



## FS7 SERIES

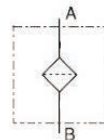
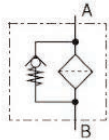
### Side wall mounting suction filters

Suction filter for mounting on the tank side wall. the shut-off valve allows filter element replacement without opening or emptying the reservoir.  
Flow rates up to 200 l/min.

## TECHNICAL INFORMATION

### HOUSING

HYDRAULIC SYMBOL:



CONNECTION PORTS:

G 1" - G 1 1/4" - G 1 1/2" - SAE flange 1 1/2" 3000 psi

MATERIALS:

Cover: PA6 polyamide  
Housing: aluminium alloy  
Seal: NBR (FKM on request)

BYPASS:

No by-pass or 0,3 bar setting

### ELEMENT

tested according to ISO 2941, 2942, 2943, 3968, 16889, 23181

FILTER MEDIA:

Cellulose C10 - C25  
Wire mesh T60 - T125 - T250

OPERATING TEMPERATURE RANGE:

-25°C + 100°C

FLUID COMPATIBILITY:

Full with HH-HL-HM-HV (acc. To ISO 2943).  
For use with other fluid please contact Filtrec Customer Service  
([info@filtrec.it](mailto:info@filtrec.it)).



## ORDERING INFORMATION

1.	2.	3.	4.	5.	6.	7.	8.	9.
<b>FS7</b>	<b>41</b>	<b>C10</b>	<b>B</b>	<b>B7</b>	<b>B</b>	<b>M</b>	<b>P</b>	<b>PSD</b>
<b>S7</b>	<b>41</b>	<b>C10</b>	SPARE ELEMENT					

1. FILTER SERIES	FS7
2. FILTER SIZE	41
3. FILTER MEDIA	000 no element
	C10 paper $\beta_{10\mu m(c)} > 2$
	C25 paper $\beta_{25\mu m(c)} > 2$
	T60 wire mesh 60 $\mu m$
	T125 wire mesh 125 $\mu m$
	T250 wire mesh 250 $\mu m$
4. SEALS	B NBR
5. CONNECTIONS	B5 G 1"
	B6 G 1 1/4"
	B7 G 1 1/2"
	F7 SAE flange 1 1/2" 3000 psi
	C5 3 x G 1"
	C6 G 1 1/4" + 2 x G 1"
	C7 G 1 1/2" + 2 x G 1"
	G7 SAE flange 1 1/2" + 2 x G 1"
6. BYPASS VALVE	0 no by-pass
	B 0,3 bar
7. MAGNET	0 no magnet
	M with magnet
8. INDICATOR PORT	P rear (standard)
	T right + rear + left (single port only)
9. INDICATOR	000 no indicator
	MPS (ex S1) vacuum gauge scale 0 ÷ -1 bar
	PDS (ex S13) vacuum switch -0,2 bar
ACCESSORIES	LC24 LED connector

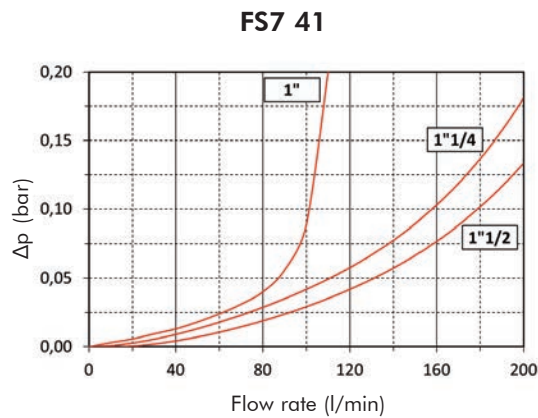
The accessories must be ordered separately

## PRESSURE DROP ( $\Delta p$ ) INFORMATION FOR FILTER SIZING

The total Delta P through a filter assembly is given from Housing  $\Delta p$  + Element  $\Delta p$ .  
 The max recommended total  $\Delta p$  for suction filters is 0,15 bar with clean element.

### HOUSING PRESSURE DROP

The housing  $\Delta p$  is given by the curve of the considered model and port, in correspondence of the flow rate value.



### ELEMENT PRESSURE DROP

The element  $\Delta p$  (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  $V_1$  different than 32 cSt a corrective factor  $V_1/32$  must be applied.

Example: 80 l/min with S741T60 and oil viscosity 46 cSt  $> 80 \times 0,075/1000 \times 46/32 = 0,09$  bar

	<b>C10</b>	<b>C25</b>	<b>T60</b>	<b>T125</b>	<b>T250</b>
<b>S741</b>	0,375	0,100	0,075	0,050	0,003

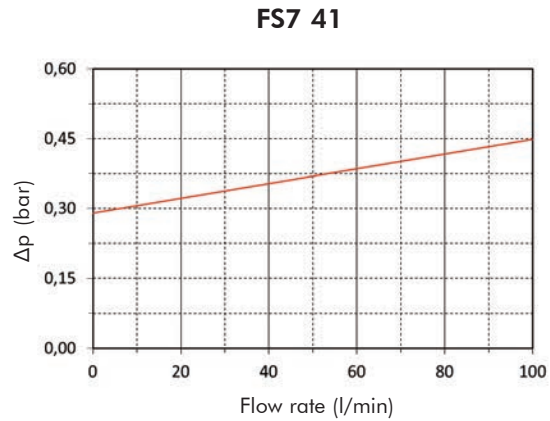
### EXAMPLE OF TOTAL $\Delta p$ CALCULATION

FS741T60BB7BMPPSD with 80 l/min and oil 46 cSt

Housing  $\Delta p$  0,02 bar + element  $\Delta p$  0,09 bar ( $80 \times 0,075/1000 \times 46/32$ ) = total assembly  $\Delta p$  0,11 bar

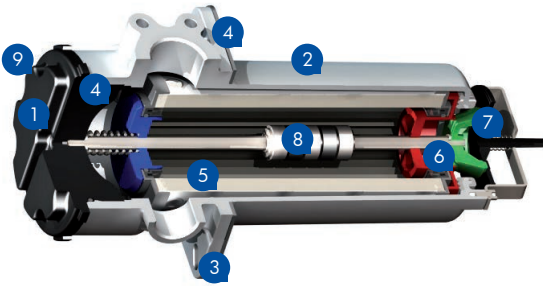
## BYPASS VALVE PRESSURE DROP

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



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<sup>3</sup>.

## USER TIPS



- |                  |                   |
|------------------|-------------------|
| 1 COVER          | 6 BY-PASS VALVE   |
| 2 HOUSING        | 7 SHUT-OFF VALVE  |
| 3 FIXING HOLES   | 8 MAGNETIC COLUMN |
| 4 SEAL           | 9 INDICATOR PORT  |
| 5 FILTER ELEMENT |                   |


### SPARE SEAL KIT PART NUMBER

NBR	07.010.00238
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### INDICATOR TIGHTENING TORQUE

10 Nm
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## WARNING

-  Make sure that Personal Protective Equipment (PPE) is worn during installation and maintenance operation.


## DISPOSAL OF FILTER ELEMENT

-  The used filter elements and the filter parts dirty of oil are classified as "Dangerous waste material": they must be disposed according to the local laws by authorized Companies.



## INSTALLATION

-  1. the filter housing (2) must be properly positioned and well secured on the tank side wall through the fixing holes
-  2. the OUT port must be properly connected to the suction line
3. verify that no tension is present on the filter after mounting
4. enough space must be available for filter element replacement
5. the visual clogging indicator must be in a easily viewable position
6. when a electrical indicator is used, make sure that it is properly wired
7. keep in stock a spare FILTREC filter element for timely replacement when required

## OPERATION

-  1. the filter must work within the operating conditions of pressure, temperature and compatibility given in the first page of this data sheet
2. the filter element must be replaced as soon as the clogging indicator signals at working temperature
3. If no clogging indicator is mounted, replace the element according to the system manufacturer's recommendations

## MAINTENANCE

-  1. before removing the top cover (1) from the housing (2), ensure that the system is switched off and there is no residual pressure in the filter
-  2. unscrew the cover (1) by turning it anticlockwise
3. remove the dirty element (5) by pulling it carefully
4. fit a new FILTREC element(5), verifying the part number, particularly concerning the micron rating
5. check the seal (4) conditions and replace if necessary
6. lubricate the threads and screw completely the cover (1) in the filter housing by turning it clockwise
7. the used filter elements cannot be cleaned and re-used



