FAH SERIES

In line spin-on type filters

Inline filters with spin-on cartridge, suitable for use on return or low pressure line.
Available with or without bypass, indicator port is a standard option to fit a visual or electrical indicator.

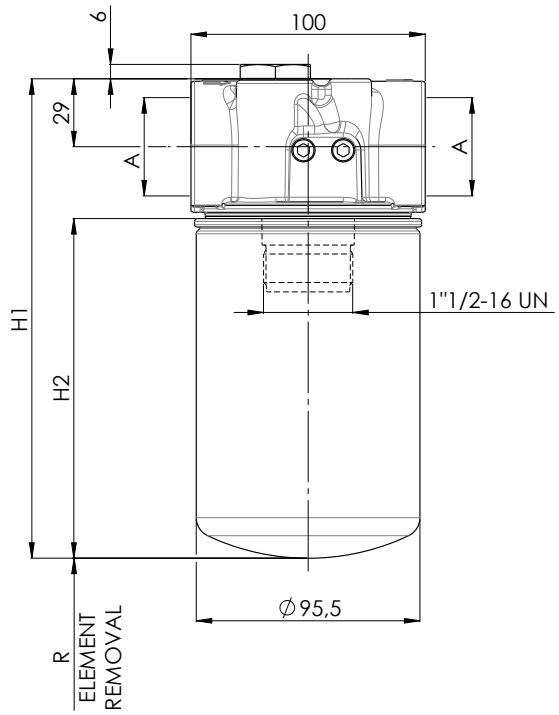
HOUSING	tested according to NFPA T3.10.17, ISO12829, ISO3968
PRESSURE:	Max operating 14 bar for FAH-A15x - FAHD-A15x Max operating 17 bar for FAH-A14x Burst: 20 bar for FAH-A15x - FAHD-A15x Burst: 28 bar for FAH-A14x
CONNECTIONS:	G 3/4"÷G 1 1/2" SAE Flange 1 1/2" 3000 psi
MATERIALS:	Head: aluminium alloy Bowl: painted steel Seal: NBR
BYPASS VALVE:	3,5 bar

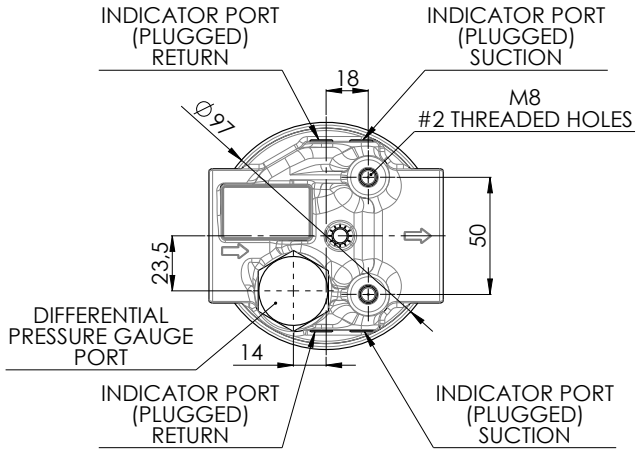
ELEMENT	tested according to ISO 11170, 2941, 2942, 2943, 3724, 3968,16889, 16908, 23181
FILTER MEDIA:	Inorganic microfiber: G03 - G06 - G10 - G25 - G40 - GW03 - GW06 - GW10 - GW25 Paper: C10 - C25 - CW25 Wire mesh: T60 - T125
COLLAPSE PRESSURE:	5 bar

TEMPERATURE RANGE:	from -30 °C to +100 °C
FLUID 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).

OVERALL DIMENSIONS

FAH - A14x



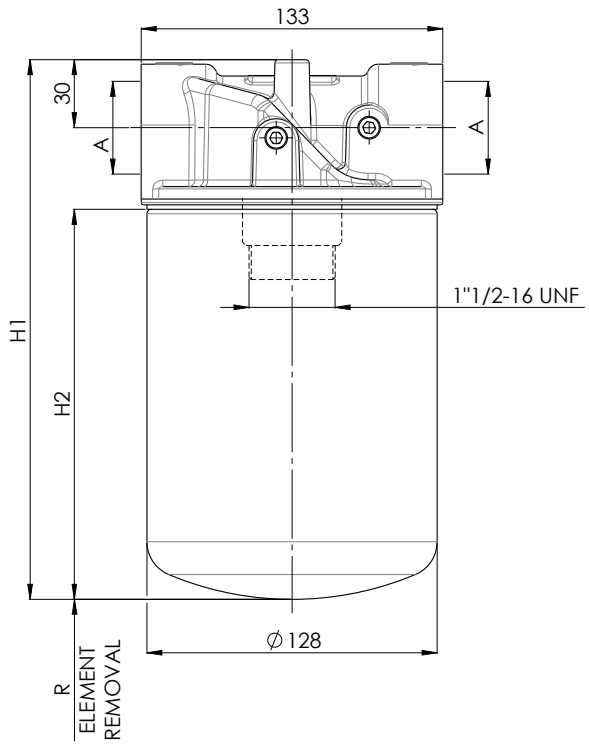


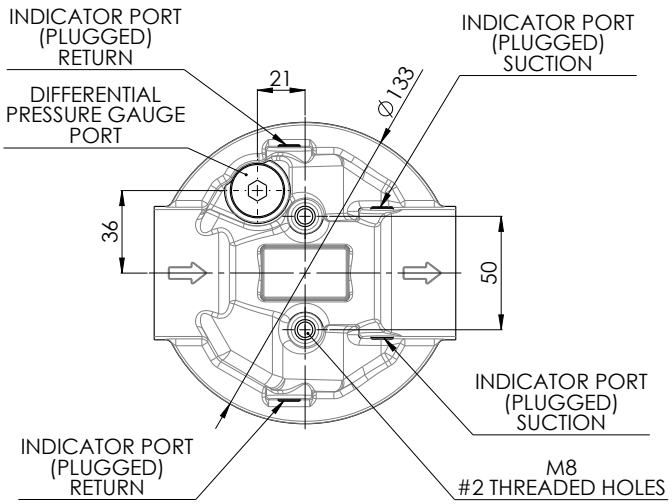
NOMINAL SIZE

CODE	A	H1	H2	R	WEIGHT
FAH - A140	G 3/4″ G 1″ G 1 1/4″	205	145	20	1,2 Kg
FAH - A142		270	210		1,4 Kg

OVERALL DIMENSIONS

FAH - A15x



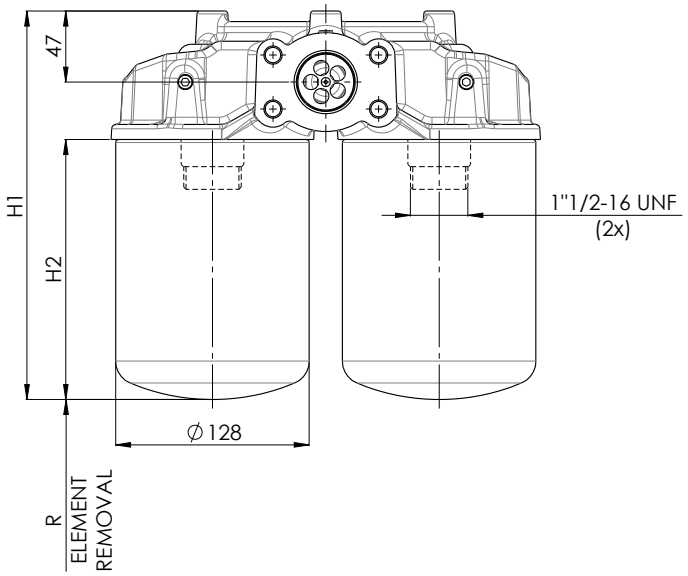


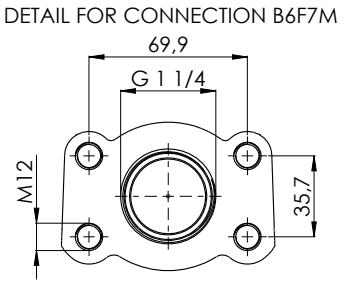
NOMINAL SIZE

CODE	A	H1	H2	R	WEIGHT
FAH - A150	G 1 1/4"	238	172	40	2 Kg
FAH - A152		398	266		2,3 Kg

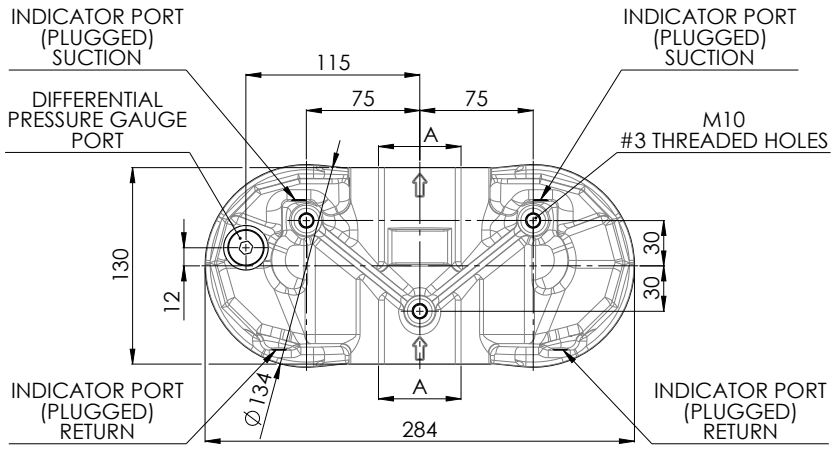
OVERALL DIMENSIONS

FAHD - A15x





G1 1/4 + 1 1/2" SAE J518-3000 - M12



NOMINAL SIZE

CODE	A	H1	H2	R	WEIGHT
FAHD - A150	G 1 1/2 G1 1/4" + 1 1/2" SAE J518-3000 - M12	257	172	40	6,4 Kg
FAHD - A152		351	266		7 Kg

ORDERING INFORMATION

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
	FAH	**A1**	**50**	**G25**	**B**	**B6**	**D**	**S**	**000**	**S**	**0**
SPARE ELEMENT		**A1**	**50**	**G25**							

1. FILTER SERIES	FAH		
	FAHD		
2. FILTER ELEMENT SERIES	A1		
3. FILTER SIZE	40-42	only for FAH	
	50-52		
4. FILTER MEDIA	000	no element	
	G03	glassfiber $ß_{5\mu m(c)} > 1.000$	
	G06	glassfiber $ß_{7\mu m(c)} > 1.000$	
	G10	glassfiber $ß_{12\mu m(c)} > 1.000$	
	G25	glassfiber $ß_{22\mu m(c)} > 1.000$	
	G40	glassfiber $ß_{35\mu m(c)} > 1.000$	
	GW03	glassfiber $ß_{5\mu m(c)} > 1.000$ + water absorbent	
	GW06	glassfiber $ß_{7\mu m(c)} > 1.000$ + water absorbent	
	GW10	glassfiber $ß_{12\mu m(c)} > 1.000$ + water absorbent	
	GW25	glassfiber $ß_{22\mu m(c)} > 1.000$ + water absorbent	
	C10	paper $ß_{10\mu m(c)} > 2$	
	C25	paper $ß_{25\mu m(c)} > 2$	
	CW25	paper $ß_{25\mu m(c)} > 2$ + water absorbent	
	T60	wire mesh 60 μm	
	T125	wire mesh 125 μm	
5. SEALS	B	NBR	ommitted for spare elements
6. CONNECTIONS	B4	G 3/4"	for size 40-42 only
	B5	G1"	
	B6	G 1 1/4"	
	B7	G 1 1/2"	for FAHD-50-52 only
	B6F7M	G 1 1/4" or 1 1/2" SAE J518-3000 psi - M12	
7. BYPASS VALVE	0	no bypass	on request only for size 40-42
	D	3,5 bar	
8. INDICATOR PORT	S	differential with metal plug	
	W	differential with plastic plug	
9. COMPULSORY FIELD	000	filtrec standard	
10. CORROSION PROTECTION	S	standard	
11. OPTIONS	0	standard	

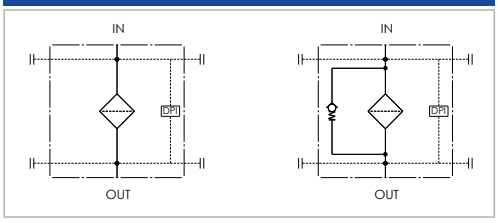
ACCESSORIES

The accessories must be ordered separately

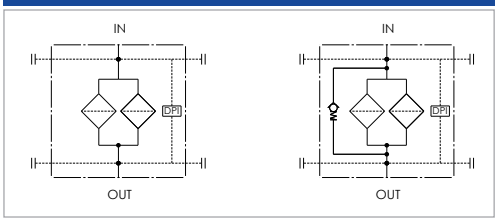
INDICATOR	MPC	pressure gauge 0÷10 bar setting 3 bar
For other options see clogging indicators catalogue	MRC	pressure gauge 0÷10 bar setting 3 bar
	PDC	pressure switch 2 bar SPDT
	VEF2	differential visual-electric 2,7 bar
	V02	differential visual 2,7bar
	E02	differential electric 2,7bar
	E02L	differential electric 2,7bar + LC24*
	LC24	LED connector for pressure switch
PLUG	P01	metal plug for indicator port - NBR

HYDRAULIC SYMBOLS

FAH - A14x / FAH - A15x



FAHD - A15x



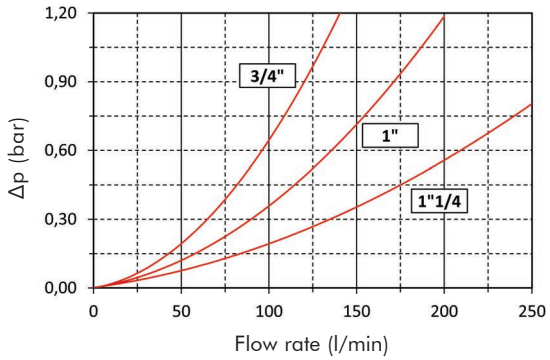
PRESSURE DROP (Δp) INFORMATION FOR FILTER SIZING

The total Delta P through a filter assembly is given from Housing Δp + Element Δp.This ideally should not exceed 0,5 bar for return application (it 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.

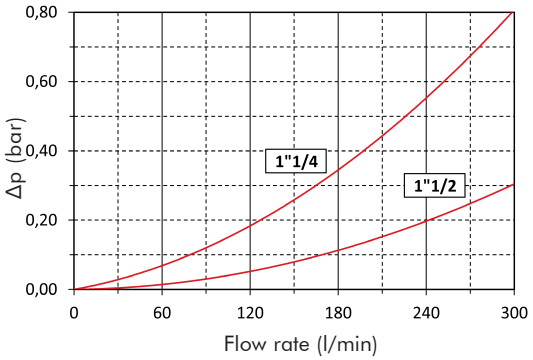
HOUSING PRESSURE DROP

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

FAH - A14x



FAH - A15x / FAHD - A15x



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 Vx different than 32 cSt a corrective factor Vx/32 must be applied.
Example: 120 l/min with A150G25 and oil viscosity 46 cSt: (120 x 1,41)/1000 x (46/32)= 0,24 bar
Example: 120 l/min with (*1) 2x A150G25 and oil viscosity 46 cSt: (120 x 0,71)/1000 x (46/32)= 0,12 bar

	G03	G06	G10	G25	G40	GW03	GW06	GW10	GW25	C10	C25	CW25	T60	T125
A140	6,92	6,39	3,83	2,98	1,99	19,52	18,02	10,81	8,41	2,02	1,81	5,11	0,96	0,64
A142	4,47	4,16	3,54	1,66	1,03	12,61	11,73	9,97	4,69	1,66	0,94	2,64	0,52	0,26
A150	4,98	4,22	2,68	1,41	0,72	14,03	11,89	7,55	3,99	0,77	0,65	1,85	0,31	0,26
A152	3,16	2,30	1,72	0,86	0,45	8,91	6,48	4,86	2,43	0,52	0,40	1,14	0,20	0,17
(*1) 2 x A150	2,49	2,11	1,34	0,71	0,36	7,02	5,95	3,77	1,99	0,38	0,33	0,92	0,15	0,13
(*2) 2 x A152	1,58	1,15	0,86	0,43	0,22	4,45	3,24	2,43	1,21	0,26	0,20	0,57	0,10	0,08

(*1) values for FAHD-A150 (*2) values for FAHD-A152. These sizes are fitting 2 cartridges each

EXAMPLE OF TOTAL Δp CALCULATION

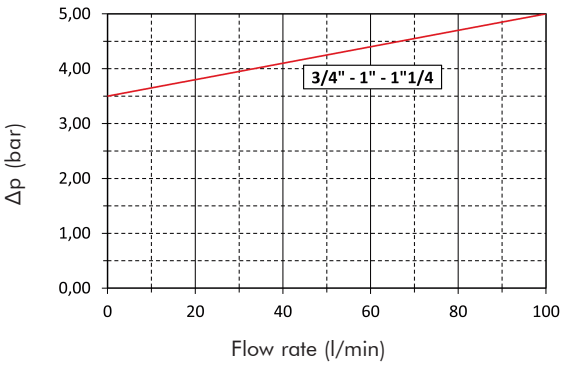
FAHA150G25BB6DS000S0 with 120 l/min and oil 46 cSt:
Housing Δp 0,19 bar + element Δp 0,24 bar (120 x 1,41)/1000 x (46/32) = Total assembly Δp 0,43 bar.

FAHDA150G25BB7DS000S0 with 120 l/min and oil 46 cSt:
Housing Δp 0,05 bar + element Δp 0,12 bar (120 x 0,71)/1000 x (46/32) = Total assembly Δp 0,17 bar

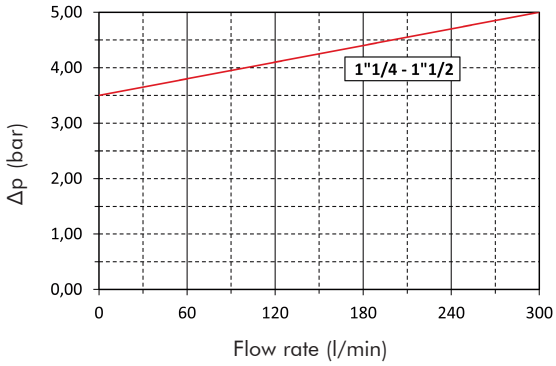
BYPASS VALVE PRESSURE DROP

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

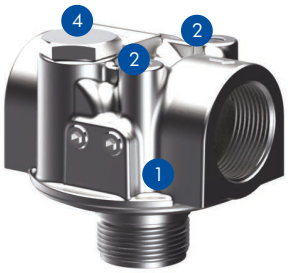
FAH-A14x



FAH-A15x



USER TIPS



1. FILTER HEAD
2. FIXING HOLES
3. FILTER CARTRIDGE
4. IDENTIFICATION LABEL

CARTRIDGE TIGHTENING TORQUE	
All models	3/4 turn

INDICATOR TIGHTENING TORQUE	
Differential pressure gauge	50 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 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 (3) downward.
3. Secure to the frame the filter head (1) using the threaded fixing holes (2).
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 a easily viewable position.
7. When a 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.

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, oil 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 cartridge (3) by turning it anti-clockwise and remove it.
3. Fit a new FILTREC cartridge element (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.

7. Spin on the new cartridge until it reaches the mounting face and tighten for 3/4 turn.