



FSD

SUCTION FILTERS

DESCRIPTION

Suction filter

MATERIALS

Cover & housing: Anodized aluminum alloy

For 61&62 only: Cover: anodized aluminum alloy

Housing: steel

Bypass valve: Polyamide

Seals: NBR Nitrile (FKM fluoroelastomer on request)

Indicator housing: Brass

PRESSURE

Collapse, differential for filter element: 1 MPa (10 bar)

BYPASS VALVE

Setting: 35 kPa (0,35 bar) \pm 10%

FLOW RATE

Qmax 700 l/min

WORKING TEMPERATURE

From -25° to +110° C

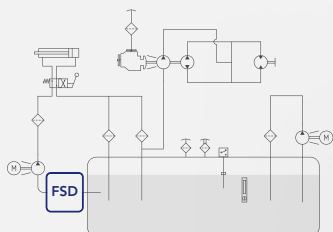
COMPATIBILITY (ISO 2943)

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



FSD

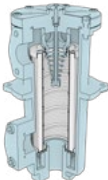
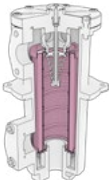
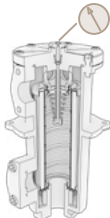
SUCTION FILTERS



ORDERING AND OPTION CHART

F	S	D	COMPLETE FILTER FAMILY						FILTER ELEMENT FAMILY	E	R	D
			SIZE & LENGTH	11	21	31	41	51	61	62	SIZE & LENGTH	
			PORT TYPE									
			B = BSP thread	B	B	B	B	B	-	-		
			N = NPT thread	N	N	N	N	N	-	-		
			S = SAE thread	S	S	S	S	S	-	-		
			F = SAE flange 3000 psi	-	-	F	F	F	F	F		
			PORT SIZE									
			04 = 1/2"	04	-	-	-	-	-	-		
			06 = 3/4"	-	06	-	-	-	-	-		
			08 = 1"	-	-	08	-	-	-	-		
			12 = 1" 1/2 (B12 only)	-	-	-	12	-	-	-		
			20 = 2" 1/2 (F20 only)	-	-	-	-	20	-	-		
			28 = 3" 1/2	-	-	-	-	-	28	-		
			32 = 4"	-	-	-	-	-	-	32		
			BYPASS VALVE									
			W = without bypass	W	W	W	W	W	W	W		
			A = 35 kPa (0,35 bar)	A	A	A	A	A	A	A		
			SEALS									SEALS
			N = NBR Nitrile	N	N	N	N	N	N	N		
			FormulaUFI MEDIA									FormulaUFI MEDIA
			ME = FormulaUFI.WEB 60 µm	ME	ME	ME	ME	ME	ME	ME		
			MF = FormulaUFI.WEB 90 µm	MF	MF	MF	MF	MF	MF	MF		
			MG = FormulaUFI.WEB 250 µm	MG	MG	MG	MG	MG	MG	MG		
			CLOGGING INDICATOR									
			08 = 1/8" seat , plugged	08	08	08	08	08	08	08		
			11 = vacuum gauge, bottom connection	11	11	11	11	11	11	11		
			91 = SPDT, vacuum switch	91	91	91	91	91	91	91		
X	X		ACCESSORI / ACCESSORIES									
			XX = no accessory available	XX	XX	XX	XX	XX	XX	XX		

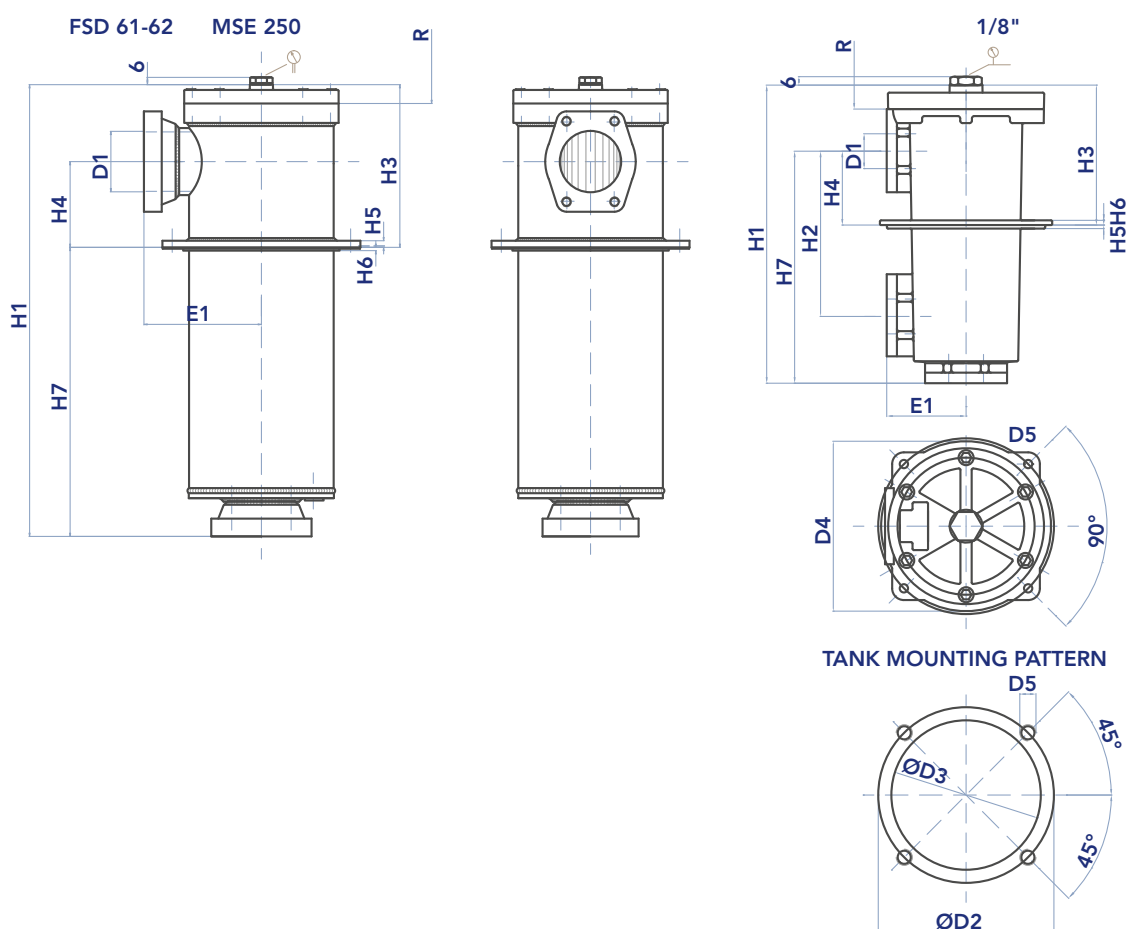
SPARE PARTS

FILTER HOUSING	FILTER ELEMENT	CLOGGING INDICATOR
		
B S D	E R D	

SPARE SEAL KIT

NBR		NBR		NBR		NBR	
FSD11	521.0045.2	FSD31	521.0047.2	FSD51	521.0048.2	FSD62	521.0049.2
FSD21	521.0046.2	FSD41	521.0031.2	FSD61	521.0049.2		

INSTALLATION DRAWING



FILTER HOUSING

	D1	D2	D3	D4	D5	E1	H1	H2	H3	H4	H5	H6	R	Kg
FSD11	1/2"	95	85	90	M5	43	160	62,5	96	31,5	4	3	105	1,3
FSD21	3/4"	138	123	128	M6	57	191	105	100	52	6	3	110	2,6
FSD31	1"	154	137	147	M6	67	250	140	117	63	8	4	155	3,7
FSD41	1"1/2	180	164	174	M8	82	323	177	155	82	8	4	240	6,5
FSD51	2"1/2	275	239	254	M10	117,5	420	218	192	91	10	8	275	14,2
FSD61	3"1/2	-	-	-	-	178	1.130	200	673	457	-	-	525	49,0
FSD62	4"	-	-	-	-	178	1.590	200	1.110	480	-	-	1.020	75,0

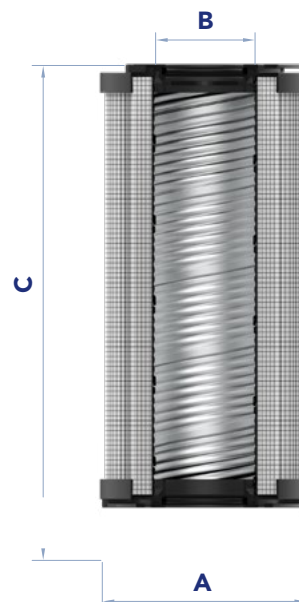
FSD

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FILTER ELEMENT

	A	B	C	Kg	AREA (cm ²)
					Media M+
ERD11	52	28/24	70	0,10	245
ERD21	70	34	85	0,20	460
ERD31	70	34	130	0,25	740
ERD41	99	51	211	0,70	2.330
ERD51	130	74	251	1,50	3.340
ERD61	130	74/85	500	2,00	9.860
ERD62	43	96,3	896	3,80	22.000



MAINTENANCE

- 1) Stop the system and verify there is no pressure in the filter.
- 2) Unscrew the screws (1).
- 3) Remove the cover (2).
N.B. Don't touch the by-pass valve as its setting must not be changed.
Collect the oil inside the filter with a suitable container.
- 4) Remove the dirty filter element (3) using the handle.
N.B. The exhausted filter elements and the oil dirty filter parts are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorised Companies.
- 5) Check the filter element part number on the filter label or in the ordering and option chart.
Use only original spare parts.
- 6) Lubricate the element o-ring gasket (4) with oil.
- 7) Insert the clean element into its seat (5) with care.
- 8) Check the cover o-ring condition (6) and lubricate with oil.
If damaged, check the seal kit part number in the spare seal kit table
- 9) Re-assembly the cover (2) and tighten the screws (1).

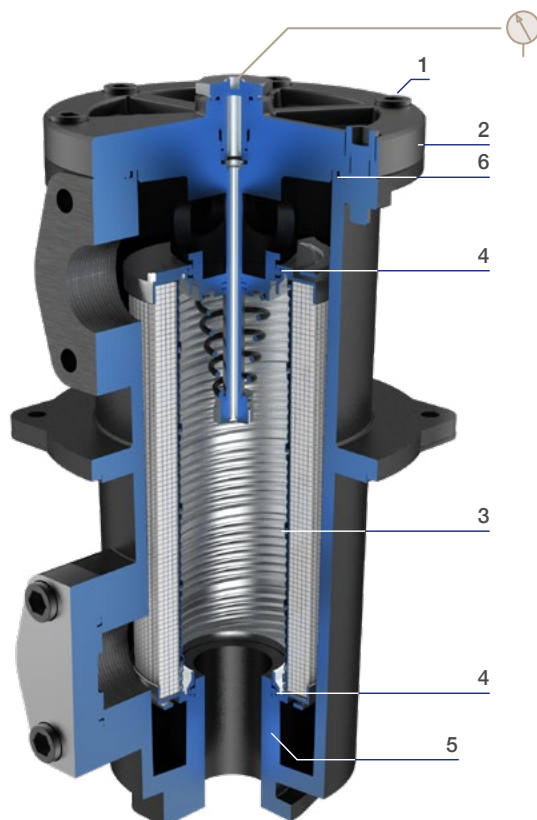
Accessories:

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.

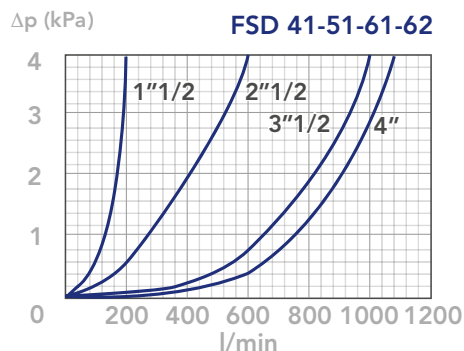
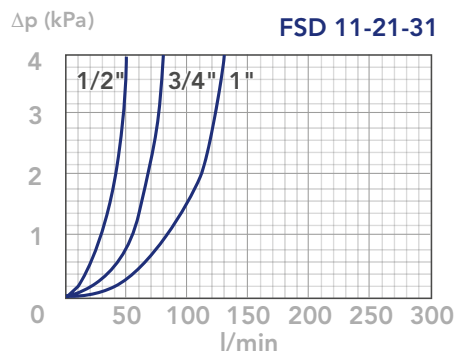




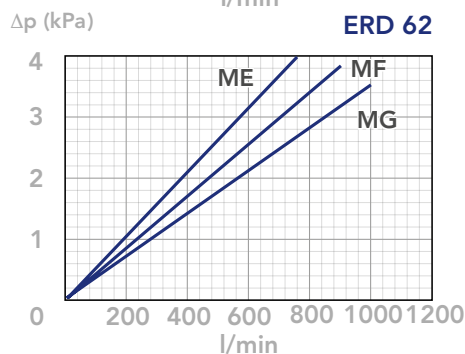
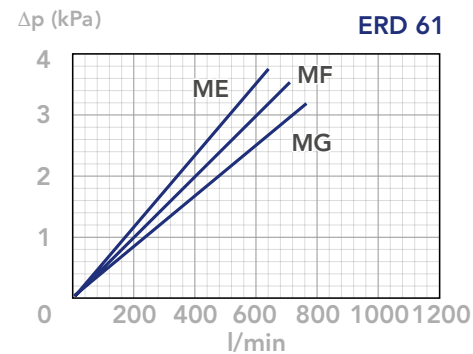
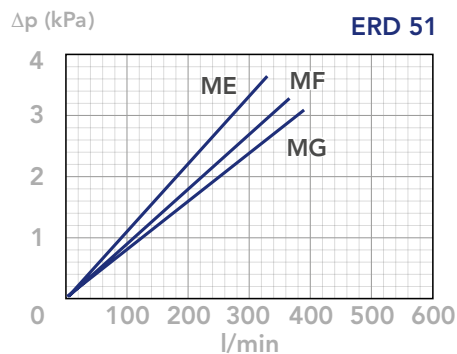
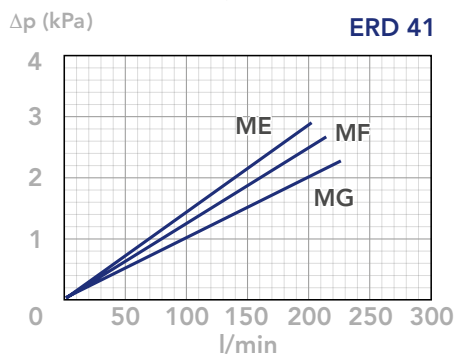
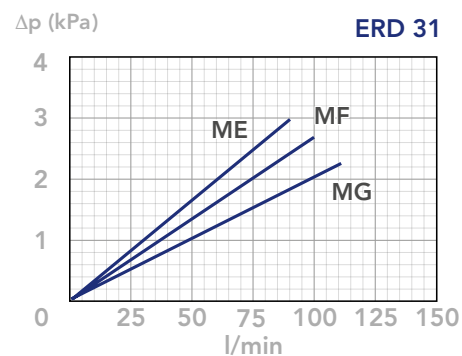
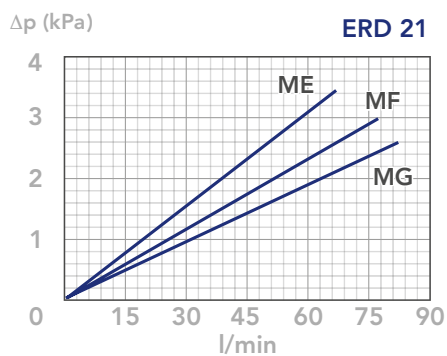
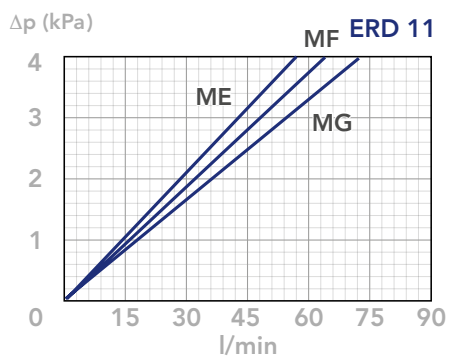
PRESSURE DROP CURVES (Δp)

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
(depending both on the internal diameter of the element and on the filter media)

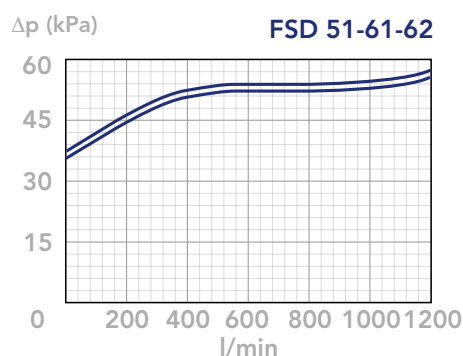
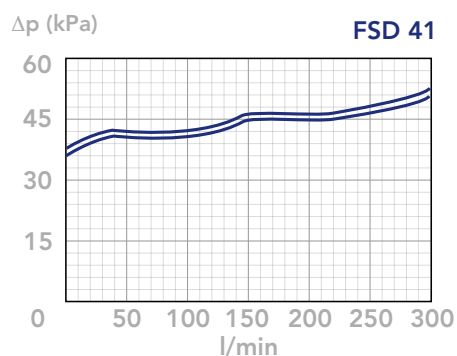
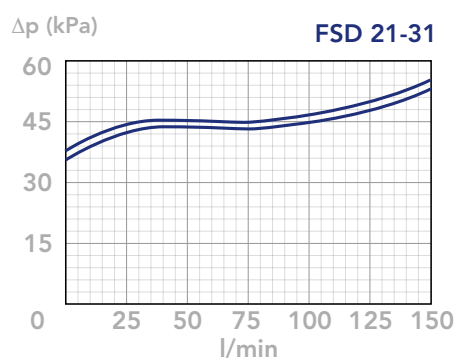
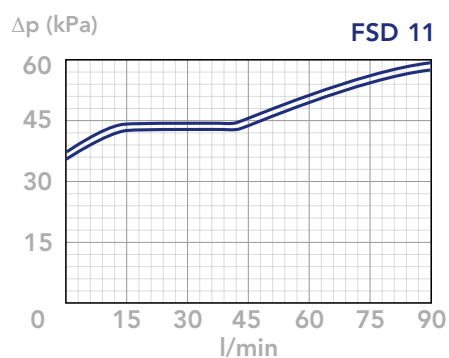


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BYPASS VALVE PRESSURE DROP

When selecting the filter size, these curves must be taken into account if it is foreseen that any flow peak is to be absorbed by the bypass valve, it also must be of proper configuration to avoid pressure peaks. The valve pressure drop is directly proportional to fluid specific gravity.



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.