



FSC

SUCTION FILTERS

DESCRIPTION

Suction filter

MATERIALS

FSC31 & FSC41

Cover & head: Aluminum alloy

Bowl: Polyamide

FSC71 & FSC81

Cover & housing: Aluminum

FSC51 & FSC61

Housing: Steel

Cover: Aluminum

Shut-off valve: Polyamide

Seals: NBR Nitrile

(FKM fluoroelastomer on request)

Indicator housing: Brass

PRESSURE

Collapse, differential for the filter element: 100 kPa (1 bar)

FLOW RATE

Q_{max} 500 l/min

WORKING TEMPERATURE

From -25° to +110° C

COMPATIBILITY (ISO 2943)

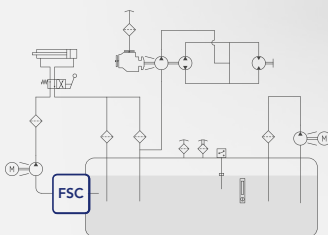
Full with fluids: HH-HL-HM-HV-HTG

(according to ISO 6743/4)

For fluids different than the above mentioned,
please contact our Customer Service.



HYDRAULIC DIAGRAM



Is this datasheet the latest release? Please check on our website

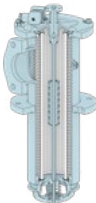
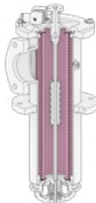
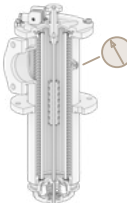

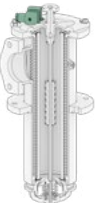
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SUCTION FILTERS

ORDERING AND OPTION CHART

F	S	C	COMPLETE FILTER FAMILY							FILTER ELEMENT FAMILY	E	S	C
			SIZE & LENGTH	31	41	51	61	71	81	SIZE & LENGTH			
			PORT TYPE										
			B = BSP thread	B	B	-	-	-	-				
			F = SAE flange 3000 psi	-	F	F	F	F	F				
			PORT SIZE										
			10 = 1" 1/4	10	-	-	-	-	-				
			12 = 1" 1/2 (B12 only)	-	12	-	-	-	-				
			16 = 2" (F16 only)	-	16	-	-	-	-				
			20 = 2" 1/2 (F20 only)	-	20	-	-	-	-				
			24 = 3"	-	-	24	-	24	-				
			32 = 4"	-	-	-	32	-	32				
		W	BYPASS VALVE										
			W = no bypass	W	W	W	W	W	W				
			SEALS							SEALS			
			N = NBR Nitrile (only for complete filter)	N	N	N	N	N	N				
			F = FKM Fluoroelastomer (only for complete filter)	F	F	F	F	F	F				
			X = not applicable (only for filter element)	X	X	X	X	X	X				
			G = treatment for water-glycol (for filter and element)	G	G	G	G	G	G				
			FormulaUFI MEDIA							FormulaUFI MEDIA			
			ME = FormulaUFI.WEB 60 µm	ME	ME	ME	ME	ME	ME				
			MF = FormulaUFI.WEB 90 µm	MF	MF	MF	MF	MF	MF				
			MG = FormulaUFI.WEB 250 µm	MG	MG	MG	MG	MG	MG				
			CLOGGING INDICATOR										
			01 = 1/8" port, plugged	-	-	-	-	-	01				
			04 = nr.2 x 1/8" seats, plugged	04	04	04	04	04	-				
			10 = vacuum gauge, rear connection	10	10	10	10	10	10				
			91 = SPDT, vacuum switch	91	91	91	91	91	91				
			ACCESSORI / ACCESSORIES										
			W = without	W	W	W	W	W	W				
			M = magnetic core	-	M	M	M	M	M				
			ACCESSORI / ACCESSORIES										
			W = without	W	W	W	W	W	W				
			S = safety switch	-	S	S	S	S	S				

SPARE PARTS

FILTER HOUSING				FILTER ELEMENT				CLOGGING INDICATOR				ACCESSORIES											
																							
B	S	C		F	W			E	S	C		X											



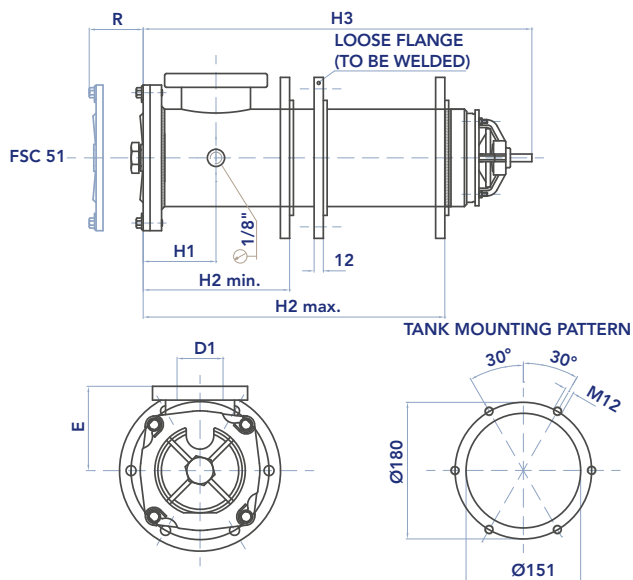
SPARE SEAL KIT

	NBR	FKM
	NBR	FKM
FSC31	521.0088.2	521.0090.2
FSC41	521.0023.2	521.0091.2
FSC51	521.0089.2	521.0092.2

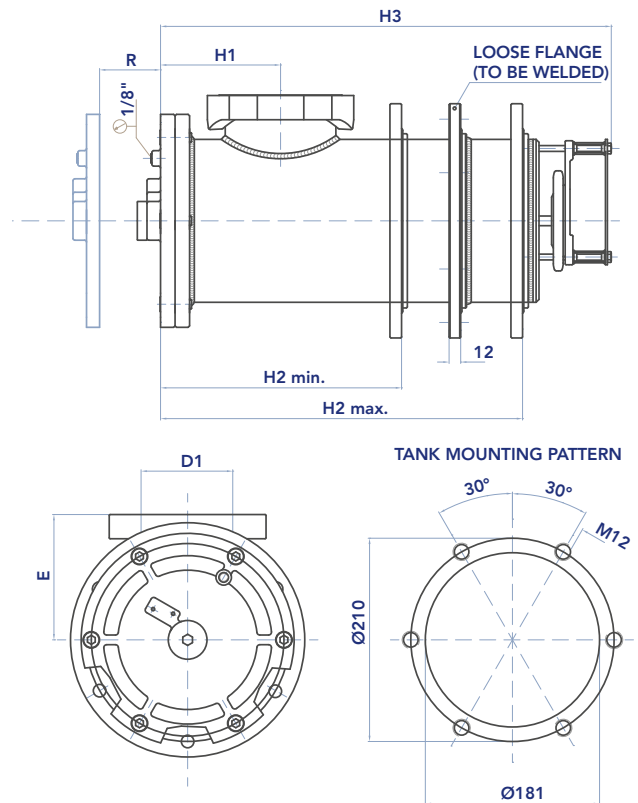
	NBR	FKM
	NBR	FKM
FSC61	521.0024.2	521.0093.2
FSC71	521.0097.2	521.0098.2
FSC81	521.0099.2	521.0100.2

INSTALLATION DRAWING

FSC51



FSC61



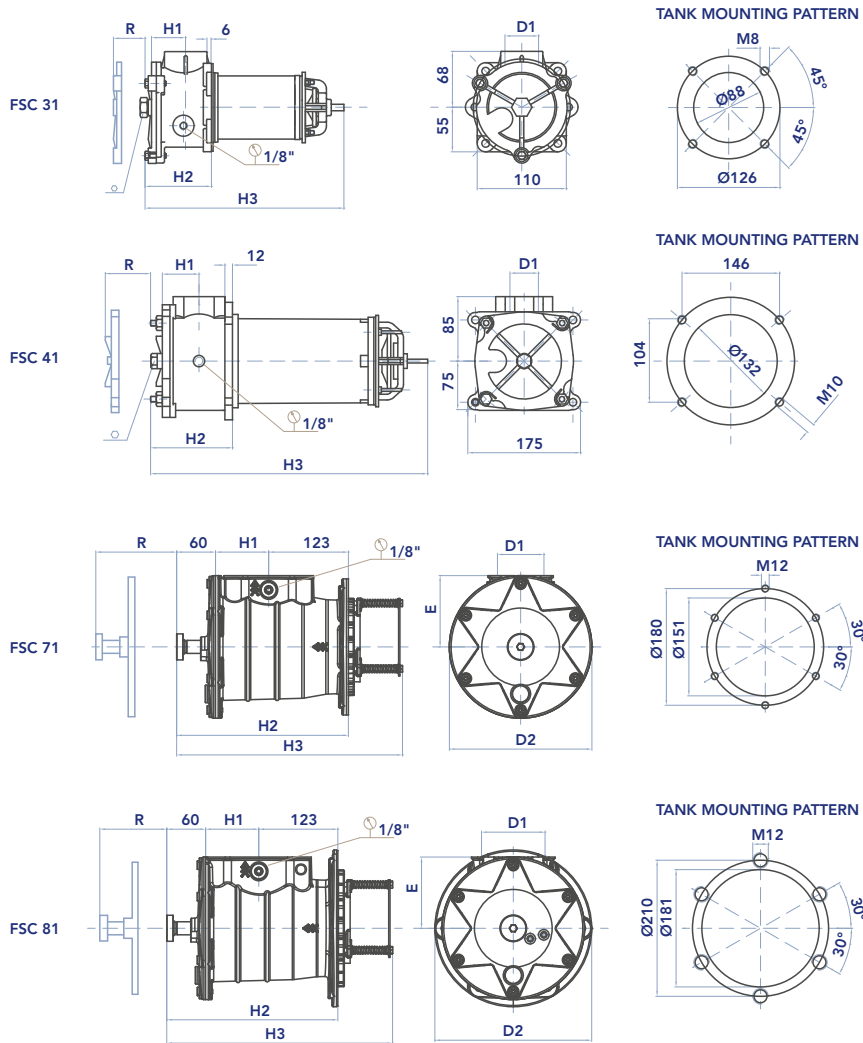
FILTER HOUSING

	D1	D2	E	H1	H2	H3	R	⬡	kg
FSC31	1"1/4	-	-	42	80	275	250	22	1,6
FSC41	1"1/2 - 2" - 1"1/2	-	-	66	120	322	300	32	3,0
FSC51	3"	210	110	95	174 ÷ 355	480	500	32	13,0
FSC61	4"	242	130	122	250 ÷ 405	470	500	32	16,0
FSC71	3"	220	110	80	265	348,5	250	10	5,5
FSC81	4"	242	110	80	264	348,5	250	10	6,0

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SUCTION FILTERS

INSTALLATION DRAWING

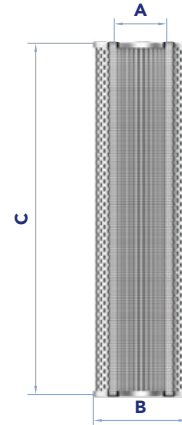


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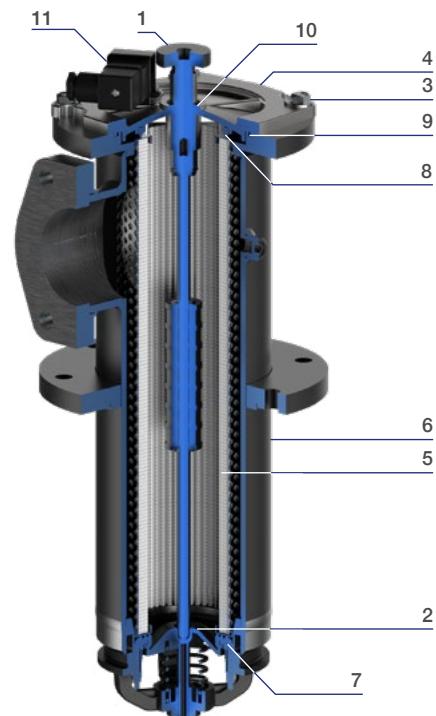
FILTER ELEMENT

	A	B	C	Kg	AREA (cm ²) Media M+
ESC31	29,5	70	163	0,25	1.600
ESC41	65	99	198	0,50	1.845
ESC51	65	99	375	0,90	3.545
ESC61	93	136	375	1,50	5.065
ESC71	77	120	196	0,80	2.400
ESC81	93	136	196	0,90	2.600



MAINTENANCE

- 1) Stop the system and verify there is no pressure in the filter.
- 2) Unscrew the threaded pin (1) to close the bulkhead (2) on the bottom of filter housing and to prevent oil leakage from the system.
- 3) Collect the oil inside the filter with a suitable container.
- 4) FSC31-FSC41-FSC51 Loosen the nuts/screws (3) on the cover (4). N.B. it is not necessary to disassemble the nuts, use the slots on the cover. FSC61-71-81: Unscrew the screws (3).
- 5) FSC31-FSC41-FSC51 Turn the cover (4) clockwise and remove it. FSC61-71-81: remove the cover (4).
- 6) Remove the dirty filter element (2).
N.B. The used filter elements and oil dirty filter parts are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorised Companies.
- 7) Check the filter element part number on the filter label or in the ordering and option chart.
Use only original spare parts.
- 8) Insert the clean element (5) in the housing (6) resting on the bottom gasket (7).
Lubricate the new element o-ring gasket (3) with oil.
- 9) Check the correct positioning and condition of the gasket (8) and o-ring (9) respectively assembled on the cover (4) and housing (6). Lubricate with oil if necessary. If damaged, check the catalogue or call the customer care service.
Insert the clean element into its seat with care.
- 10) Position the cover (4) and tighten the screws/nuts (3) until it stops.
- 11) Screw the threaded pin (1) up to the stop on the cover (4). This opens the bulkhead (2) on the bottom and allows the oil inlet from the tank. N.B. The o-Ring (10) ensures the seal between the pin and the cover.



Accessories:

Safety switch. The threaded pin (1) must be completely screwed to close the contact of microswitch (11). If the pin is unscrewed, the microswitch opens. If damaged, check the catalogue or call the customer care service.

Clogging indicator. If damaged, unscrew and replace it (check the part number in the ordering and option chart). Apply a thread-sealing and screw until tight.

N.B. an over-tightening can damage the thread.

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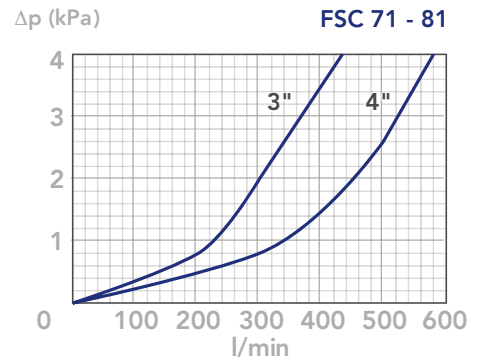
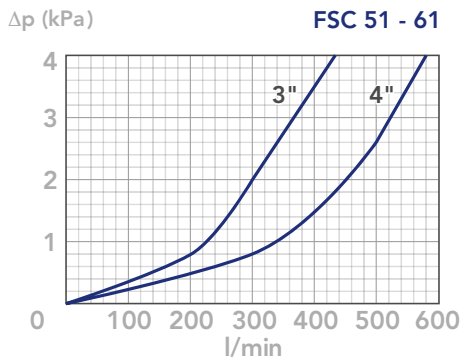
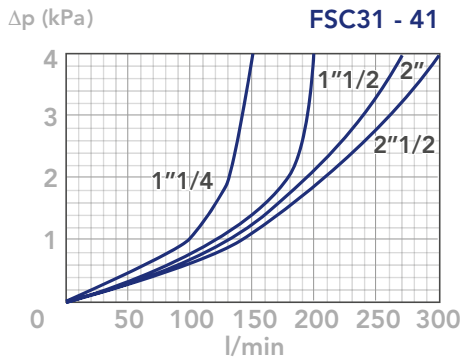
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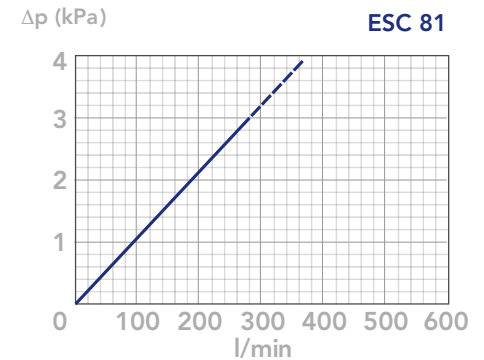
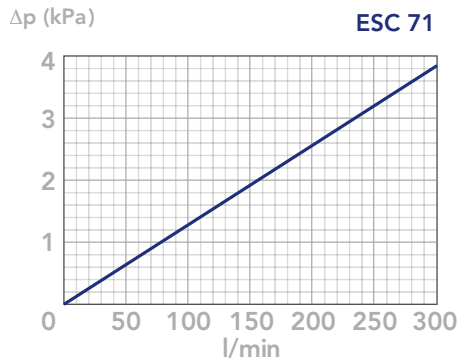
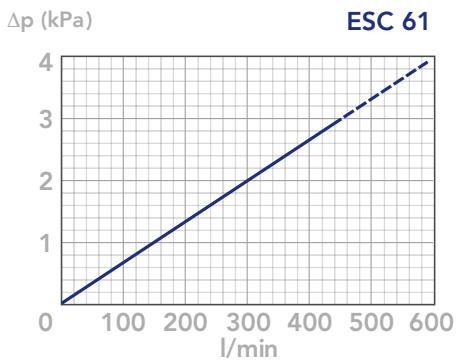
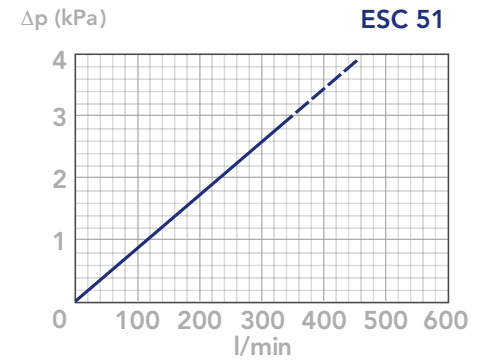
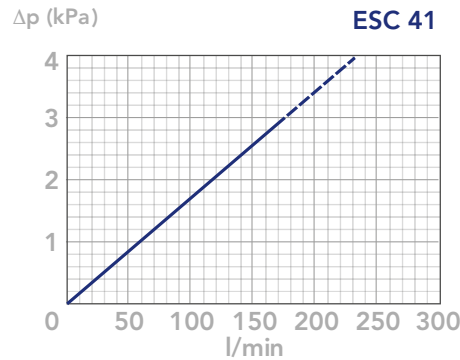
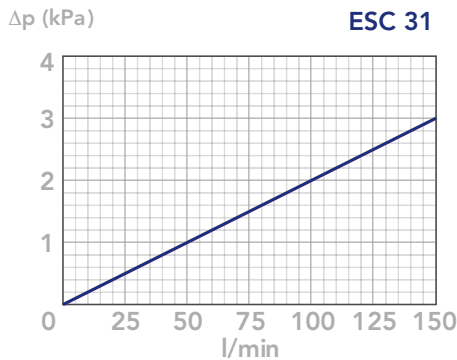
PRESSURE DROP CURVES (Δp)

The Pressure Drop (Δp) must be lower than 3 kPa (0,03 bar).

FILTER HOUSING PRESSURE DROP
(mainly depending on the port size)



CLEAN FILTER ELEMENT PRESSURE DROP
(pressure drop values of the elements by ME - MF - MG media are very similar)



N.B.

All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 kg/dm³; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves

are obtained from test done at the UFI FILTERS HYDRAULICS Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.