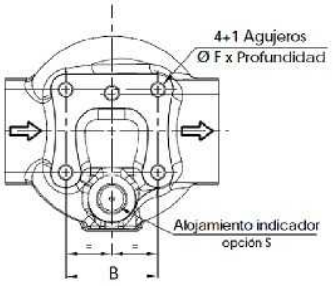
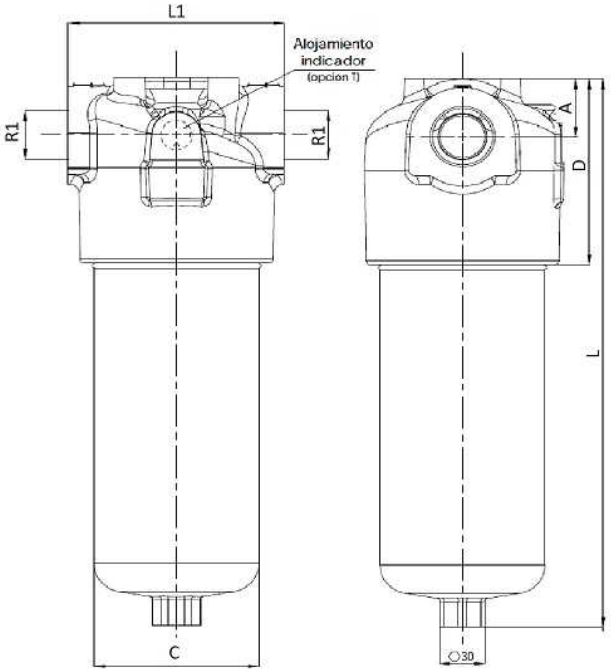
# Filtro en línea media-alta presión (completo) 280 bar






**Materiales:** Cabezal y vaso: Hierro fundido y Acero extruido
Juntas: Buna-N (o FKM)

**Bypass:** Bypass: 6 bar (90 psi) (o sin bypass)

| Artículo | R1 | Caudal máx. (l/min) | Pres. max. (bar) | Grado filtración | L | L1 | A | B | C | D |
|---|---|---|---|---|---|---|---|---|---|---|
| **F280D121G10AB5DSZ30** | 1'' BSP | 120 | 280 | 10 µm | 293 | 90 | 22,5 | 60,6 | 70 | 92 |
| **F280D140G10AB6DSZ30** | 1''1/4 BSP | 250 | 280 | 10 µm | 248 | 140 | 40 | 60,6 | 107 | 129 |

*La información recogida en esta ficha (Catálogo) es de carácter orientativo y puede ser modificada sin previo aviso. DICSA no se hace responsable de una incorrecta utilización del producto, salvo las referentes a defectos de fabricación.*

# FH320 SERIES

In line pressure filters

Inline filters for operating pressure up to 320 bar, flow rate up to 150 l/min.

Available with or without bypass, indicator port is a standard option to fit a visual or electrical differential indicator.




## HOUSING

tested according to NFPA T3.10.5.1, ISO 10771, ISO 3968

| | |
|---|---|
| PRESSURE: | Max operating:<br>320 bar<br>Fatigue rating:<br>$10^6$ cycles 0÷320 bar |
| CONNECTIONS: | G 1/2"÷1" - M22x1,5 on request |
| MATERIALS: | Head: cast iron<br>Bowl: extruded steel<br>Seal: NBR (FKM on request) |
| BYPASS VALVE: | No by-pass or 6 bar setting |

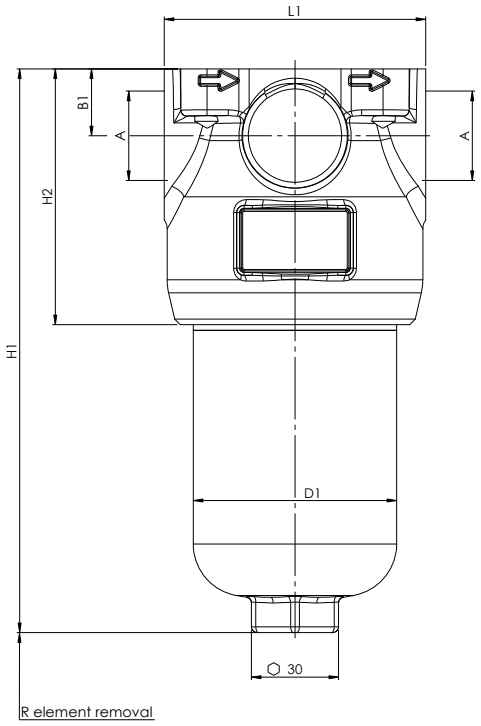
## ELEMENT

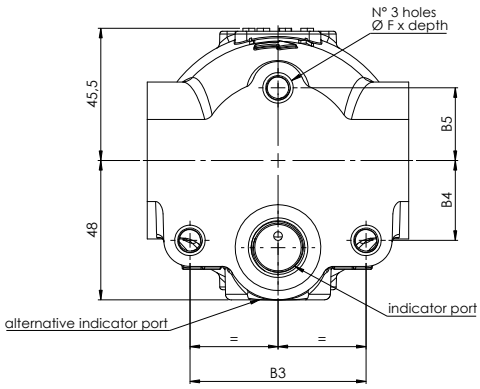
tested according to ISO 11170, 2941, 2942, 2943, 3724, 3968,16889, 16908, 23181

| | |
|---|---|
| FILTER MEDIA: | Inorganic microfiber:<br>G01 - G03 - G06 - G10<br>G15 - G25 |
| COLLAPSE PRESSURE: | 21 bar<br>210 bar |

| | |
|---|---|
| TEMPERATURE RANGE: | with NBR seal<br>from -30 °C to +100 °C<br><br>with FKM seal (OPTION)<br>from -25 °C to +120 °C |
| FLUID COMPATIBILITY: | Full with HH-HL-HM-HV<br>HETG-HEES (acc. to ISO 6743/4). |

## OVERALL DIMENSIONS

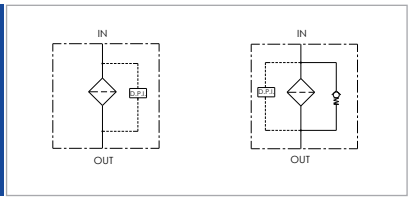



## NOMINAL SIZE

| MODEL | A | B1 | B3 | B4 | B5 | D1 | F | H1 | H2 | L1 | R | WEIGHT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FH320-D125 | G 1/2" G 3/4" G 1" M22x1,5 | 23 | 60,6 | 27,5 | 25 | 70 | M10x15 | 157 | 88 | 90 | 110 | 3,3 Kg |
| FH320-D120 | | | | | | | | 198 | | | | 3,9 Kg |
| FH320-D124 | | | | | | | | 241 | | | | 4,4 Kg |
| FH320-D121 | | | | | | | | 291 | | | | 4,9 Kg |
| FH320-D126 | | | | | | | | 335 | | | | 5,3 Kg |

HYDRAULIC SYMBOL



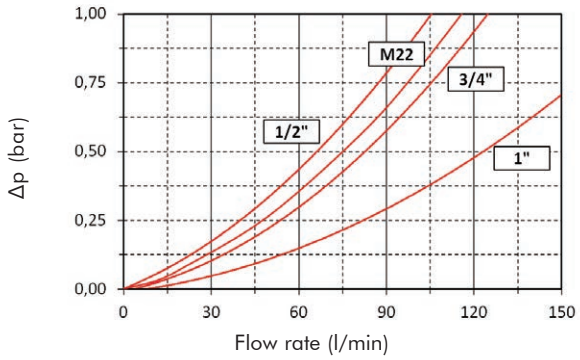
## PRESSURE DROP (Δp) INFORMATION FOR FILTER SIZING

The total Delta P through a filter assembly is given from Housing Δp + Element Δp.
This ideally should not exceed 1,0 bar and should never exceed 1/3 of the set value of the by-pass valve.
N.B. All the reported data have been obtained at our laboratory, according to specification ISO3968 with mineral oil having 32 cSt viscosity and density 0,875 Kg/dm$^3$.

## HOUSING PRESSURE DROP

The housing Δp is given by the curve of the considered model and port, in correspondence of the flow rate value.

**FH320 D12xx**




## ELEMENT PRESSURE DROP (filter elements 21 bar collapse)

The element Δp (bar) is given by the flow rate (l/min) multiplied by the factor in the table here below corresponding to the selected media and divided by 1000.
If the oil has a viscosity Vx different than 32 cSt a corrective factor Vx/32 must be applied.
Example: 80 l/min with D121G10A and oil viscosity 46 cSt >(80 x 4,42)/1000 x (46/32) = 0,51 bar

| | G01A | G03A | G06A | G10A | G15A | G25A |
|---|---|---|---|---|---|---|
| **D125** | 50,24 | 35,56 | 25,75 | 15,51 | 8,27 | 7,57 |
| **D120** | 30,43 | 21,30 | 13,97 | 8,39 | 5,18 | 4,78 |
| **D124** | 19,90 | 13,93 | 8,42 | 5,17 | 4,16 | 3,60 |
| **D121** | 15,48 | 10,84 | 6,79 | 4,42 | 3,38 | 2,93 |
| **D126** | 13,24 | 8,61 | 5,75 | 4,03 | 2,91 | 2,43 |

## EXAMPLE OF TOTAL Δp CALCULATION

FH320D121G10ABB5DWV05 with **80** l/min and oil **46** cSt:
Housing Δp 0,25 bar + element Δp 0,51 bar (80 x 4,42)/1000 x (46/32) = total assembly Δp 0,76 bar

## ELEMENT PRESSURE DROP (filter elements 210 bar collapse)

The element Δp (bar) is given by the flow rate (l/min) multiplied by the factor in the table here below corresponding to the selected media and divided by 1000.
If the oil has a viscosity Vx different than 32 cSt a corrective factor Vx/32 must be applied.
Example: 80 l/min with D121G10B and oil viscosity 46 cSt > (80 x 5,25)/1000 x (46/32) = 0,60 bar

| | G01B | G03B | G06B | G10B | G15B | G25B |
|---|---|---|---|---|---|---|
| **D125** | 57,38 | 39,23 | 27,50 | 16,53 | 10,15 | 8,03 |
| **D120** | 37,18 | 26,03 | 14,77 | 11,57 | 6,89 | 6,13 |
| **D124** | 24,56 | 17,19 | 11,37 | 6,63 | 4,93 | 3,92 |
| **D121** | 23,89 | 16,72 | 11,25 | 5,25 | 3,85 | 3,34 |
| **D126** | 17,65 | 11,48 | 7,79 | 5,17 | 3,55 | 2,85 |

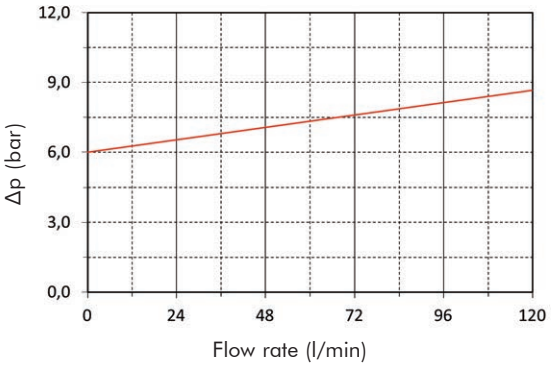
## EXAMPLE OF TOTAL Δp CALCULATION

FH320D121G10BBB5DWV08 with **80** l/min and oil **46** cSt :
Housing Δp 0,25 bar + element Δp 0,60 bar (80 x 5,25)/1000 x (46/32) = total assembly Δp 0,85 bar

## BYPASS VALVE PRESSURE DROP

The bypass valve Δp is given by the curve of the considered model and setting, in correspondence of the flow rate value.

**FH320 D12x**




N.B. All the reported data have been obtained at our laboratory, according to specification ISO3968 with mineral oil having 32 cSt viscosity and density 0,875 Kg/dm$^3$.

## USER TIPS




1. FILTER HEAD
2. INDICATOR PORT
3. FIXING HOLES
4. FILTER ELEMENT
5. FILTER BOWL
6. SEAL KIT
7. IDENTIFICATION LABEL

| INDICATOR TIGHTENING TORQUE |
|---|
| 90 Nm |

| SPARE SEAL KIT PART NUMBER (6) | | |
|---|---|---|
| | NBR | FKM |
| FH320 D1-2x | 06.021.00268 | 06.021.00269 |

| BOWL TIGHTENING TORQUE |
|---|
| screw up filter bowl till end |