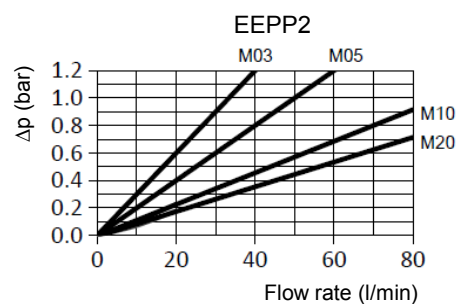
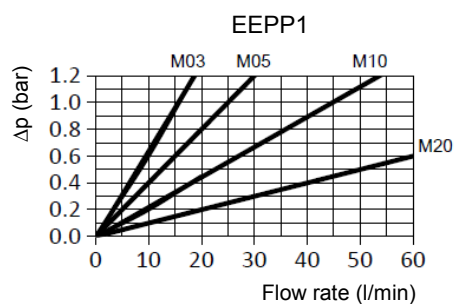
#### Pressure drop graph on by-pass valve



## EPPG Medium Pressure Filter Series

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

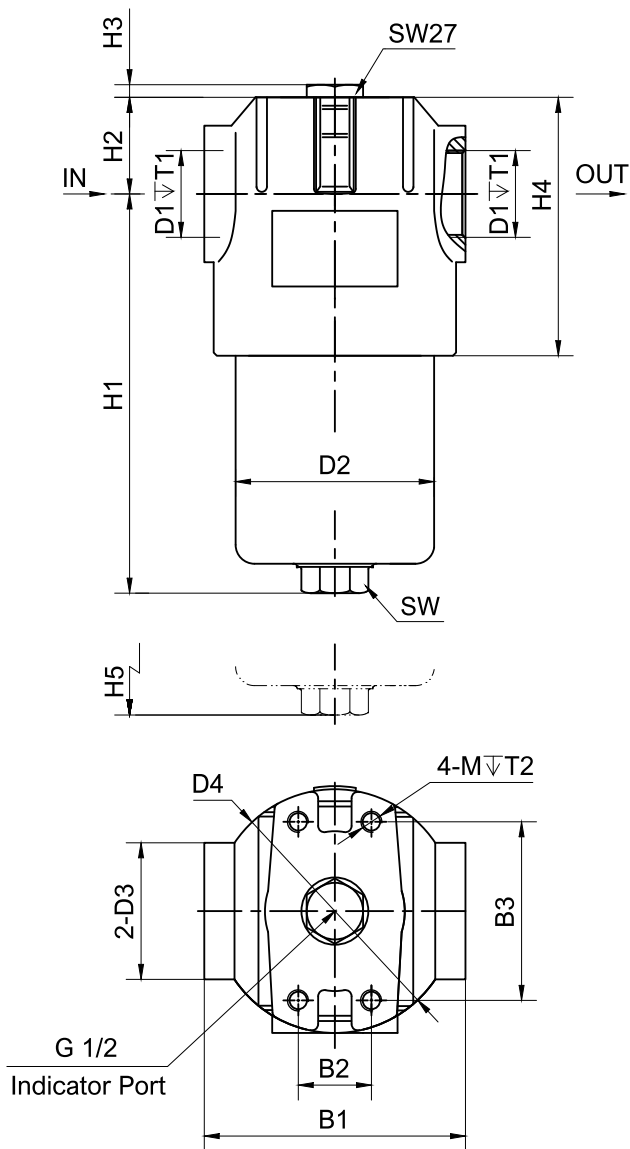
Pressure Drop with Clean Filter Elements (M filter media)



# EFPG Medium Pressure Filter Series

## Technical Drawings and Dimension

### EFPG1 TO EFPG12



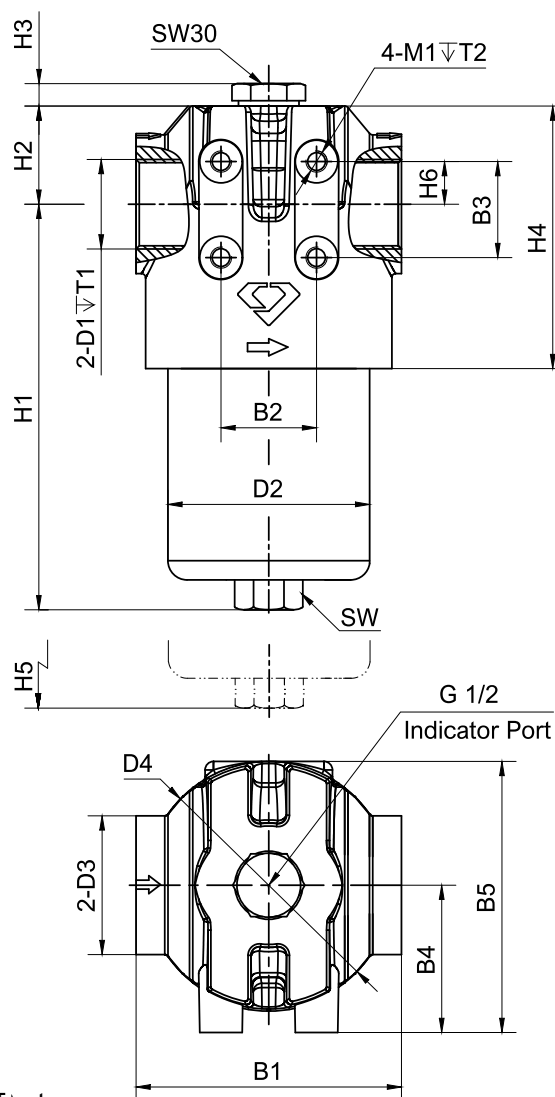
Threaded Connection Ports

|        | Connection Port<br>(BSP/NPT/SAE) | Height |    |    |     |     |     |    |     |     |    |     |    |     |    |    |    |
|--------|----------------------------------|--------|----|----|-----|-----|-----|----|-----|-----|----|-----|----|-----|----|----|----|
| Type   | inch                             | mm     | H1 | H2 | H3  | H4  | H5  | D2 | D3  | D4  | b1 | b2  | b3 | SW  | M  | T1 | T2 |
| EFPG1  | ½", SAE08                        | 136    | 31 | 6  | 88  | 75  | 52  | 36 | 67  | 69  | 30 | 45  | 24 | M5  | 15 | 9  |    |
| EFPG2  | ¾", SAE12                        | 138    | 39 | 6  | 98  | 75  | 68  | 42 | 85  | 90  | 32 | 56  | 27 | M6  | 21 | 10 |    |
| EFPG3  |                                  | 206    | 39 | 6  | 98  | 75  | 68  | 42 | 85  | 90  | 32 | 56  | 27 | M6  | 21 | 10 |    |
| EFPG5  | 1¼", SAE20                       | 190    | 46 | 6  | 123 | 95  | 95  | 65 | 116 | 125 | 35 | 85  | 32 | M10 | 25 | 17 |    |
| EFPG6  |                                  | 250    | 46 | 6  | 123 | 95  | 95  | 65 | 116 | 125 | 35 | 85  | 32 | M10 | 25 | 17 |    |
| EFPG9  | 1½", SAE24                       | 250    | 52 | 6  | 138 | 105 | 130 | 85 | 160 | 160 | 60 | 115 | 36 | M12 | 27 | 25 |    |
| EFPG12 |                                  | 416    | 52 | 6  | 138 | 105 | 130 | 85 | 160 | 160 | 60 | 115 | 36 | M12 | 27 | 25 |    |

# EFPG Medium Pressure Filter Series

## Technical Drawings and Dimension

EFPG5.1&EFPG6.1



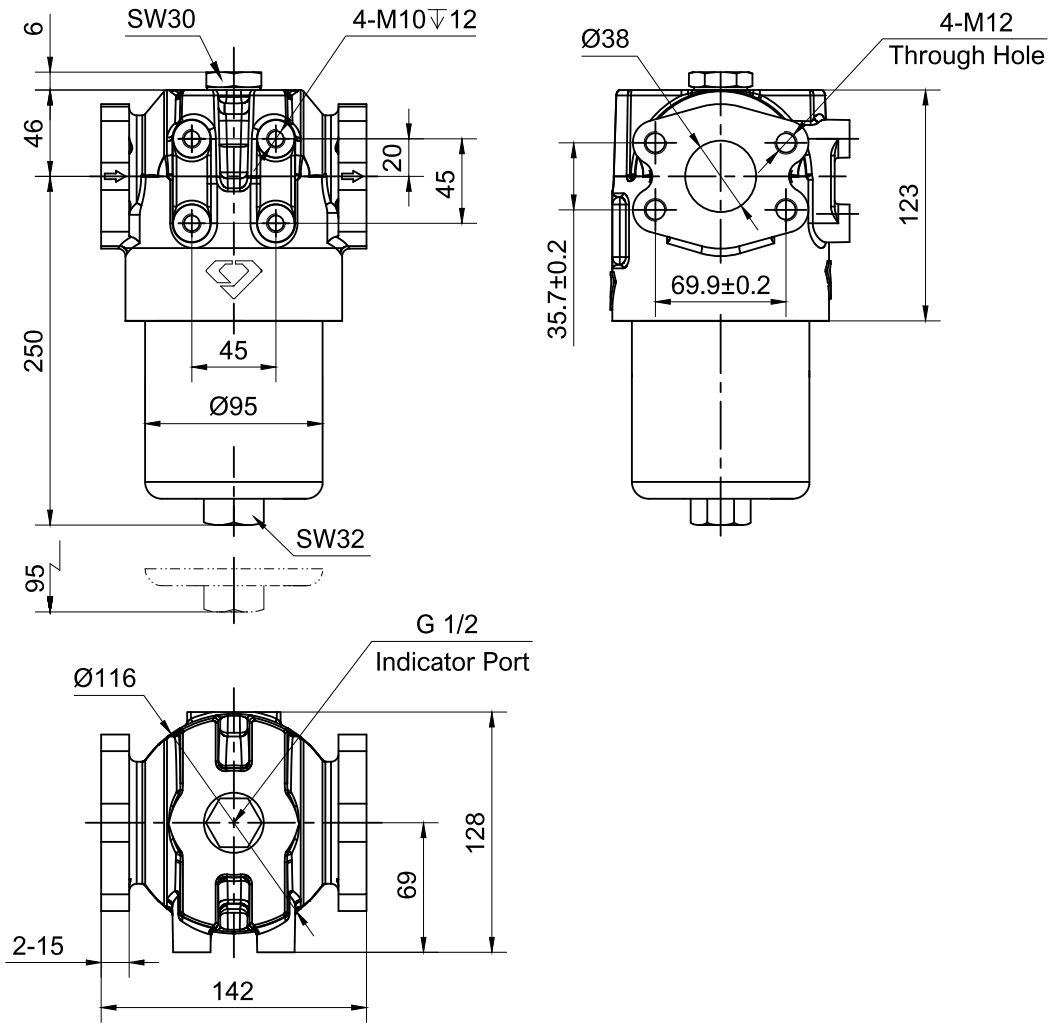
### Threaded Connection Ports

| Type    | Connection Port<br>(BSP/NPT/SAE) |       | Height |    |    |     |    |    |    |    |     |     |    |    |    |     |    |     |    |    |
|---------|----------------------------------|-------|--------|----|----|-----|----|----|----|----|-----|-----|----|----|----|-----|----|-----|----|----|
|         | D1                               |       | H1     | H2 | H3 | H4  | H5 | H6 | D2 | D3 | D4  | B1  | B2 | B3 | B4 | B5  | SW | M   | T1 | T2 |
| EFPG5.1 | 1 1/2"                           | SAE24 | 190    | 46 | 6  | 123 | 95 | 20 | 95 | 65 | 116 | 125 | 45 | 45 | 69 | 127 | 32 | M10 | 25 | 12 |
| EFPG6.1 |                                  |       | 250    | 46 | 6  | 123 | 95 | 20 | 95 | 65 | 116 | 125 | 45 | 45 | 69 | 127 | 32 | M10 | 25 | 12 |

EFPG Medium Pressure Filter Series

Technical Drawings and Dimension

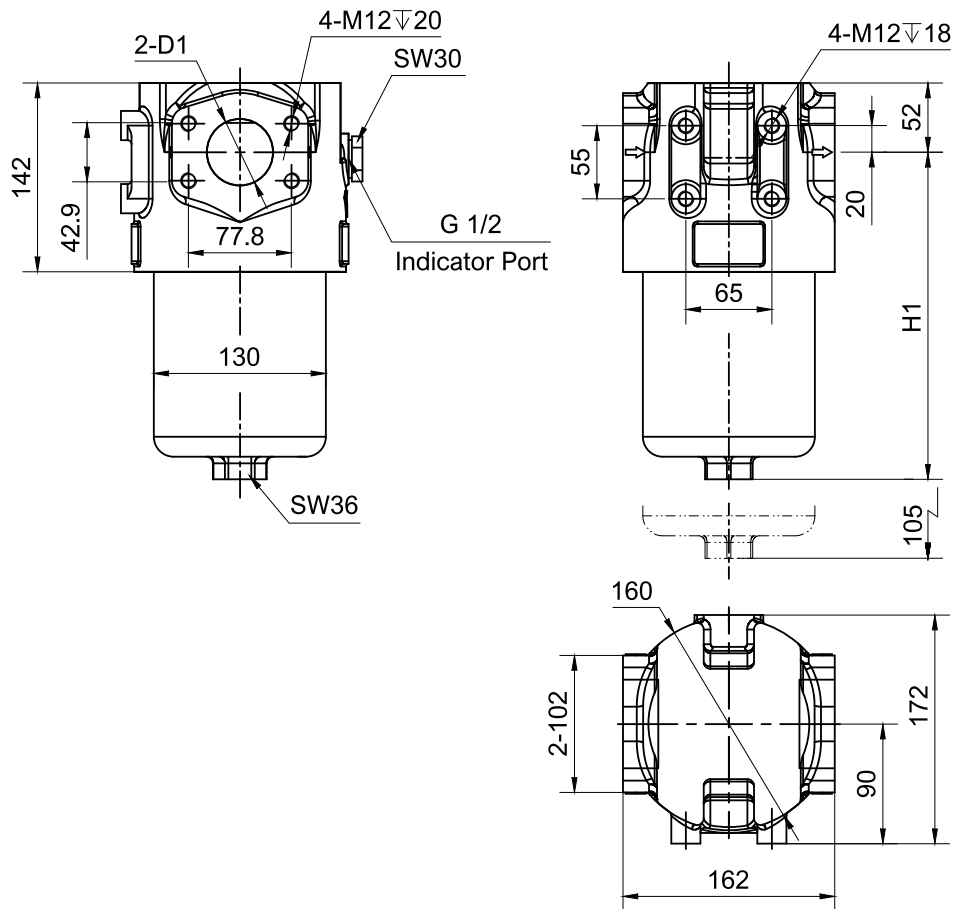
EFPG6.2



EFPG Medium Pressure Filter Series

Technical Drawings and Dimension

EFPG9.1&EFPG12.1



Threaded Connection Ports

| Type     | Connection Port (SAE) |    | Height |
|----------|-----------------------|----|--------|
|          | inch                  | mm |        |
| EFPG9.1  | D1                    |    | H1     |
| EFPG12.1 | SAE DN50 3000psi      |    | 250    |
|          |                       |    | 416    |

## EFPG Medium Pressure Filter Series

### Order Codes

| Filter Assembly Series | A | B  | C  | D | - | E   | - | F   | Element Series | A | D | E   |
|------------------------|---|----|----|---|---|-----|---|-----|----------------|---|---|-----|
| EFPG                   | 1 | BB | 11 | B | - | M20 | - | 5PB | EEPP           | 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 |
| 5.1  | 160 l/min |
| 6    | 240 l/min |
| 6.1  | 240 l/min |
| 9    | 330 l/min |
| 9.1  | 330 l/min |
| 11   | 500 l/min |
| 12   | 660 l/min |
| 12.1 | 660 l/min |

#### B Connection Ports

|     |                  |
|-----|------------------|
| A08 | SAE08            |
| A12 | SAE12            |
| A20 | SAE20            |
| A24 | SAE24            |
| BB  | BSP ½"           |
| BC  | BSP ¾"           |
| BE  | BSP 1-¼"         |
| BF  | BSP 1-½"         |
| NB  | NPT ½"           |
| NC  | NPT ¾"           |
| NE  | NPT 1-¼"         |
| NF  | NPT 1-½"         |
| FE  | SAE DN40 3000psi |
| FF  | SAE DN50 3000psi |

#### C By-pass Valve

|    |         |
|----|---------|
| 00 | No      |
| 11 | 6.0 bar |
| X  | special |

#### D Seal

|   |     |
|---|-----|
| B | NBR |
| V | FPM |

#### E Media Material Filtration Collapse Pressure

|     |            |      |        |
|-----|------------|------|--------|
| M03 | Fiberglass | 5µm  | 21 bar |
| M05 | Fiberglass | 7µm  | 21 bar |
| M10 | Fiberglass | 12µm | 21 bar |
| M20 | Fiberglass | 21µm | 21 bar |
| Y25 | Wire Mesh  | 25µm | 30 bar |
| Y60 | Wire Mesh  | 60µm | 30 bar |

#### F Indicator

|     |                         |               |
|-----|-------------------------|---------------|
| 00  | No                      | Connection    |
| 5PV | 5 bar visual            | BSP ½" Thread |
| 5PE | 5 bar visual/electrical | BSP ½" Thread |
| 5PB | 5 bar electrical        | BSP ½" Thread |

\*EFPG5 and EFPG6 flange connections SAE DN40 3000psi

\*EFPG9 and EFPG12 flange connections SAE DN50 3000psi