

# **FA5 SERIES**

In line medium pressure filters

Inline filters with spin-on cartridge for operating pressure up to 24 bar, flow rate up to 250 l/min.

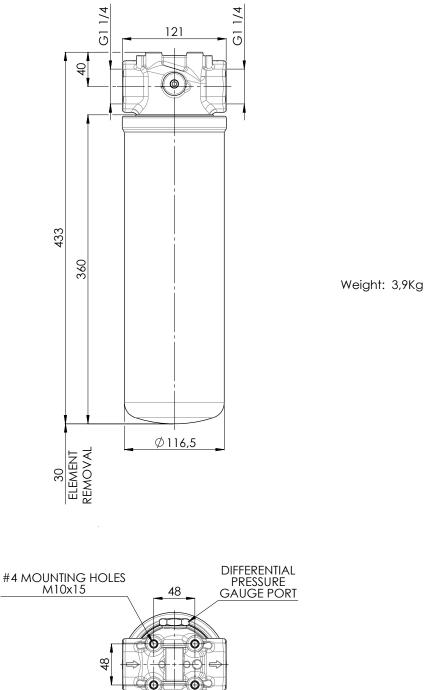
The indicator ports allow to fit a visual electrical differential indicator and an absolute clock manometer or pressure switch.



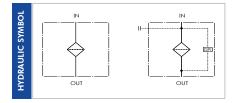
HOUSING	tested according to NFPA T3.10.17, ISO12829, ISO3968				
PRESSURE:	Max operating: 24 bar Burst: 55 bar				
CONNECTION:	G 1 1/4"				
MATERIALS:	Head: aluminium alloy Bowl: painted steel Seal: FKM				
BYPASS VALVE:	No by-pass				
ELEMENT	tested according to ISO 11170, 2941, 2942, 2943, 3724, 3968,16889, 16908, 23181				
FILTER MEDIA:	Inorganic microfiber: G01 - G03 - G06 - G10 - G25 Inorganic microfiber + water absorbent: GW40				
COLLAPSE PRESSURE:	12 bar				
TEMPERATURE RANGE:	from -25 °C to +120 °C				
FLUID COMPATIBILITY:	Full with HH-HL-HM-HV HETG-HEES (acc. to ISO 6743/4). Diesel EN590, ASTMD975 Biodiesel B0 to B100 EN14214 Fuel oil EN51603-1 For use with other fluid please contact Filtrec Customer Service (info@filtrec.it).				



# **OVERALL DIMENSIONS**



ABSOLUTE PRESSURE GAUGE PORT





# **ORDERING INFORMATION**

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13	
	FA	5	22	G01	V	0	AB2	B6	0	Z	000	S	0	
SPARE E	LEMENT	<b>A</b> 5	22	G01	V	0	/AB2							
1. FILTE	R SERIES				FA5									
2. FILTE		IT SERI	ES		A5	_								
3. FILTE	R SIZE				22	_								
					~~	-								
4 FUTE						_	/A	B2			/AB1			
4. FILIE	R MEDIA				000	alasef	bor f	> 10.0	no elen		r ß	> 2 000		
					G01		ber $\beta_{4\mu m(a)}$	,			$r B_{4\mu m(c)}$			
					G03	giussii	glassfiber $\beta_{5\mu m(c)} \ge 5.000$ glassfiber $\beta_{4\mu m(c)} \ge 2.000$							
				G06 G10	alassfi	$\begin{array}{c} \mbox{glassfiber } \beta_{7\mu m(c)} \geq 2.000 \\ \mbox{glassfiber } \beta_{10\mu m(c)} \geq 2.000  \mbox{glassfiber } \beta_{12\mu m(c)} \geq 1.000 \end{array}$								
				G10 G25	giussii	$\frac{\text{glassfiber } \beta_{10\mu\text{m}(c)} \ge 2.000}{\text{glassfiber } \beta_{25\mu\text{m}(c)} \ge 2.000}$								
				G25 GW40		$\frac{g_{\text{radiation}} - 2.000}{g_{\text{radiation}} - 2.000}$								
						-	gracens	<b>στ 19</b> 35μm(α	e) — 1.00				_	
5. SEAL	.5				V	FKM								
6. BYPA	SS VALVE				0	no by-	pass							
inbuilt int	o the filter el	lement												
7. ELEMENT SUFFIX			AB1	AbsoluteBeta - high capacity / efficiency filter element with AB1 connection							on			
only for spare element "/" before the three digit suffix is needed			AB2	Absolute	Beta 2 - very	/ high capa	city / efficie	ncy filter elei	ment with A	B2 connectio	n			
		•	is needed	_	- /									
8. CONNECTIONS			B6	G 1 1/4"										
9. BYPA	SS VALVE				0	no by-	pass							
inbuilt int	o the filter h	ead												
10. INE	0. INDICATOR PORT OPTION			no inc	licator po	ort								
					Z		for absolu tor both				ifferentia	l clogging		
11. CO	MPULSOF	RY FIELD	C		000	Filtrec	standard							
12. CO	RROSION	I PROTE	ECTION		S	standa	ard (Filter	head wi	th no tre	atment)				
							•							

#### ACCESSORIES

13. OPTIONS

The accessories must be ordered separately

INDICATOR	MPO	pressure gauge rear connection, scale 0-16 bar
(Y and F) digit for FKM seal option	MPC	pressure gauge rear connection, setting 3 bar, scale 0-10 bar
For other options see clogging indicators catalogue	MRC	pressure gauge radial connection, setting 3 bar, scale 0-10 bar
calalogoe	EY2	differential electric 2,7 bar
	VY2	differential visual 2,7 bar
	VEXF2	differential visual electric 2,7 bar
	PF1	metal plug for indicator seat - FKM

AB2 thread

AB1 thread

0

3

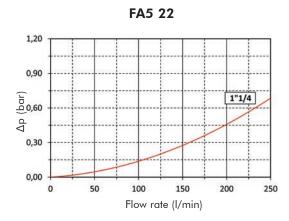


# PRESSURE DROP (Ap) INFORMATION FOR FILTER SIZING

The total Delta P through a filter assembly is given from Housing  $\Delta p$  + Element  $\Delta p$ ; this ideally should not exceed 1,0 bar. 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>.

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

Example: 100 l/min with A522G01V0/AB2 and oil viscosity 46 cSt >  $100 \times 5.8/1000 \times 46/32 = 0.83$  bar

		G01	G03	G06	G10	G25	GW40
A522	AB2	5,80	3,29	1,08	0,83	0,65	0,98
	AB1	3,29	1,35		0,73		

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

FA522G01V0AB2B60Z000S0 with 100 l/min and oil 46 cSt Housing  $\Delta p$  0,14 bar + element Dp 0,83 bar (100 x 5,8/1000 x 46/32) = total assembly  $\Delta p$  0,97 bar



# **USER TIPS**

Absolute



CARTRIDGE TIGHTENING TORQUE						
All models	1/2 turn					
INDICATOR TIGHTENING TORQUE						
Differential 50 Nm						

10 Nm

*SPARE SEAL KIT (5)
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	FKM
FA5-2x	06.021.00411

\* The kit includes 2 o-rings

# 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 or fuel are classified as "Dangerous waste material": they must be disposed according to the local laws by authorized Companies.

#### **INSTALLATION**

- 1. The IN and OUT ports must be connected to the hoses in the correct flow direction an arrow shows on the filter head (1).
  - The filter housing should be preferably mounted 2. with the cartridge (4) downward.
  - 3. Secure to the frame the filter head (1) using the threaded fixing holes (3).
  - Verify that no tension is present on the filter after 4. mounting.
  - Enough space must be available for filter 5. element cartridge replacement.
  - 6. The visual clogging indicator must be in a easily viewable position.
  - 7. When a electrical indicator is used, make sure that it is properly wired.
- <u> 8</u>. Never run the system with no filter element fitted.
  - 9. Keep in stock a spare FILTREC filter element for timely replacement when required.
  - 10. Filter housing should be earthed.

# **OPERATION**

- <u>1</u>. The filter must work within the operating conditions of pressure, temperature and compatibility given in the first page of this data sheet.
  - The filter element must be replaced as soon 2. as the clogging indicator signals at working temperature (in cold start conditions, fluid temperature lower than 30°C, a false alarm can be given due to oil viscosity).
  - If no clogging indicator is mounted, replace the 3. element according to the system manufacturer's recommendations.

#### MAINTENANCE

- Λ 1. Make sure that the system is switched off and there is no residual pressure in the filter.
  - 2. Unscrew the filter cartridge (4) by turning it anti-clockwise and remove it. Check the condition of the gasket located at the end of the threated spigot; replace it if necessary.
  - Fit a new FILTREC cartridge element (4), 3. verifying the part number, particularly concerning the micron rating.



- 4. Ensure that the head mounting face is clean.
- 🕂 5. Lubricate the gasket of the replacement cartridge and the thread prior to assembly.
  - 6. Spin on the new cartridge until it reaches the mounting face and tighten for 1/2 turn.





CT110-02/25

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