FSC-FSB
SUCTION FILTERS

MATERIALS

Housing: Aluminium alloy
FSC31 & FSC41
Cover & head: Aluminium alloy
Bowl: Polyammide
FSC71 & FSC81
Cover & housing: Aluminium
FSC51 & FSC61
Housing: Steel
Cover: Aluminium
Shut-off valve: Polyammide
Seals: NBR Nitrile
(FKM - on request fluoroelastomer)
Indicator housing: Brass

PRESSURE

Collapse, differential for the filter element (ISO 2941): 100 kPa (1 bar)

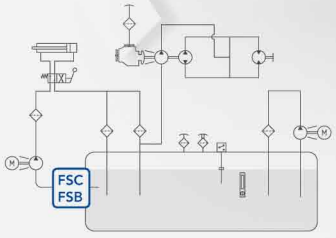
WORKING TEMPERATURE

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.

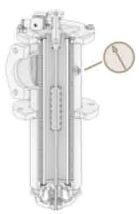
FSC
SUCTION FILTERS

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 (B10 only)	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				
			FILTER MEDIA							FILTER MEDIA			
			ME = metal wire mesh 60 µm	ME	ME	ME	ME	ME	ME				
			MF = metal wire mesh 90 µm	MF	MF	MF	MF	MF	MF				
			MG = metal wire mesh 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				
			ACCESSORIES										
			W = without	W	W	W	W	W	W				
			M = magnetic core	-	M	M	M	M	M				
			ACCESSORIES										
			W = without	W	W	W	W	W	W				
			S = safety switch	-	S	S	S	S	S				

SPARE PARTS ELEMENTS

FILTER HOUSING	FILTER ELEMENT	CLOGGING INDICATOR	ACCESSORIES



B	S	C			F			W									

E	S	C			X		

FSB
SUCTION FILTERS

ORDERING AND OPTION CHART

F	S	B	COMPLETE FILTER FAMILY							FILTER ELEMENT FAMILY	C	S	F
			SIZE & LENGTH	110	501	550	535	560	540	SIZE & LENGTH			
				110	510	515	535	520	540				
			FILTER MEDIA							FILTER MEDIA			
			MS = metal wire mesh 60 µm	MS	MS	MS	MS	MS	MS				
			MN =metal wire mesh 90 µm	MN	MN	MN	MN	MN	MN				
			DC =metal wire mesh 250 µm	DC	DC	DC	DC	DC	DC				
			SEALS							SEALS			
			0 = not applicable (only for filter element)	0	0	0	0	0	0				
			1 = NBR Nitrile (only for complete filter)	1	1	1	1	1	1				
			3 = treatment for water-glycol (for filter and element)	3	3	3	3	3	3				
		0	BYPASS VALVE										
			0 = no bypass	0	0	0	0	0	0				
			PORT TYPE										
			B = BSP thread	B	B	B	B	B	B				
			F = SAE flange 3000 psi	F	F	F	F	F	F				
			PORT SIZE										
			6 = 1" 1/4	6	-	-	-	-	-				
			7 = 1" 1/2 only B	-	7	-	-	-	-				
			8 = 2" only F	-	8	-	-	-	-				
			9 = 2"1/2 only F	-	9	-	-	-	-				
			A = 3"	-	-	A	A	-	-				
			C = 4"	-	-	-	-	C	C				
			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				
			ACCESSORIES										
			S = without	S	S	S	S	S	S				
			M = magnetic core	-	M	M	M	M	M				
			ACCESSORIES										
			S = without	S	S	S	S	S	S				
			E = safety switch	-	E	E	E	E	E				

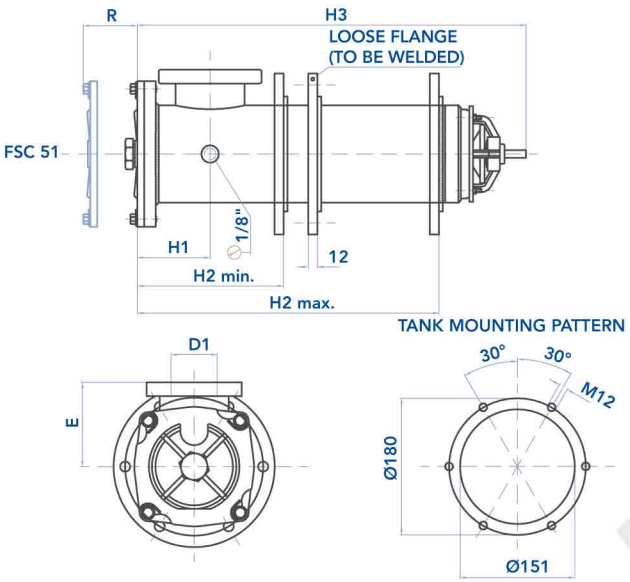
SPARE SEAL KIT

	NBR	FKM
FSC31 FSB110	521.0088.2	521.0090.2
FSC41 FSB501	521.0023.2	521.0091.2
FSC51 FSB535	521.0089.2	521.0092.2
FSC61 FSB540	521.0024.2	521.0093.2
FSC71 FSB550	521.0097.2	521.0098.2
FSC81 FSB560	521.0099.2	521.0100.2

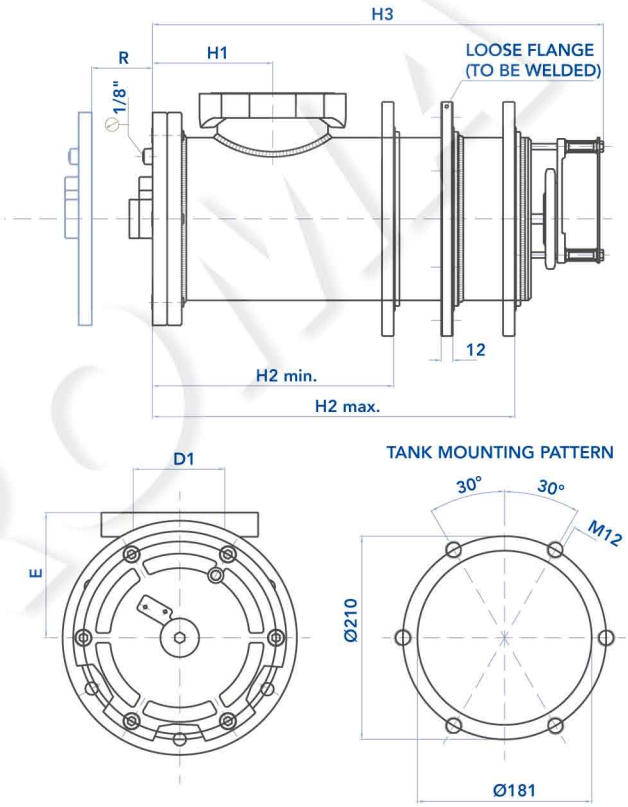
FSC-FSB
SUCTION FILTERS

INSTALLATION DRAWING

FSC51



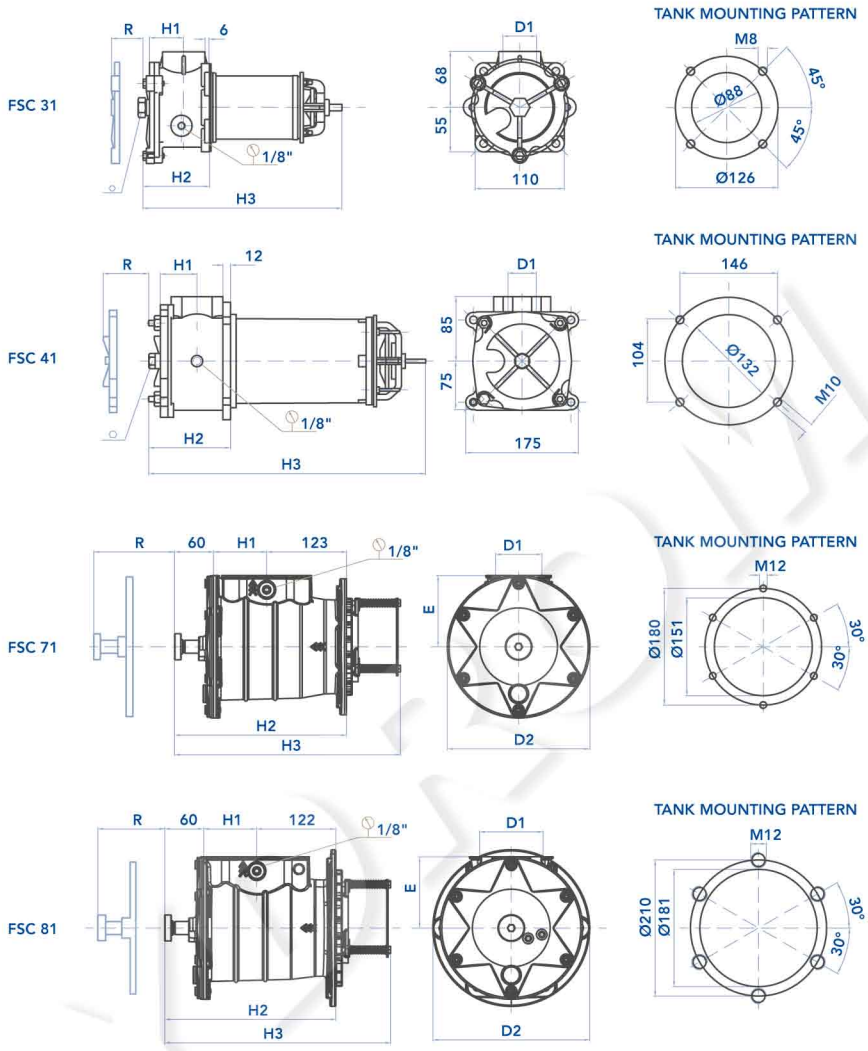
FSC61



FILTER HOUSING

	D1	D2	E	H1	H2	H3	R	⬡	kg
FSC31 FSB110	1"1/4	-	-	42	80	275	250	22	1,6
FSC41 FSB501	1"1/2 - 2" - "1/2	-	-	66	120	322	300	32	3,0
FSC51 FSB535	3"	210	110	95	174 ÷ 355	480	500	32	13,0
FSC61 FSB540	4"	242	130	122	250 ÷ 405	470	500	32	16,0
FSC71 FSB550	3"	220	110	82	265	348,5	250	10	5,5
FSC81 FSB560	4"	242	110	82	264	348,5	250	10	6,0

INSTALLATION DRAWING



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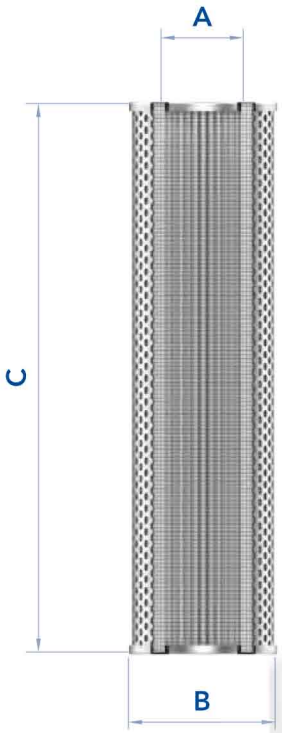
FSC81 FSB560	4"	242	110	82	264	348,5	250	10	6,0

FSC-FSB
SUCTION FILTERS

MAINTENANCE

The best time to change your filter element is just before it reaches its maximum dirt-holding capacity. For this reason, we recommend to monitor the pressure of the hydraulic oil flowing through the filter with a clogging indicator. When it is time to change the filter element, switch off the system before opening the filter housing.
Unscrew the tie rod, unscrew the cover of the filter head and remove the dirty filter element. Replace it with an original UFI element, verifying the part number on the filter label or on the catalogue. Check the gaskets conditions and replace if necessary. Insert the clean element, handling with care and cleanliness. Replace the cover on the filter head with the screw and screw the tie rod until it stops.
We recommend the stocking of a spare UFI filter element for timely replacement when required.



FILTER ELEMENT

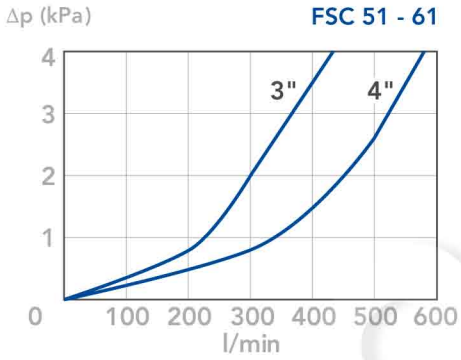
	A	B	C	KG	AREA (cm^2) Media M+
ESC31 CSF110	29,5	70	163	0,25	1.600
ESC41 CSF510	65	99	198	0,50	1.845
ESC51 CSF535	65	99	375	0,90	3.545
ESC61 CSF540	93	136	375	1,50	5.065
ESC71 CSF515	77	120	196	0,80	2.400
ESC81 CSF520	93	136	196	0,90	2.600

The used filter elements cannot be cleaned and are classified as “Dangerous waste material”. They must be disposed according to local laws by authorized Companies.
Verify that the Company you choose has the expertise and authorization to dispose this type of waste material.

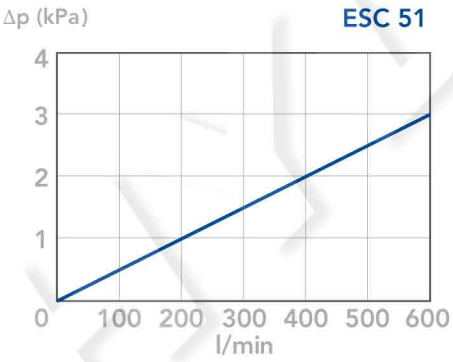
PRESSURE DROP CURVES (ΔP)

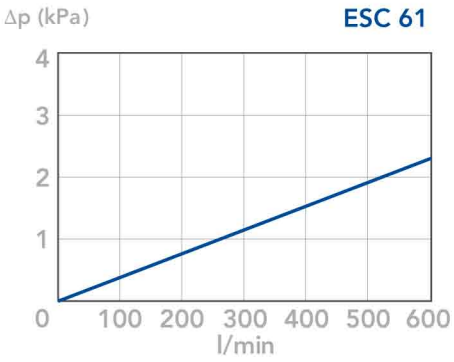
The Pressure Drop (Δp) must be lower than 3 kPa (0,03 bar).

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.

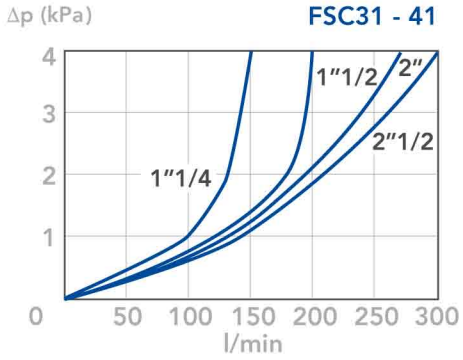
All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 kg/dm3; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

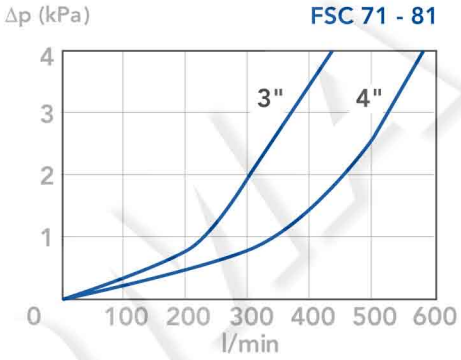
FSC-FSB STANDARD SERIES
SUCTION FILTERS

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)





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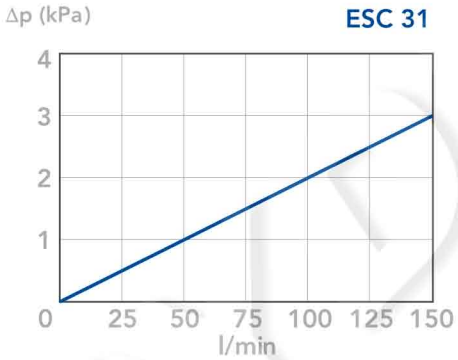

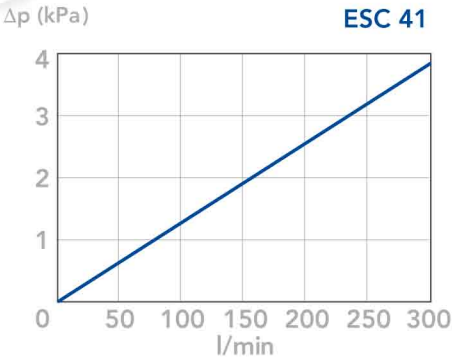

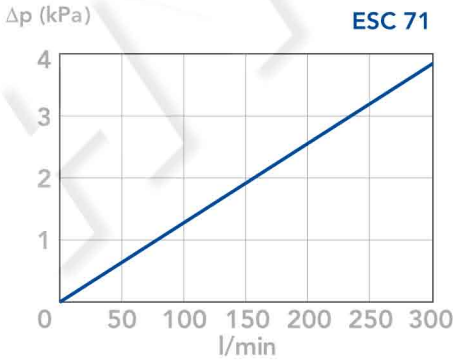

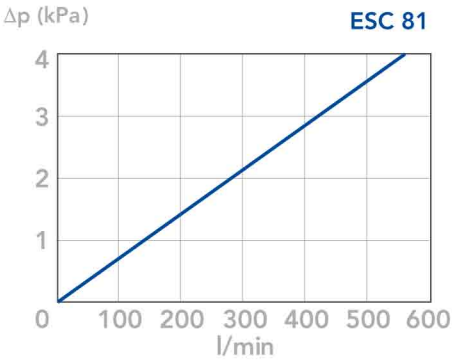

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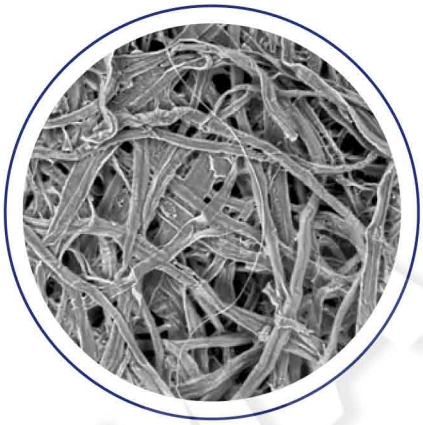
FORMULA UFI.CELL

DESCRIPTION

FormulaUFI.Cell is based on paper fibers made from pure cellulose impregnated with resin to maximize the filter life and reduce pressure drop.

Cellulose provides effective filtration for a variety of hydraulic applications, like concrete pumps and mining vehicles. It is also used for air breathers, return line filters and spin-on cartridges, in which a good quality-price ratio should be recommended.

Cellulose presents a porous surface, so that filtering media are classified on average pore size.



APPLICATIONS

AGRICULTURAL
CONSTRUCTION
HEAVY DUTY
INDUSTRIAL
MATERIAL HANDLING
POWER GENERATION

PLUS

+ **Improved performances** in mechanical stability and filter life
+ **High stiffness to retain stability** also during low temperature conditions
+ **Effective filtration** for a wide variety of petroleum-based fluids

Main FormulaUFI.Cell available options are highlighted in the following table. Additional customized options are available on request under technical evaluation of the specific application requirements.

FormulaUFI	FILTRATION RATING $\beta_x \geq 2$ ISO 16889	UFI CODIFICATION	SOFIMA CODIFICATION
FormulaUFI.CELL	10 µm	CC	CD
FormulaUFI.CELL	25 µm	CD	CV
FormulaUFI.CELL - Reinforced version	10 µm	RC	DR
FormulaUFI.CELL - Reinforced version	25 µm	RD	VR