

# **FS5 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 100 l/min.

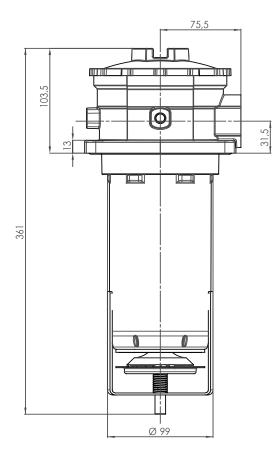


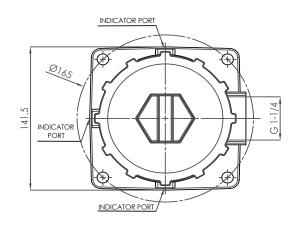
HOUSING	tested according to NFPA T3.10.5.1*, ISO 10771*, ISO 3968					
CONNECTIONS:	G 1 1/4"					
ATERIALS:	Head: aluminium alloy Top cover: PA6 reinforced Seal: NBR					
YPASS VALVE:	No bypass or 0,3 bar setting					
ELEMENT	tested according to ISO 11170, 2941, 2942, 2943, 3724, 3968,16889, 16908, 23181					
ILTER MEDIA:	Cellulose: C10 - C25 Wire mesh: T60 - T125 - T250 Inorganic microfiber: G40					
EMPERATURE ANGE:	-30°C +100°C					
luid Compatibility:	Full with HH-HL-HM-HV HETG-HEES (acc. to ISO 6743/4). For use with other fluid please contact Filtrec Customer Service (info@filtrec.it).					

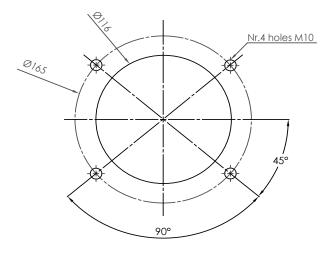
\* as reference method only for verifying the pressure fatigue resistance and establishing the burst pressure ratings.



# **OVERALL DIMENSIONS**













# ORDERING INFORMATION

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	
	FS		31	C25	В	B6	00	В	0	Т	000	S	0	
SPARE E	LEMENT	S5	31	C25										
1. FILTER				_	-									
					<u>F</u>									
2. FILTER SIZE					S5									
3. FILTER SIZE					31									
4. FILTER MEDIA				(	000	00 no element								
				210		$\beta_{10\mu m(c)} >$								
				225		paper $\beta_{25\mu m(c)} > 2$								
				Э40 Г60		glassfiber $\beta_{35\mu m(c)} > 1.000$								
					125		wire mesh 60 μm wire mesh 125 μm				-			
					T250 wire mesh 250 μm									
5. SEALS					*В	NBR	NBR				*omitted for spare element			
6. MAIN PORT					B6	G 1 1/4″								
7. ADDITIONAL PORTS					00	no additional ports								
8. BYPASS VALVE					0	no bypass								
				В	0,3 bar									
9. MAGNET				0	no ma	no magnet								
					М	with magnet (on request)								
10. IND	10. INDICATOR PORT OPTION				Т	right +	rear + le	eft						
11. COI	MPULSOF	ry field		(	000	filtrec standard								
12. CO	RROSION	PROTE	CTION		S	standa	standard							
13. OPT	IONS				0	no option								

#### ACCESSORIES

The accessories must be ordered separately

INDICATOR	MPS	vacuum gauge scale 0÷-1 bar		
	PDS	vacuum switch -0,2 bar SPDT		
	LC24	LED connector for vacuum switch		

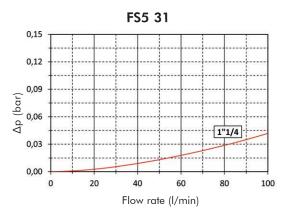


## PRESSURE DROP (Ap) INFORMATION FOR FILTER SIZING

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 V1 different than 32 cSt a corrective factor V1/32 must be applied.

Example: 50 l/min with S531C25 and oil viscosity 46 cSt > 50 x  $0,11/1000 \times 46/32 = 0,008$  bar

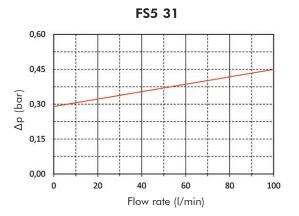
	C10	C25	T60	T125	T250	G40
S531	0,38	0,11	0,08	0,06	0,04	0,13

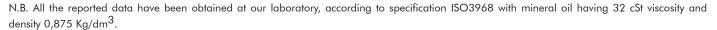
#### **EXAMPLE OF TOTAL** $\Delta p$ CALCULATION

FS531C25BB600B0T000S0 with 50 l/min and oil 46 cSt Housing  $\Delta p$  0,014 bar + element Dp 0,008 bar (50 x 0,11/1000 x 46/32) = total assembly  $\Delta p$  0,022 bar

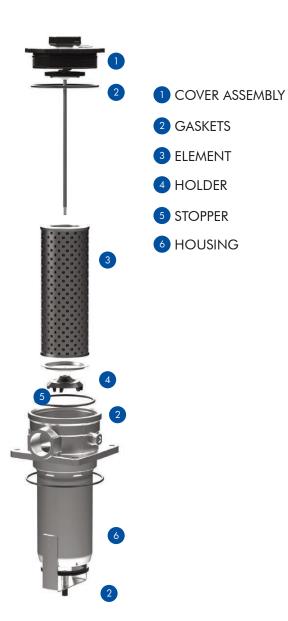
## **BYPASS VALVE PRESSURE DROP**

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









#### SPARE SEAL KIT (2)

NBR

06.021.00420

#### INDICATOR TIGHTENING TORQUE

10 Nm

#### COVER TIGHTENING TORQUE

20 Nm

#### 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 (6) 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.
  - 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.
  - Keep in stock a spare FILTREC filter element for timely replacement when required.
  - 8. Filter housing should be earthed.

#### **OPERATION**

- 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

- Before removing the top cover (1) from the housing (6), ensure that the system is switched off and there is no residual pressure in the filter.
- Unscrew the cover (1) by turning it anticlockwise.
  Remove the dirty element (3) by pulling it carefully.
  - Fit a new FILTREC element (3), verifying the part number, particularly concerning the micron rating.
  - 5. Check the seals (2) conditions and replace if necessary.
  - Lubricate the threads and screw completely the cover (1) in the filter housing by turning it clock wise.
  - 7. The used filter elements cannot be cleaned and re-used.





