

   
FILTRAZIONE IDRAULICA  
HYDRAULIC FILTRATION



**FILTREC**<sup>®</sup>  
Technical Filtration

serie  
**FD-1**





# Serie FD-1

## Filtri in linea per le alte pressioni *In line high pressure filters*



### CORPO FILTRO

**Descrizione:**  
**Portata massima:**  
**Pressione max di esercizio:**  
**Pressione di prova:**  
**Pressione di scoppio:**  
**Connessioni:**  
**Valvola by-pass :**  
**Indicatore intasamento:**  
**Temperatura di esercizio:**  
**Materiali:**

**Compatibilità con fluidi:**

### Caratteristiche tecniche

Filtri di linea per alte pressioni con cartuccia rigenerabile o a perdere  
400 l/min

Secondo NFPA T 3.10.5.1: 420 Bar

Secondo NFPA T 3.10.5.1: 600 Bar

Secondo NFPA T 3.10.5.1: 1260 Bar

BSP, NPT, SAE J518, SAE J514b

Senza o taratura 6 Bar

Differenziale visivo e visivo elettrico, tarature 5 e 8 Bar

-25°C +120°C

- Testata: ghisa
- Contenitore: acciaio estruso
- Guarnizioni: Buna-N / Viton®

ISO 2943: Filtro compatibile con oli minerali ed alcuni oli sintetici e vegetali. Per altri fluidi contattare FILTREC S.p.A.

### ELEMENTO FILTRANTE

**Setto filtrante:**

Microfibra di vetro 3,6,10,25 µm

Carta 10,25 µm

Tela metallica 10,25 µm

**Pressione di collasso:**

Secondo ISO 2941: 21 Bar e 210 Bar



### FILTER HOUSING

**Description:**  
**Max flow rate:**  
**Max working pressure:**  
**Test pressure:**  
**Burst pressure:**  
**Connection Ports:**  
**By-pass:**  
**Indicator:**

**Working temperature:**  
**Materials:**

**Fluids compatibility:**

### Technical Information

*In line high pressure filter assembly with cleanable or throw way elements  
400 l/min (105.5 gpm)*

*As per NFPA T 3.10.5.1: 420 Bar ( 6091.5 psi)*

*As per NFPA T 3.10.5.1: 600 Bar ( 8702.3 psi)*

*As per NFPA T 3.10.5.1: 1260 Bar (18274.8 psi)*

*BSP, NPT, SAE J518, SAE J514b*

*No by-pass or 6 Bar (87 psi) setting*

*Differential visual and differential electrical visual ,  
5 Bar (72.5 psi) and 8 Bar (116 psi) setting.*

*-25°C +120°C (-13°F +248°F)*

- Head: cast iron
- Bowl: extruded steel
- Seal: Buna-N / Viton®

*ISO 2943: Filter assembly compatible with mineral oils and some synthetic or vegetable oils. With other fluid applications please contact Filtrec S.p.A.*

### FILTER ELEMENT

**Filter media:**

Microglass fiber 3,6,10,25 µm

Cellulose 10,25 µm

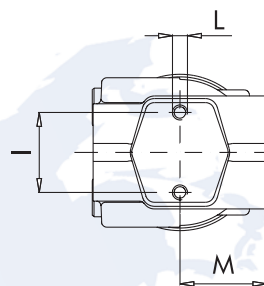
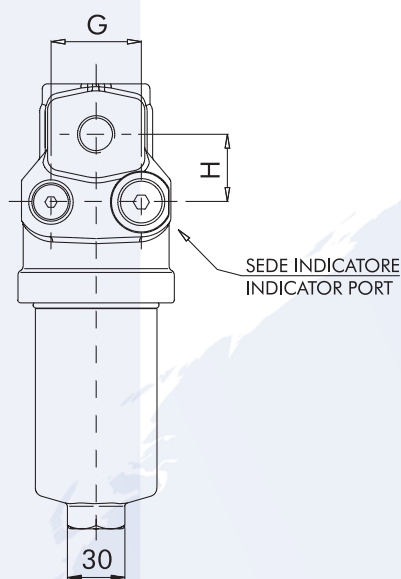
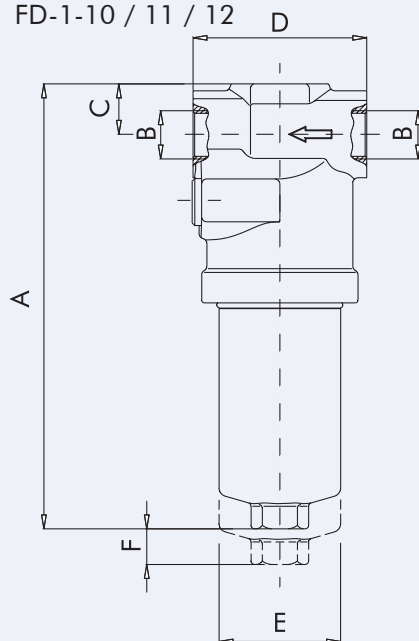
Wire mesh 10, 25 µm

**Collapse pressure:**

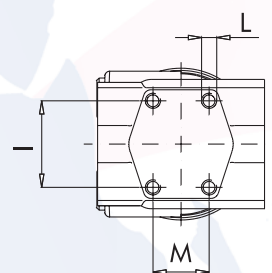
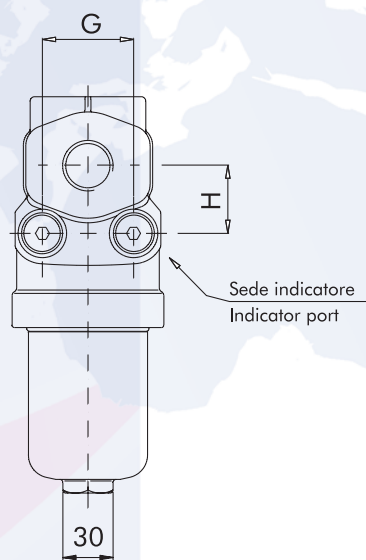
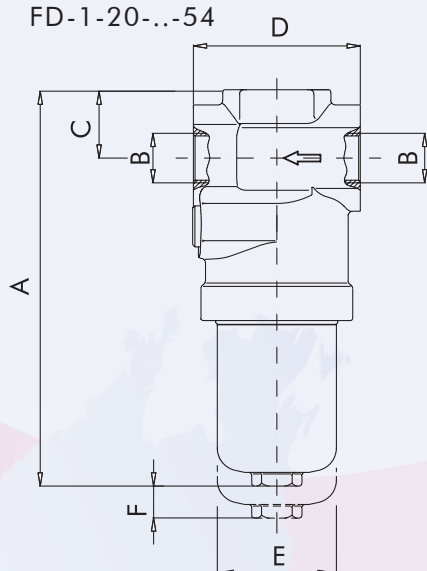
*As per ISO 2941: 21 Bar (305 psi) and 210 Bar (3045 psi)*

## Informazioni dimensionali - Overall dimensions

FD-1-10 / 11 / 12



FD-1-20-...-54



### 1) Grandezza nominale - Nominal size

| Codice - Code  | A   | B                           | C  | D   | E    | F   | G  | H  | I  | L                            | M  | Cart. ricambio - Element |
|----------------|-----|-----------------------------|----|-----|------|-----|----|----|----|------------------------------|----|--------------------------|
| <b>FD-1-10</b> | 208 | 1/2" - 3/4" BSP             | 27 | 100 | 70   | 95  | 52 | 39 | 46 | Vedi tabella 5 - See table 5 | 50 | D-1-10                   |
| <b>FD-1-11</b> | 234 | 1/2" - 3/4" NPT             | 27 | 100 | 70   | 95  | 52 | 39 | 46 |                              | 50 | D-1-11                   |
| <b>FD-1-12</b> | 331 | 3/4" - 1 1/16" SAE J514b    | 27 | 100 | 70   | 95  | 52 | 39 | 46 |                              | 50 | D-1-12                   |
| <b>FD-1-20</b> | 250 | 3/4" - 1" BSP               | 39 | 110 | 78,5 | 100 | 60 | 45 | 57 |                              | 37 | D-1-20                   |
| <b>FD-1-21</b> | 358 | 3/4" - 1" NPT               | 39 | 110 | 78,5 | 100 | 60 | 45 | 57 |                              | 37 | D-1-21                   |
| <b>FD-1-30</b> | 250 | 3/4" - 1" SAE J518          | 39 | 110 | 78,5 | 100 | 60 | 45 | 57 |                              | 37 | D-1-30                   |
| <b>FD-1-31</b> | 358 | 1 1/16" - 1 5/16" SAE J514b | 39 | 110 | 78,5 | 100 | 60 | 45 | 57 |                              | 37 | D-1-31                   |
| <b>FD-1-40</b> | 274 | 1" - 1 1/4" - 1 1/2" BSP    | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-40                   |
| <b>FD-1-41</b> | 399 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-41                   |
| <b>FD-1-42</b> | 544 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-42                   |
| <b>FD-1-43</b> | 689 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-43                   |
| <b>FD-1-50</b> | 274 | 1 1/4" - 1 1/2" SAE J518    | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-50                   |
| <b>FD-1-51</b> | 399 | 1 5/8" - 1 7/8" SAE J514b   | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-51                   |
| <b>FD-1-52</b> | 544 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-52                   |
| <b>FD-1-53</b> | 689 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-53                   |
| <b>FD-1-54</b> | 304 |                             | 47 | 140 | 105  | 105 | 70 | 58 | 76 |                              | 64 | D-1-54                   |

## 2) Grado di filtrazione - Filtration ratings

| Codice - Code | Materiale - Media                            | Efficienza - Efficiency | Note                                                       |
|---------------|----------------------------------------------|-------------------------|------------------------------------------------------------|
| <b>0</b>      | senza cartuccia / no element                 | -----                   |                                                            |
| <b>G03</b>    | microfibra inorganica / microglass fiber     | $\beta_3 \geq 1000$     |                                                            |
| <b>G06</b>    | microfibra inorganica / microglass fiber     | $\beta_6 \geq 1000$     |                                                            |
| <b>G10</b>    | microfibra inorganica / microglass fiber     | $\beta_{10} \geq 1000$  |                                                            |
| <b>G25</b>    | microfibra inorganica / microglass fiber     | $\beta_{25} \geq 1000$  |                                                            |
| <b>C10</b>    | carta trattata / resin impregnated cellulose | $\beta_{10} \geq 2$     | Solo $\Delta p$ 21 Bar<br>$\Delta p$ 21 Bar (305 psi) only |
| <b>C25</b>    | carta trattata / resin impregnated cellulose | $\beta_{25} \geq 2$     |                                                            |
| <b>T60</b>    | tela metallica / wire mesh                   | -----                   |                                                            |
| <b>T125</b>   | tela metallica / wire mesh                   | -----                   |                                                            |

## 3) Collasso cartuccia - Element collapse

| Codice - Code | $\Delta p$ (Bar) - $\Delta p$ (psi) |
|---------------|-------------------------------------|
| <b>A</b>      | 21 Bar / 305 psi                    |
| <b>B</b>      | 210 Bar / 3045 psi                  |

## 4) Guarnizioni - Seals

| Codice - Code | Tipo - Type |
|---------------|-------------|
| <b>---</b>    | NBR         |
| <b>V</b>      | Viton®      |

## 5) Connessioni - Connection port

| Codice - Code | FD-1-1x                   |                | FD-1-2x / FD-1-3x         |               | FD-1-4x / FD-1-5x        |               |
|---------------|---------------------------|----------------|---------------------------|---------------|--------------------------|---------------|
|               | B                         | L              | B                         | L             | B                        | L             |
| <b>B3</b>     | 1/2" BSP                  | M8             |                           |               |                          |               |
| <b>B4</b>     | 3/4" BSP                  | M8             |                           |               |                          |               |
| <b>B5</b>     |                           |                | 3/4" BSP                  | M10           | 1" BSP                   | M12           |
| <b>B6</b>     |                           |                | 1" BSP                    | M10           | 1 1/4" BSP               | M12           |
| <b>B7</b>     |                           |                |                           |               | 1 1/2" BSP               | M12           |
| <b>N3</b>     | 1/2" NPT                  | 5/16-18 UNC-2B |                           |               |                          |               |
| <b>N4</b>     | 3/4" NPT                  | 5/16-18 UNC-2B | 3/4" NPT                  | 3/8-16 UNC-2B | 1" NPT                   | 1/2-13 UNC-2B |
| <b>N5</b>     |                           |                | 1" NPT                    | 3/8-16 UNC-2B | 1 1/4" NPT               | 1/2-13 UNC-2B |
| <b>N6</b>     |                           |                |                           |               | 1 1/2" NPT               | 1/2-13 UNC-2B |
| <b>N7</b>     |                           |                |                           |               |                          |               |
| <b>F4M</b>    |                           |                | 3/4" SAE J518 - 3000      | M12           |                          |               |
| <b>F5M</b>    |                           |                | 1" SAE J518 - 3000        | M12           |                          |               |
| <b>F6M</b>    |                           |                |                           |               | 1 1/4" SAE J518 - 3000   | M12           |
| <b>F7M</b>    |                           |                |                           |               | 1 1/2" SAE J518 - 3000   | M12           |
| <b>F4U</b>    |                           |                | 3/4" SAE J518 - 3000      | 3/8-16 UNC-2B |                          |               |
| <b>F5U</b>    |                           |                | 1" SAE J518 - 3000        | 3/8-16 UNC-2B |                          |               |
| <b>F6U</b>    |                           |                |                           |               | 1 1/4" SAE J518 - 3000   | 1/2-13 UNC-2B |
| <b>F7U</b>    |                           |                |                           |               | 1 1/2" SAE J518 - 3000   | 1/2-13 UNC-2B |
| <b>H4M</b>    |                           |                | 3/4" SAE J518 - 6000      | M12           |                          |               |
| <b>H5M</b>    |                           |                | 1" SAE J518 - 6000        | M12           |                          |               |
| <b>H6M</b>    |                           |                |                           |               | 1 1/4" SAE J518 - 6000   | M12           |
| <b>H7M</b>    |                           |                |                           |               | 1 1/2" SAE J518 - 6000   | M12           |
| <b>H4U</b>    |                           |                | 3/4" SAE J518 - 6000      | 3/8-16 UNC-2B |                          |               |
| <b>H5U</b>    |                           |                | 1" SAE J518 - 6000        | 3/8-16 UNC-2B |                          |               |
| <b>H6U</b>    |                           |                |                           |               | 1 1/4" SAE J518 - 6000   | 1/2-13 UNC-2B |
| <b>H7U</b>    |                           |                |                           |               | 1 1/2" SAE J518 - 6000   | 1/2-13 UNC-2B |
| <b>R3</b>     | 3/4-16 UNF-2B SAE J514b   | 5/16-18 UNC-2B |                           |               |                          |               |
| <b>R4</b>     | 1-1/16-12 UN-2B SAE J514b | 5/16-18 UNC-2B | 1-1/16-12 UN-2B SAE J514b | 3/8-16 UNC-2B |                          |               |
| <b>R5</b>     |                           |                | 1-5/16-12 UN-2B SAE J514b | 3/8-16 UNC-2B |                          |               |
| <b>R6</b>     |                           |                |                           |               | 1-5/8-12 UN-2B SAE J514b | 1/2-13 UNC-2B |
| <b>R7</b>     |                           |                |                           |               | 1-7/8-12 UN-2B SAE J514b | 1/2-13 UNC-2B |

## 6) Valvola di by-pass - By-pass valve

| Codice - Code | Taratura - Setting |
|---------------|--------------------|
| <b>0</b>      | senza / without    |
| <b>D</b>      | 6 Bar / 87 psi     |

## 7) Indicatori - Indicator

| Codice - Code | Tipo indicatore - Indicator type                                 | Taratura - Setting |
|---------------|------------------------------------------------------------------|--------------------|
| <b>0</b>      | senza / without                                                  | -----              |
| <b>Z3</b>     | differenziale visivo<br>differential visual switch               | 5 Bar<br>72.5 psi  |
| <b>Z4</b>     | differenziale visivo elettrico<br>differential electrical visual | 5 Bar<br>72.5 psi  |
| <b>Z5</b>     | differenziale visivo<br>differential visual switch               | 8 Bar<br>116 psi   |
| <b>Z6</b>     | differenziale visivo elettrico<br>differential electrical visual | 8 Bar<br>116 psi   |

## Codici per l'ordinazione - Ordering information

**Filtro completo**  
Filter assembly

**FD-1**

|           |            |          |          |            |          |           |
|-----------|------------|----------|----------|------------|----------|-----------|
| <b>30</b> | <b>G10</b> | <b>A</b> | <b>V</b> | <b>F5M</b> | <b>D</b> | <b>Z4</b> |
| 1*        | 2*         | 3*       | 4*       | 5*         | 6*       | 7*        |

**Cartuccia**  
Filter element

**D-1**

|           |            |          |          |
|-----------|------------|----------|----------|
| <b>30</b> | <b>G10</b> | <b>A</b> | <b>V</b> |
| 1*        | 2*         | 3*       | 4*       |

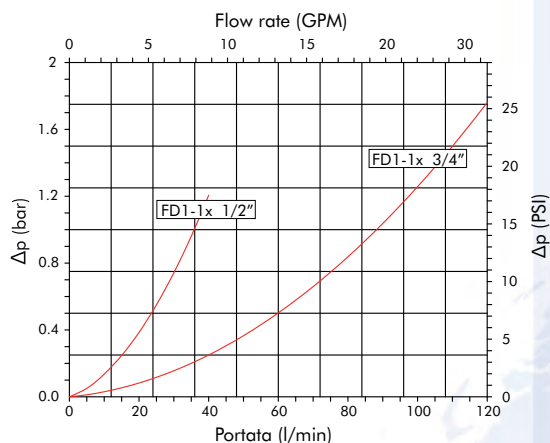


## Curve di portata - Pressure drop charts

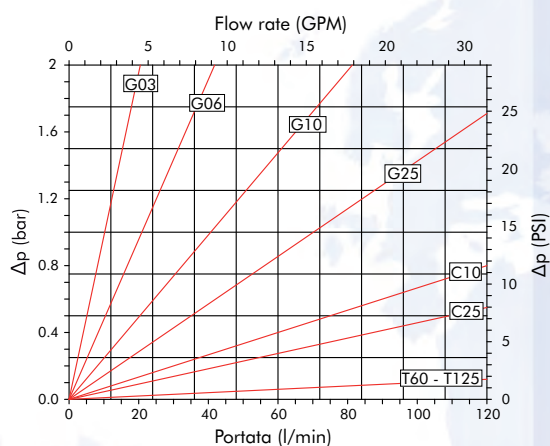
Le curve (secondo ISO 3968 classe B) sono ottenute con olio minerale avente viscosità di 30 cSt e densità di 0,86 Kg/dm<sup>3</sup>. Per viscosità e densità diverse i dati variano.

Pressure drop charts (as per ISO 3968 class B) are obtained using mineral oil with 30 cSt viscosity and 0,86 Kg/dm<sup>3</sup> density. With different values of viscosity and density data may vary.

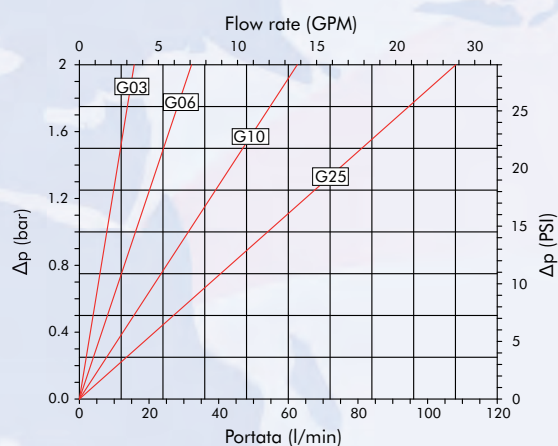
### Filtro Housing



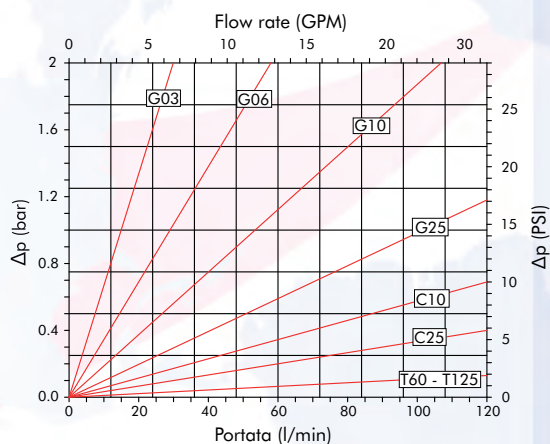
### D-1-10-...-A



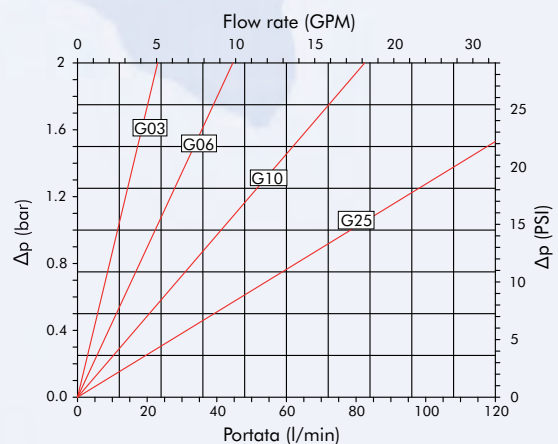
### D-1-10-...-B



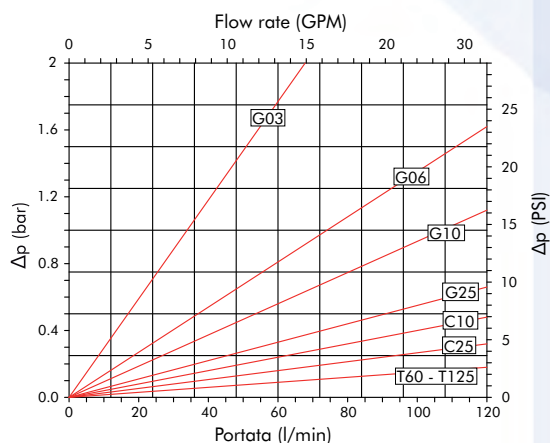
### D-1-11-...-A



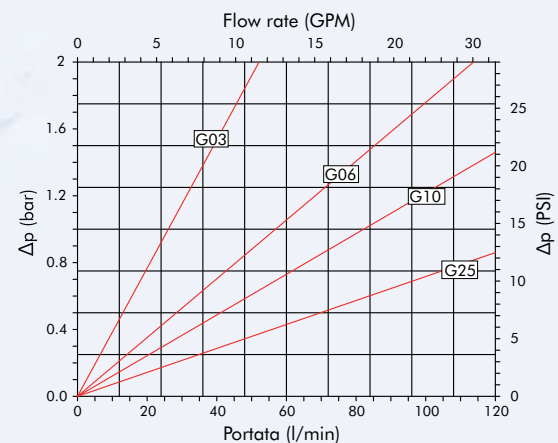
### D-1-11-...-B



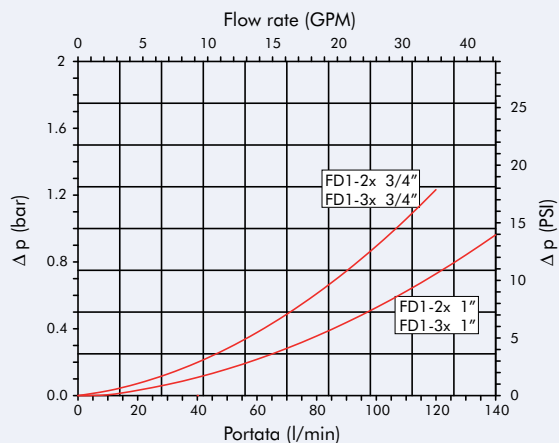
### D-1-12-...-A



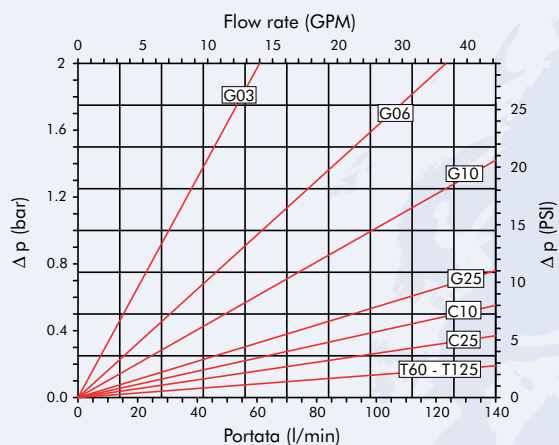
### D-1-12-...-B



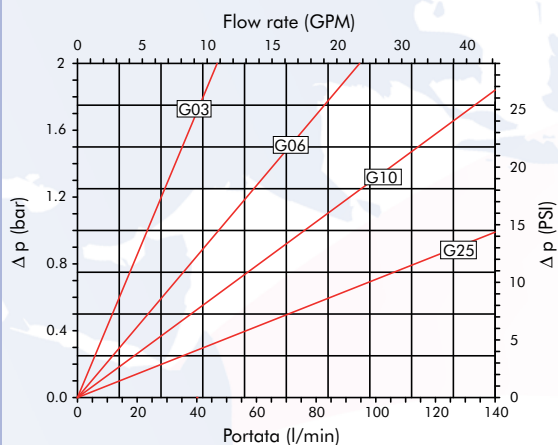
## Filtro Housing



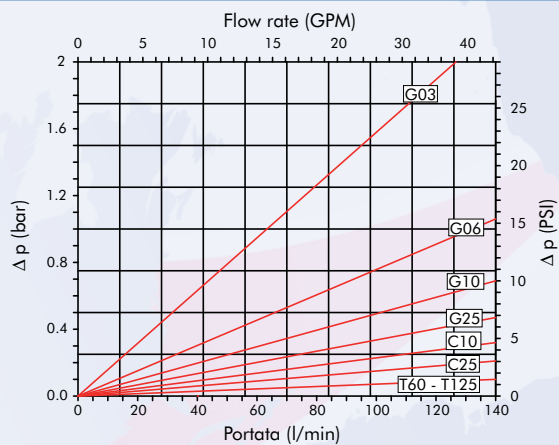
## D-1-20/30...-A



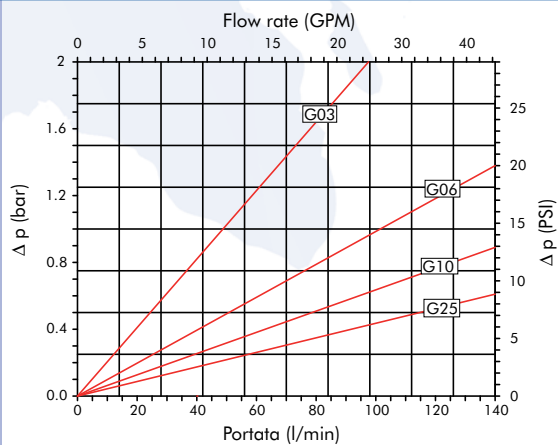
## D-1-20/30...-B



## D-1-21/31...-A

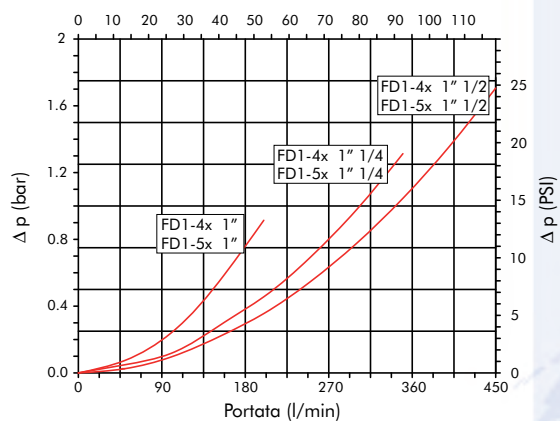


## D-1-21/31...-B

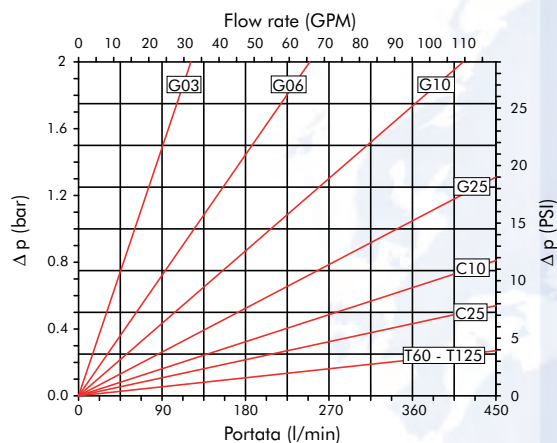




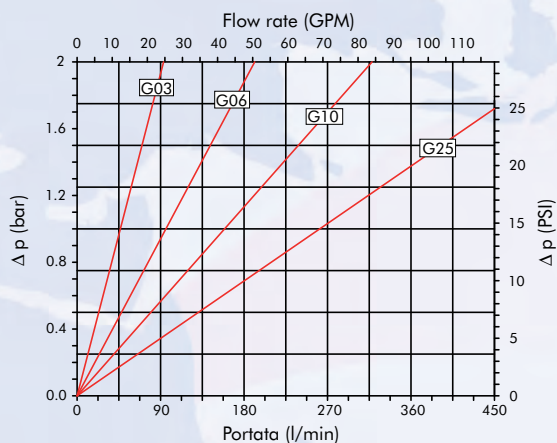
## Filtro Housing



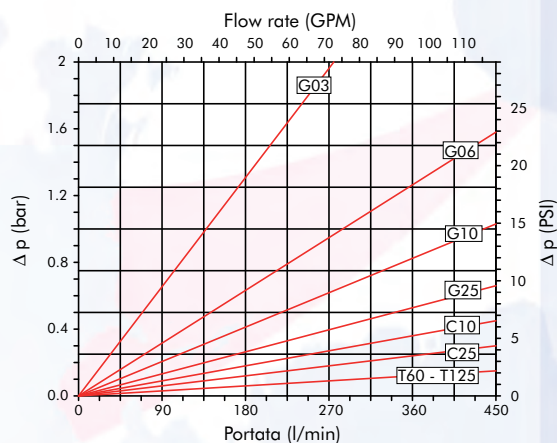
## D-1-40---A D-1-50---A



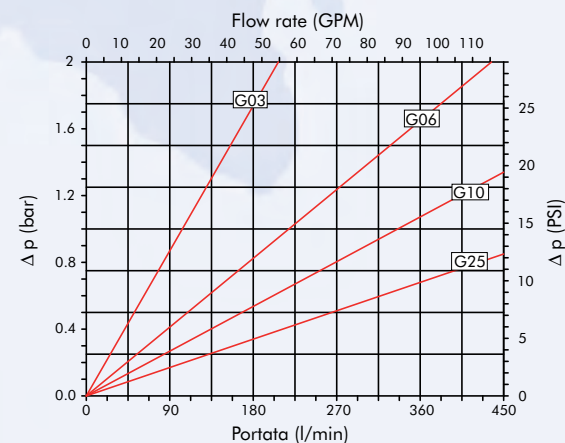
## D-1-40---B D-1-50---B



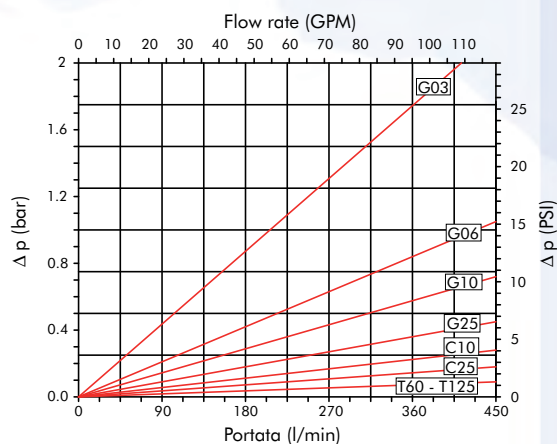
## D-1-41---A D-1-51---A



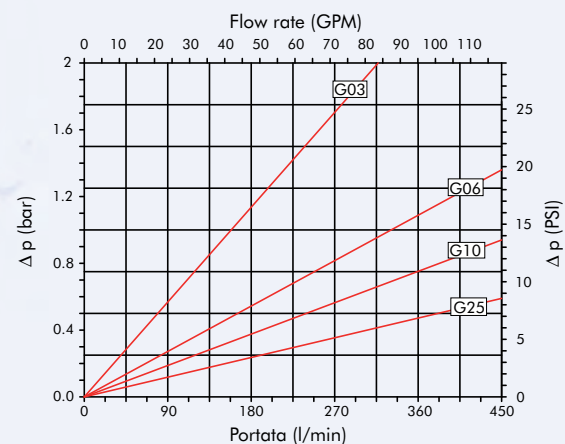
## D-1-41---B D-1-51---B



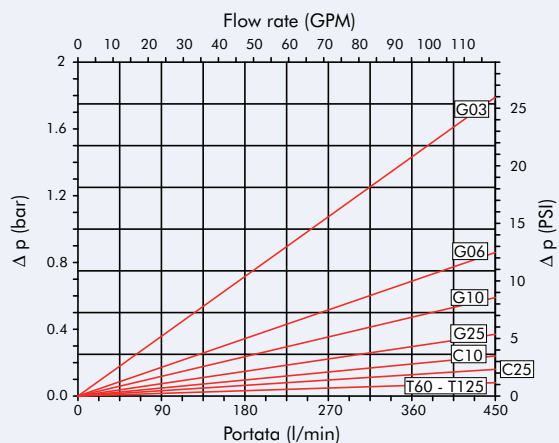
## D-1-42---A D-1-52---A



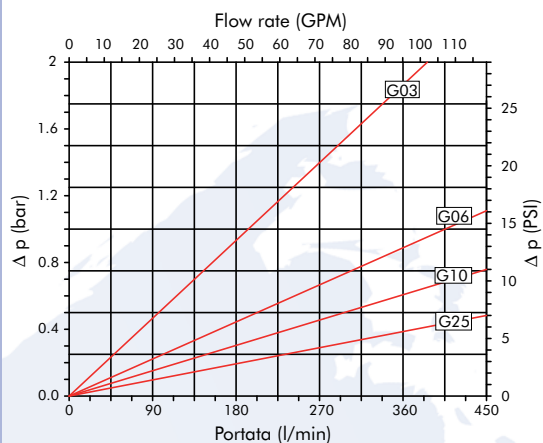
## D-1-42---B D-1-52---B



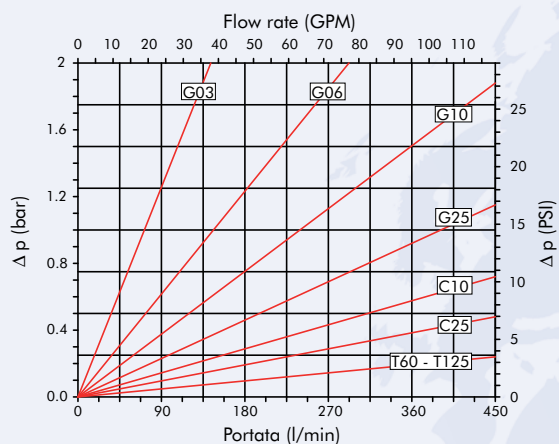
# D-1-43-...-A D-1-53-...-A



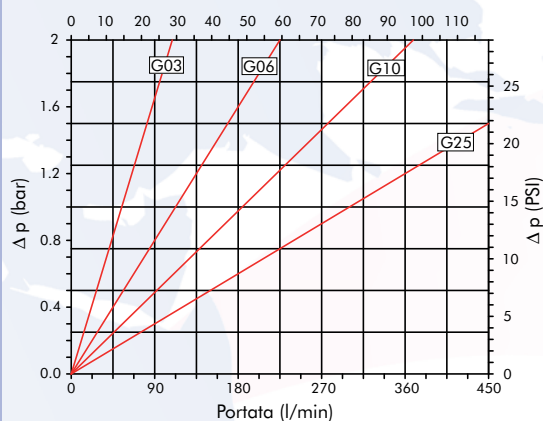
# D-1-43-...-B D-1-53-...-B



# D-1-54-...-A



# D-1-54-...-B





**FILTREC S.p.A.**  
**HEAD OFFICE - OVERSEAS OPERATIONS**

25046 Cazzago San Martino (BS) Italy - Via E. Mattei, 28/30  
Phone +39 030.7241039 - Fax +39 030.7240436  
E-mail: [info@filtrec.it](mailto:info@filtrec.it) - Web site: [www.filtrec.com](http://www.filtrec.com)

**FILTREC IBÉRICA S.L.**  
**IN SPAIN, ANDORRA, PORTUGAL AND MOROCCO**

Ctra. Sabadell a Mollet, km. 5 nave 14  
08130 Sta. Perpétua de la Mogoda - (Barcelona) España  
Phone +34 93 560 63 11 - Fax +34 93 560 38 62  
E-mail: [info@filtrec.es](mailto:info@filtrec.es) - Web site: [www.filtrec.es](http://www.filtrec.es)

**FILTREC ASIA PACIFIC Ltd.**  
**IN AUSTRALIA - ASIA PACIFIC**

Unit 4 /29 Business Park Drive, Notting Hill, Victoria, 3168  
Phone +61 3 9263 4500 - Fax +61 3 9263 4599  
E-mail: [info@filtrec.com.au](mailto:info@filtrec.com.au) - Web site: [www.filtrec.com.au](http://www.filtrec.com.au)

**FILTREC MIDDLE EAST FZC**  
**IN MIDDLE EAST**

P.O. Box 50047 - Ras Al Khaimah  
United Arab Emirates  
Phone: +971 7 2660 488 - Fax: +971 7 2660 499  
E-mail: [info@filtrec.ae](mailto:info@filtrec.ae) - Web site: [www.filtrec.ae](http://www.filtrec.ae)

**[www.filtrec.com](http://www.filtrec.com)**