



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

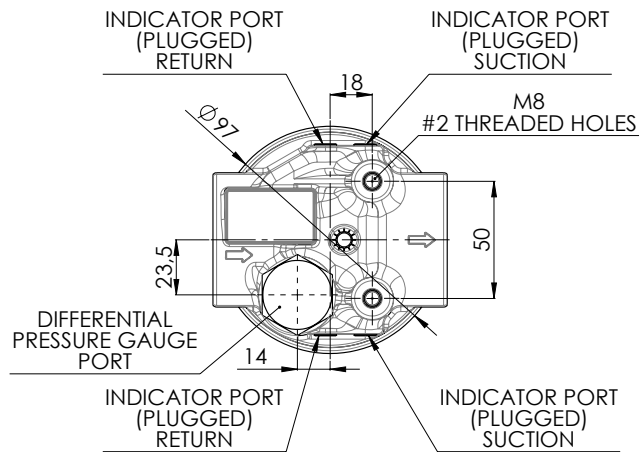
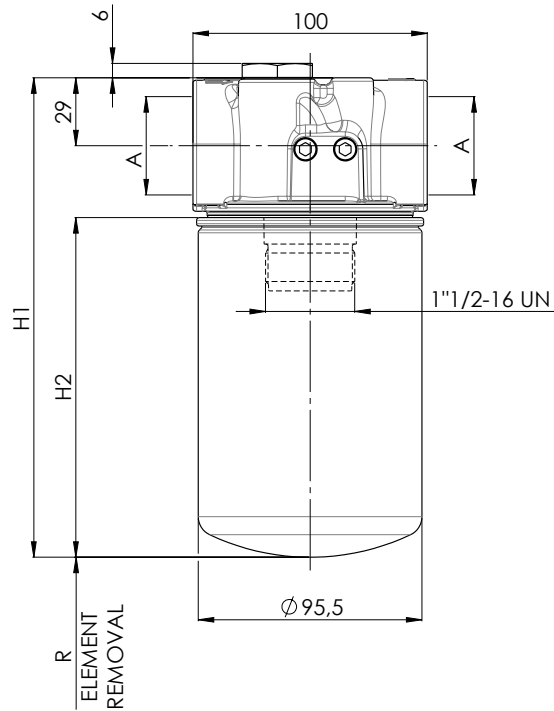
COLLAPSE PRESSURE: 5 bar

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

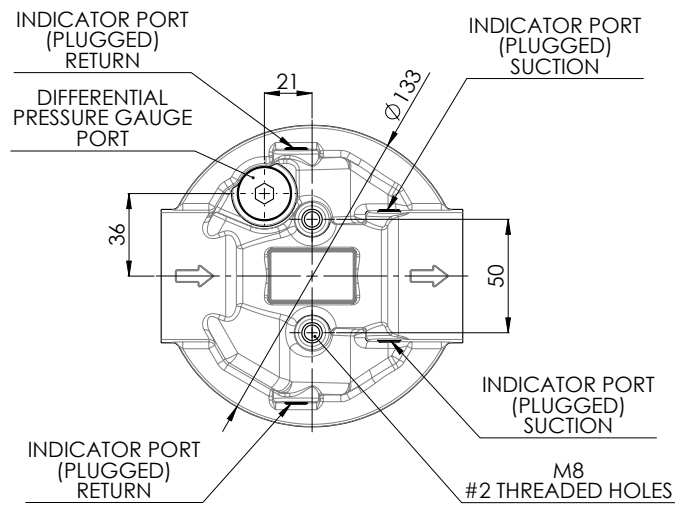
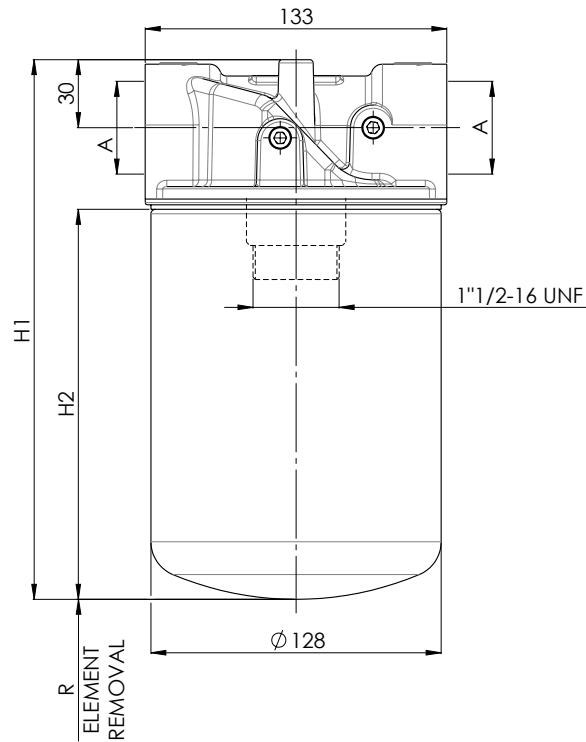


NOMINAL SIZE

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

OVERALL DIMENSIONS

FAH - A15x

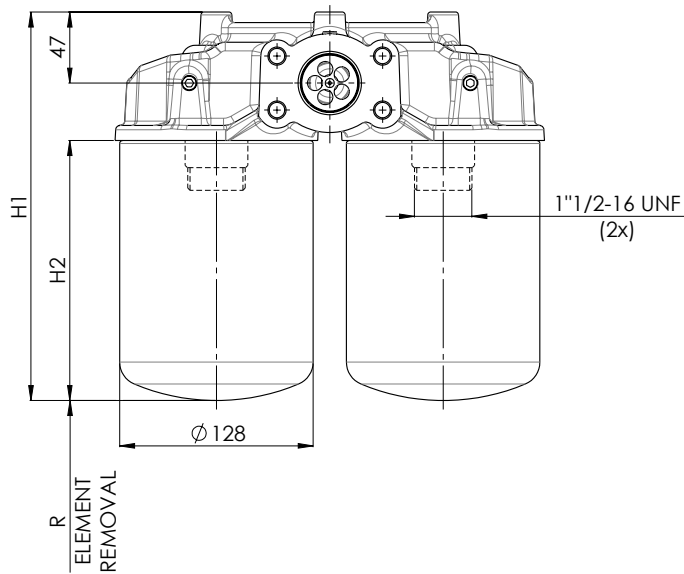


NOMINAL SIZE

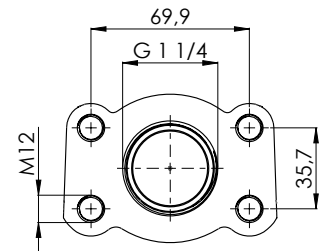
CODE	A	H1	H2	R	WEIGHT
FAH - A150	G 1 1/4"	238	172	40	2 Kg
FAH - A152		398	266		2,3 Kg

OVERALL DIMENSIONS

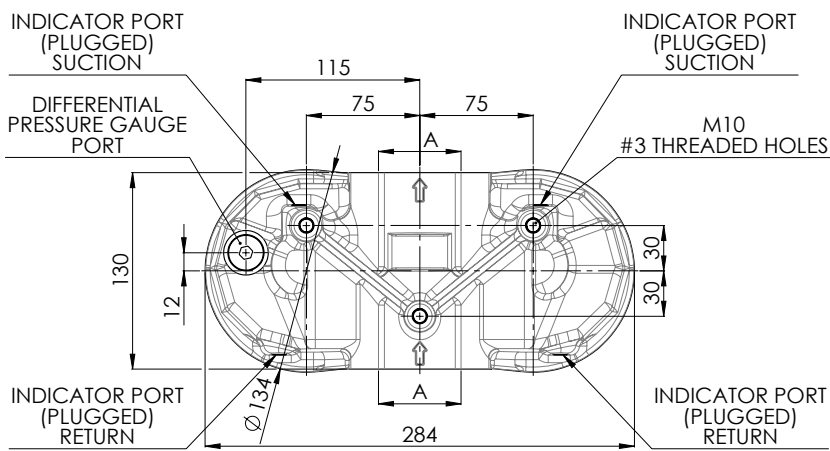
FAHD - A15x



DETAIL FOR CONNECTION B6F7M



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



NOMINAL SIZE

CODE	A	H1	H2	R	WEIGHT
FAHD - A150	G 1 1/2	257	172	40	6,4 Kg
FAHD - A152	G1 1/4" + 1 1/2" SAE J518-3000 - M12	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 $\beta_{5\mu\text{m(c)}} > 1.000$
	G06	glassfiber $\beta_{7\mu\text{m(c)}} > 1.000$
	G10	glassfiber $\beta_{12\mu\text{m(c)}} > 1.000$
	G25	glassfiber $\beta_{22\mu\text{m(c)}} > 1.000$
	G40	glassfiber $\beta_{35\mu\text{m(c)}} > 1.000$
	GW03	glassfiber $\beta_{5\mu\text{m(c)}} > 1.000$ + water absorbent
	GW06	glassfiber $\beta_{7\mu\text{m(c)}} > 1.000$ + water absorbent
	GW10	glassfiber $\beta_{12\mu\text{m(c)}} > 1.000$ + water absorbent
	GW25	glassfiber $\beta_{22\mu\text{m(c)}} > 1.000$ + water absorbent
	C10	paper $\beta_{10\mu\text{m(c)}} > 2$
	C25	paper $\beta_{25\mu\text{m(c)}} > 2$
	CW25	paper $\beta_{25\mu\text{m(c)}} > 2$ + water absorbent
	T60	wire mesh 60 μm
T125	wire mesh 125 μm	
5. SEALS	B	NBR omitted for spare elements
6. CONNECTIONS	B4	G 3/4" for size 40-42 only
	B5	G 1"
	B6	G 1 1/4"
	B7	G 1 1/2"
	B6F7M	G 1 1/4" or 1 1/2" SAE J518-3000 psi - M12 for FAHD-50-52 only
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

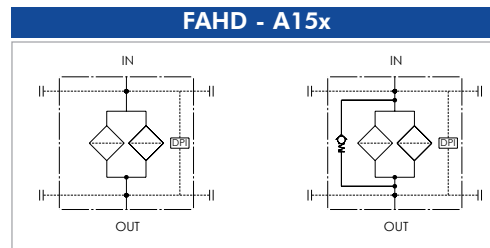
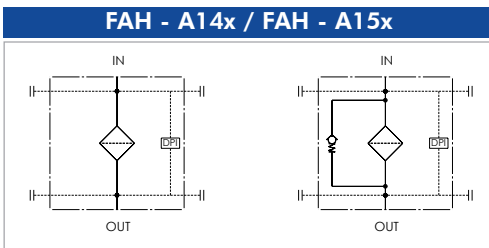
(F) digit for FKM seal option
For other options see clogging indicators catalogue

MPC	pressure gauge 0÷10 bar setting 3 bar	
MRC	pressure gauge 0÷10 bar setting 3 bar	for return and suction application
PDC	pressure switch 2 bar SPDT	
VE02 (VEF2)	differential visual-electric 2,7 bar	for inline application 40-42 only
Z34	differential visual 2,7 bar	for size 50-52 only
Z35	differential electric 2,7 bar SPST	
LC24	LED connector for pressure switch	

PLUG

P01	metal plug for indicator port - NBR	for size 40-42 only
P02	metal plug for indicator port - NBR	for size 50-52 only

HYDRAULIC SYMBOLS



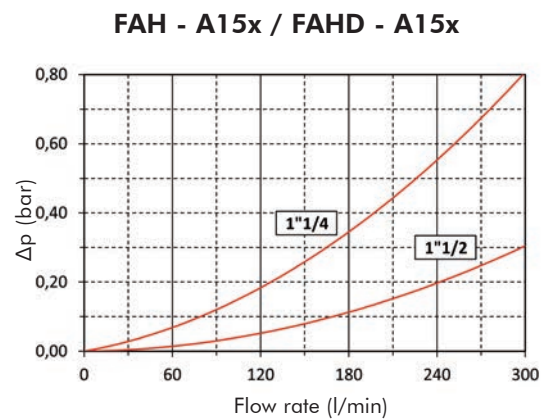
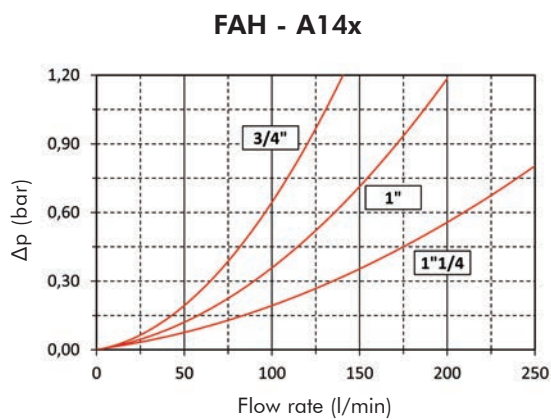
PRESSURE DROP (Δp) INFORMATION FOR FILTER SIZING

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/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: 120 l/min with A150G25 and oil viscosity 46 cSt: $(120 \times 1,41)/1000 \times (46/32) = 0,24$ bar

Example: 120 l/min with (*1) 2x A150G25 and oil viscosity 46 cSt: $(120 \times 0,71)/1000 \times (46/32) = 0,12$ 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:

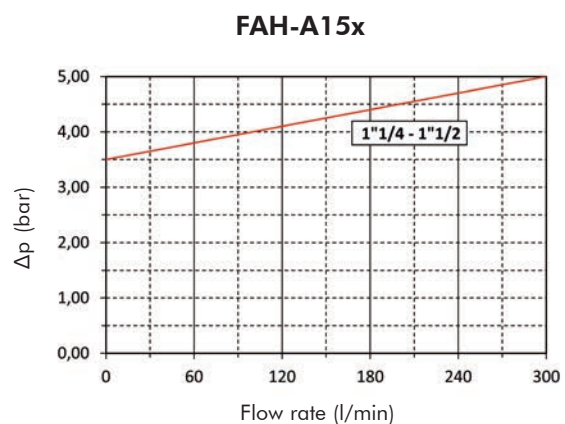
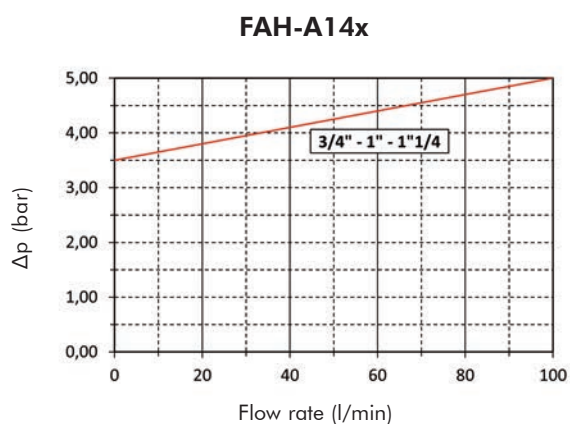
Housing Δp 0,19 bar + element Δp 0,24 bar $(120 \times 1,41)/1000 \times (46/32) =$ Total assembly Δp 0,43 bar.

FAHDA150G25BB7DS000S0 with 120 l/min and oil 46 cSt:

Housing Δp 0,05 bar + element Δp 0,12 bar $(120 \times 0,71)/1000 \times (46/32) =$ 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.



USER TIPS



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




CARTRIDGE TIGHTENING TORQUE

All models	3/4 turn
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INDICATOR TIGHTENING TORQUE

Differential pressure gauge	50 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 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.

