



FAP A5 SERIES

In line medium pressure filters

Inline filters with coupled spin-on cartridges, specifically designed for fuel oil applications. Operating pressure up to 24 bar, flow rate up to 500 l/min.

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

Sampling port, for fluid contamination analysis, available and easily accessible on the filter head.



HOUSING

tested according to NFPA T3.10.17, ISO12829, ISO3968

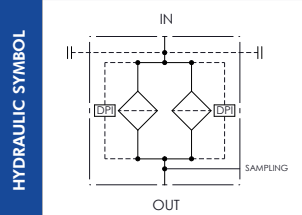
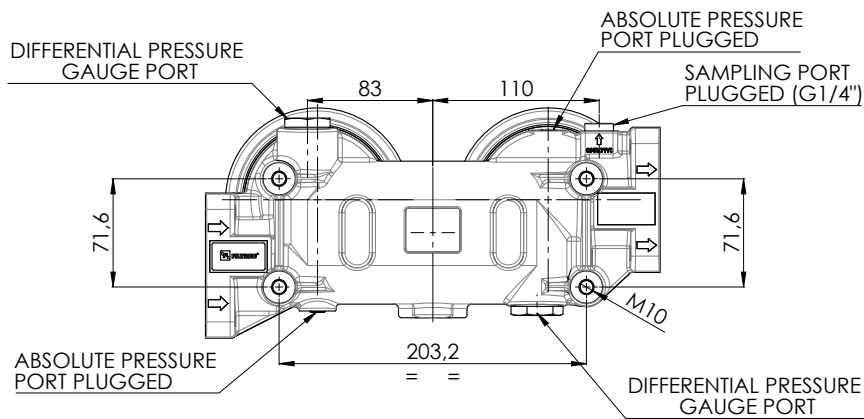
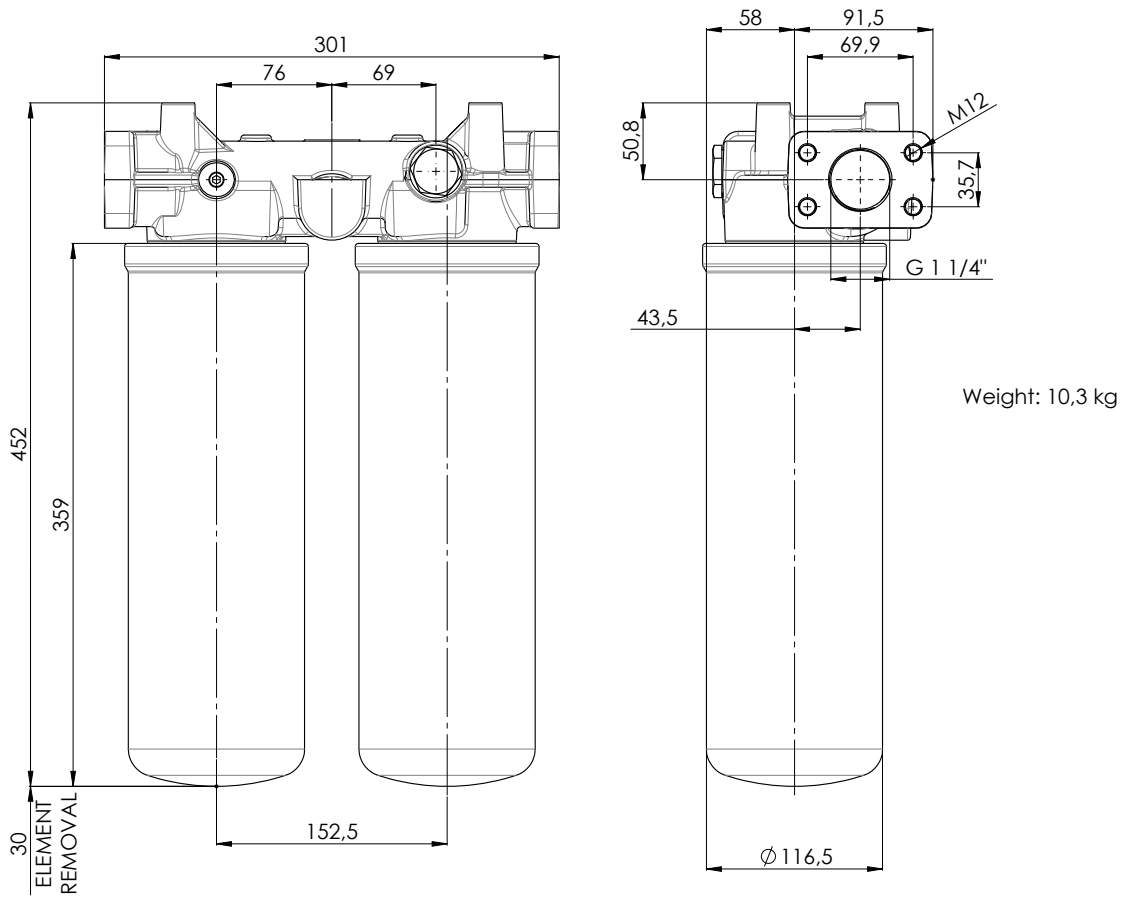
PRESSURE:	Max operating: 24 bar Burst: 55 bar
CONNECTION:	G 1 1/4" and 1 1/2" SAE 3000
MATERIALS:	Head: aluminium alloy Bowl: painted steel Seal: FKM
BYPASS VALVE:	No bypass

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, ASTM D975 Biodiesel B0 to B100 EN14214 Fuel oil EN51603-1 For use with other fluid please contact Filtrac Customer Service (info@filtrac.it).

OVERALL DIMENSIONS



ORDERING INFORMATION

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
	FAP	A5	22	G01	V	0	AB2	B6F7M	0	Z	000	S	0
SPARE ELEMENT	A5	22	G01	V	0	/AB2							

1. FILTER SERIES	FAP	
2. FILTER ELEMENT SERIES	A5	
3. FILTER SIZE	22	
4. FILTER MEDIA	/AB2	/AB1
	000	no element
	G01	glassfiber $\beta_{4\mu\text{m(c)}} \geq 10.000$ glassfiber $\beta_{4\mu\text{m(c)}} \geq 2.000$
	G03	glassfiber $\beta_{5\mu\text{m(c)}} \geq 5.000$ glassfiber $\beta_{4\mu\text{m(c)}} \geq 2.000$
	G06	glassfiber $\beta_{7\mu\text{m(c)}} \geq 2.000$
	G10	glassfiber $\beta_{10\mu\text{m(c)}} \geq 2.000$ glassfiber $\beta_{12\mu\text{m(c)}} \geq 1.000$
	G25	glassfiber $\beta_{25\mu\text{m(c)}} \geq 2.000$
	GW40	glassfiber $\beta_{35\mu\text{m(c)}} \geq 1.000$ + water absorbent
5. SEALS	V	FKM
6. BYPASS VALVE	0	no bypass
Inbuilt into the filter element		
7. ELEMENT SUFFIX	AB1	AbsoluteBeta - high capacity / efficiency filter element with AB1 connection
only for spare element "/" before the three digit suffix is needed	AB2	AbsoluteBeta 2 - very high capacity / efficiency filter element with AB2 connection
8. CONNECTIONS	B6F7M	G 1 1/4" + 1 1/2" SAE 3000 FLANGE
9. BYPASS VALVE	0	no bypass
Inbuilt into the filter head		
10. INDICATOR PORT OPTION	Z	ports for absolute pressure gauge and differential clogging indicator both plugged with metal plug
11. COMPULSORY FIELD	000	Filtrec standard
12. CORROSION PROTECTION	S	standard (filter head with no treatment)
13. OPTIONS	0	AB2 thread
ACCESSORIES	2	AB1 thread

The accessories must be ordered separately

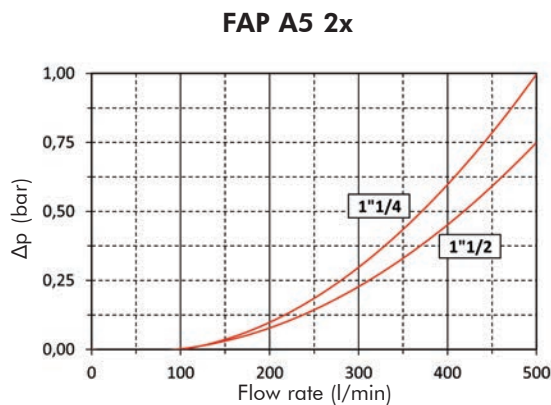
INDICATOR	MP0	pressure gauge rear connection, scale 0-16 bar
(Y and F) digit for FKM seal option For other options see clogging indicators catalogue	MPC	pressure gauge rear connection, setting 3 bar, scale 0-10 bar
	MRC	pressure gauge radial connection, setting 3 bar, scale 0-10 bar
	EY2	differential electric 2,7 bar
	VY2	differential visual 2,7 bar
	VEXF2	differential visual electric 2,7 bar
	PF1	metal plug for indicator seat - FKM
ACCESSORIES	PF4NF6F7M	FKM flange kit
	FMSA08S0	sampling point - check coupling M16x2 with G 1/4 connection thread
	FMSA09S0	microhose for check coupling M16x2 – length 1m

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. 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/dm³.

HOUSING PRESSURE DROP

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



ELEMENT PRESSURE DROP

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

Example: 200 l/min with A522G01V0/AB2 and oil viscosity 4 cSt: $200 \times (2,9/1000) \times (4/32) = 0,073\text{bar}$

		G01	G03	G06	G10	G25	GW40
A522	AB2	2,90	1,65	0,54	0,42	0,33	0,49
	AB1	1,64	0,68		0,36		

EXAMPLE OF TOTAL Δp CALCULATION

FAPA522G01V0AB2B6F7M0Z000S0 with 200 l/min and oil 4 cSt (using G 1 1/4" threaded port)

Housing Δp 0,12 bar + element Δp 0,073 bar ($200 \times 2,9/1000 \times 4/32$) = total assembly Δp 0,193 bar

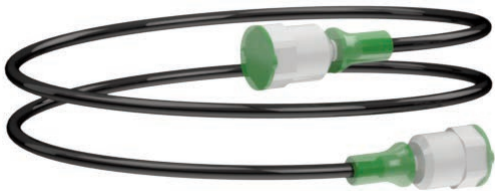
ACCESSORIES

These accessories must be ordered separately.



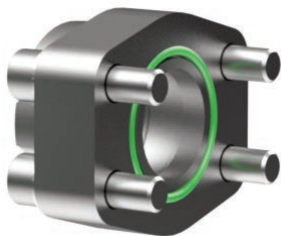
04.006.00539	FMSA08S0	sampling point - check coupling M16x2 with G 1/4 connection thread
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Allows you to control the pressure safely while the system is at full capacity and can be used to obtain fluid samples.



04.006.00538	FMSA09S0	microhose for check coupling M16x2 – length 1m
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Allows to connect the check coupling to the microhose by screwing them together by hand, without the use of special tools and without the risk of leaks while the system is in operation. The connection is automatically sealed and does not become loose as a result of vibration or pressure surges.



07.036.00109	PF4NF6F7M	FKM flange kit
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Flange to switch from 1 1/2" SAE 3000 connection to 1 1/2" NPTF. The kit includes 1 flange, 1 o-ring, 4 screws and 4 washers.

USER TIPS



- 1 FILTER HEAD
- 2 INDICATOR PORT
- 3 FIXING HOLES
- 4 FILTER CARTRIDGES
- 5 SEAL KIT
- 6 SAMPLING PLUG PORT

CARTRIDGE TIGHTENING TORQUE

All models	1/2 turn
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INDICATOR TIGHTENING TORQUE

Differential	50 Nm
Absolute	10 Nm

SPARE SEAL KIT (5)

	FKM
FAPA5-22	06.021.00411

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 IN and OUT ports must be connected to the hoses in the correct flow direction an arrow shows on the filter head (1).
- 2. The filter housing should be preferably mounted with the cartridge (4) downward.
- 3. Secure to the frame the filter head (1) using the threaded fixing holes (3).
- 4. Verify that no tension is present on the filter after mounting.
- 5. Enough space must be available for filter element cartridge replacement.
- 6. The visual clogging indicator must be in an easily viewable position.
- 7. When an electrical indicator is used, make sure that it is properly wired.
- ⚠ 8. 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

- ⚠ 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 (in cold start conditions, fluid temperature lower than 30°C, a false alarm can be given due to oil viscosity).
- 3. If no clogging indicator is mounted, replace the element according to the system manufacturer's recommendations.

MAINTENANCE

- ⚠ 1. Make sure that the system is switched off and there is no residual pressure in the filter.
- 2. Unscrew the filter cartridges (4) by turning them anti-clockwise and remove them. Check the condition of the gaskets located at the end of the threaded spigots; replace them if necessary.
- 3. Fit new FILTREC cartridge element (4), verifying the part number, particularly concerning the micron rating.
- ⚠ 4. Ensure that the head mounting face is clean.
- 5. Lubricate the gaskets of the replacement cartridges and the threads prior to assembly.
- 6. Spin on the new cartridges until they reach the mounting face and tighten for 1/2 turn.

