

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SISTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

FSE-AMF

SUCTION FILTERS

MATERIALS

Head: Aluminium alloy

Spin-on cartridge: Steel

Bypass valve: Polyamide

Seals: NBR Nitrile (FKM on request fluoroelastomer)

Indicator housing: Brass

PRESSURE

Max working: 1,2 MPa (12 bar)

Collapse, differential for filter element (ISO 2941): 400 kPa (4 bar)

BYPASS VALVE

Setting: 30 kPa (0,30 bar) \pm 10%

WORKING TEMPERATURE

From -25° to +110° C

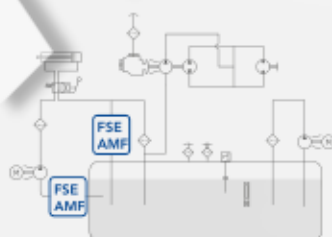
COMPATIBILITY (ISO 2943)

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.



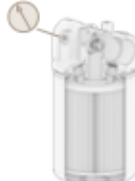
FSE

SUCTION FILTERS

ORDERING AND OPTION CHART

F	S	E	COMPLETE FILTER FAMILY											FILTER ELEMENT FAMILY	E	S	E
			SIZE & LENGHT	11	12	21	22	31*	32*	41*	42*			SIZE & LENGHT			
			PORT TYPE														
			B = BSP thread	B	B	B	B	B	B	B	B						
			F = SAE flange 3000 psi, metric screws	-	-	-	-	-	-	F	F						
			PORT SIZE														
			06 = 3/4"	06	06	-	-	-	-	-	-						
			10 = 1" 1/4	-	-	10	10	-	-	-	-						
			12 = 1" 1/2	-	-	-	-	12	12	12	12						
			BYPASS VALVE														
			W = no bypass	W	W	W	W	W	W	W	W						
			A = 30 kPa (0,30 bar)	A	A	A	A	A	A	A	A						
			SEALS											SEALS			
			N = NBR Nitrile	N	N	N	N	N	N	N	N						
			F = FKM Fluoroelastomer	F	F	F	F	F	F	F	F						
			FILTER MEDIA											FILTER MEDIA			
			CC = impregnated cellulose 10 µm β>2	CC	CC	CC	CC	CC	CC	CC	CC						
			CD = impregnated cellulose 25 µm β>2	CD	CD	CD	CD	CD	CD	CD	CD						
			ME = metal wire mesh 60 µm	ME	ME	ME	ME	ME	ME	ME	ME						
			MF = metal wire mesh 90 µm	MF	MF	MF	MF	MF	MF	MF	MF						
			CLOGGING INDICATOR														
			08 = 1/8" seat , plugged	08	06	06	06	06	06	06	06						
			10 = vacuum gauge, bottom connection	10	10	10	10	10	10	10	10						
			91 = SPDT, vacuum switch	91	91	91	91	91	91	91	91						
X	X		ACCESSORIES														
			XX = no accessory available	XX	XX	XX	XX	XX	XX	XX	XX						

SPARE PARTS ELEMENTS

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

AMF

SUCTION FILTERS

ORDERING AND OPTION CHART

A	M	F	COMPLETE FILTER FAMILY	151	152	301	302	601*	602*	801*	802*	FILTER ELEMENT FAMILY	C	C	A
			SIZE & LENGHT									SIZE & LENGHT			
			FILTER MEDIA									FILTER MEDIA			
			CD = impregnated cellulose 10 µm(c) β>2	CD	CD	CD	CD	CD	CD	CD	CD				
			CV = impregnated cellulose 25 µm(c) β>2	CV	CV	CV	CV	CV	CV	CV	CV				
			MS = metal wire mesh 60 µm	MS	MS	MS	MS	MS	MS	MS	MS				
			MN = metal wire mesh 90 µm	MN	MN	MN	MN	MN	MN	MN	MN				
			SEALS									SEALS			
			1 = NBR 1itrile	1	1	1	1	1	1	1	1				
			2 = FKM Fluoroelastomer	2	2	2	2	2	2	2	2				
			BYPASS VALVE												
			S = without	S	S	S	S	S	S	S	S				
			A = 30 kPa (0,30 bar)	A	A	A	A	A	A	A	A				
			PORT TYPE												
			B = BSP thread	B	B	B	B	B	B	B	B				
			F = SAE flange 3000 psi	-	-	-	-	-	-	F	F				
			PORT SIZE												
			4 = 3/4"	4	4	-	-	-	-	-	-				
			6 = 1" 1/4	-	-	6	6	-	-	-	-				
			7 = 1" 1/2	-	-	-	-	7	7	7	7				
			CLOGGING INDICATOR												
			06 = port, plugged	06	06	06	06	06	06	06	06				
			10 = vacuum gauge, bottom connection	10	10	10	10	10	10	10	10				
			91 = SPDT, vacuum switch	91	91	91	91	91	91	91	91				
X	X		ACCESSORIES												
			XX = no accessory available	XX	XX	XX	XX	XX	XX	XX	XX				

NOTES

* When ordering the filter elements, please consider the following information:

ESE31 = 2 x ESE21
 ESE32 = 2 x ESE22
 ESE41 = 2 x ESE21
 ESE42 = 2 x ESE22

* When ordering the filter elements, please consider the following information:

CCA601 = 2 x CCA301
 CCA602 = 2 x CCA302
 CCA801 = 2 x CCA301
 CCA802 = 2 x CCA302

AMF

SUCTION FILTERS

ORDERING AND OPTION CHART

A	M	F	COMPLETE FILTER FAMILY	151	152	301	302	601*	602*	801*	802*	FILTER ELEMENT FAMILY	C	C	A
			SIZE & LENGHT									SIZE & LENGHT			
			FILTER MEDIA									FILTER MEDIA			
			CD = impregnated cellulose 10 µm(c) β>2	CD	CD	CD	CD	CD	CD	CD	CD				
			CV = impregnated cellulose 25 µm(c) β>2	CV	CV	CV	CV	CV	CV	CV	CV				
			MS = metal wire mesh 60 µm	MS	MS	MS	MS	MS	MS	MS	MS				
			MN = metal wire mesh 90 µm	MN	MN	MN	MN	MN	MN	MN	MN				
			SEALS									SEALS			
			1 = NBR 1itrile	1	1	1	1	1	1	1	1				
			2 = FKM Fluoroelastomer	2	2	2	2	2	2	2	2				
			BYPASS VALVE												
			S = without	S	S	S	S	S	S	S	S				
			A = 30 kPa (0,30 bar)	A	A	A	A	A	A	A	A				
			PORT TYPE												
			B = BSP thread	B	B	B	B	B	B	B	B				
			F = SAE flange 3000 psi	-	-	-	-	-	-	F	F				
			PORT SIZE												
			4 = 3/4"	4	4	-	-	-	-	-	-				
			6 = 1" 1/4	-	-	6	6	-	-	-	-				
			7 = 1" 1/2	-	-	-	-	7	7	7	7				
			CLOGGING INDICATOR												
			06 = port, plugged	06	06	06	06	06	06	06	06				
			10 = vacuum gauge, bottom connection	10	10	10	10	10	10	10	10				
			91 = SPDT, vacuum switch	91	91	91	91	91	91	91	91				
X	X		ACCESSORIES												
			XX = no accessory available	XX	XX	XX	XX	XX	XX	XX	XX				

NOTES

* When ordering the filter elements, please consider the following information:

ESE31 = 2 x ESE21
 ESE32 = 2 x ESE22
 ESE41 = 2 x ESE21
 ESE42 = 2 x ESE22

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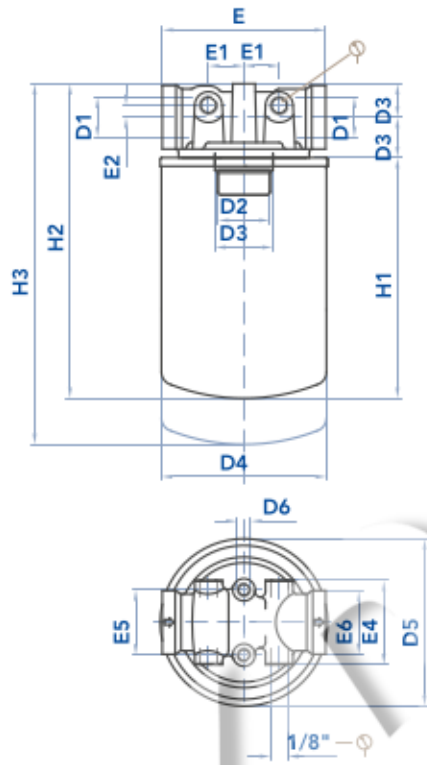
CCA601 = 2 x CCA301
 CCA602 = 2 x CCA302
 CCA801 = 2 x CCA301
 CCA802 = 2 x CCA302

FSE-AMF

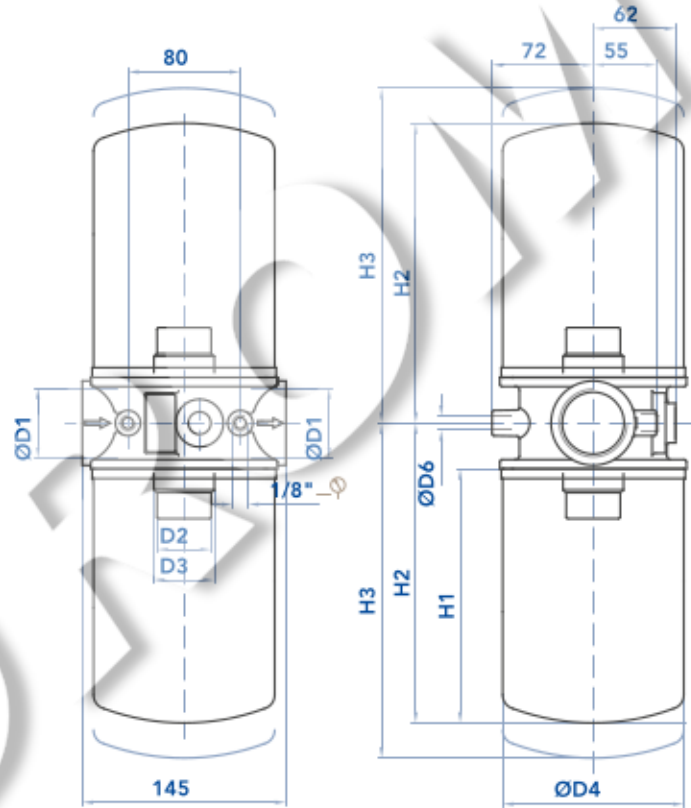
SUCTION FILTERS

INSTALLATION DRAWING

FSE 1+ E FSE 2+

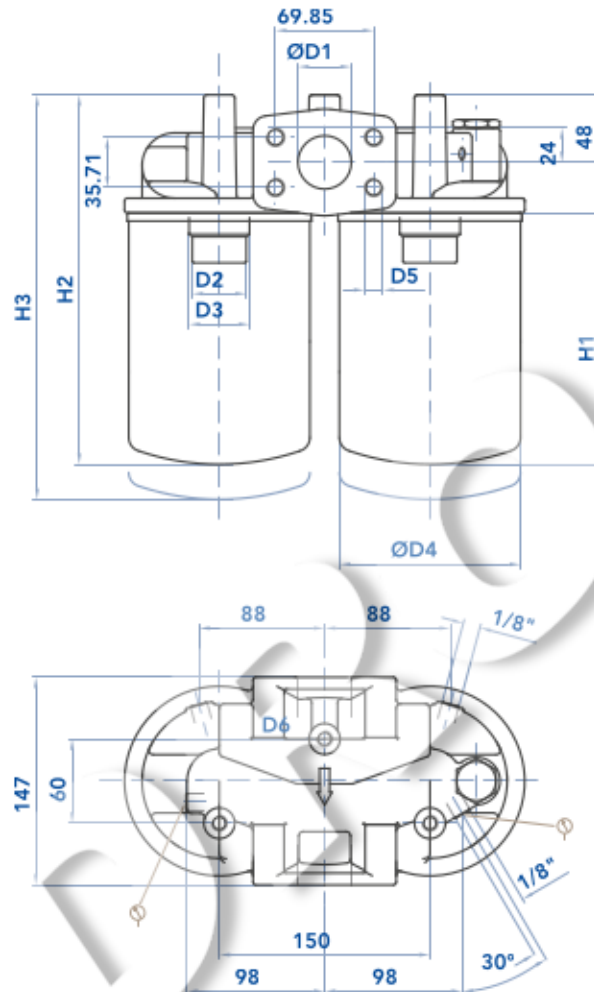


FSE 3+





FSE 4+



FILTER HOUSING

	D1	D2	D3	D4	D5	D6	E	E1	E2	E3	E4	E5	E6	H1	H2	H3	Kg
FSE11 AMF151	3/4"	3/4"BSP	-	96	96	M8	95	20,5	7	20	49	38	37	145	188	208	1,2
FSE12 AMF152	3/4"	3/4"BSP	-	96	96	M8	95	20,5	7	20	49	38	37	191	234	254	1,5
FSE21 AMF301	1"1/4	1"1/2 16-UN	1"1/4 BSP	129	134	M8	133	35	10	30	64	50	57	181	248	278	1,9
FSE22 AMF302	1"1/4	1"1/2 16-UN	1"1/4 BSP	129	134	M8	133	35	10	30	64	50	57	226	293	323	2,0
FSE31 AMF601	1"1/2	1"1/2 16-UN	1"1/4 BSP	129	-	M10	-	-	-	-	-	-	-	181	216	246	3,6
FSE32 AMF602	1"1/2	1"1/2 16-UN	1"1/4 BSP	129	-	M10	-	-	-	-	-	-	-	226	261	291	3,8
FSE41 AMF801	1"1/2	1"1/2 16-UN	1"1/4 BSP	129	M12	M10	-	-	-	-	-	-	-	181	269	299	4,8
FSE42 AMF802	1"1/2	1"1/2 16-UN	1"1/4 BSP	129	M12	M10	-	-	-	-	-	-	-	226	314	344	5,0

FSE-AMF

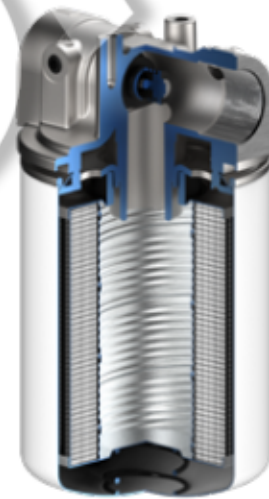
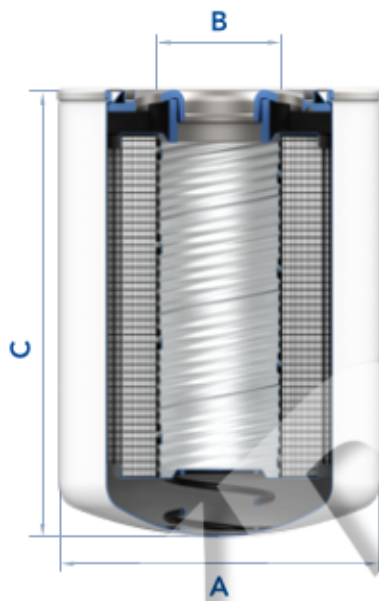
SUCTION FILTERS

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. Remove the dirty filter element. Replace it with

an original UFI element, verifying the part number on the filter label or on the catalogue. Lubricate the spin-on gasket, screw on the head until it stops and tighten by turning it 3/4 of a turn.

We recommend the stocking of a spare UFI filter element for timely replacement when required.

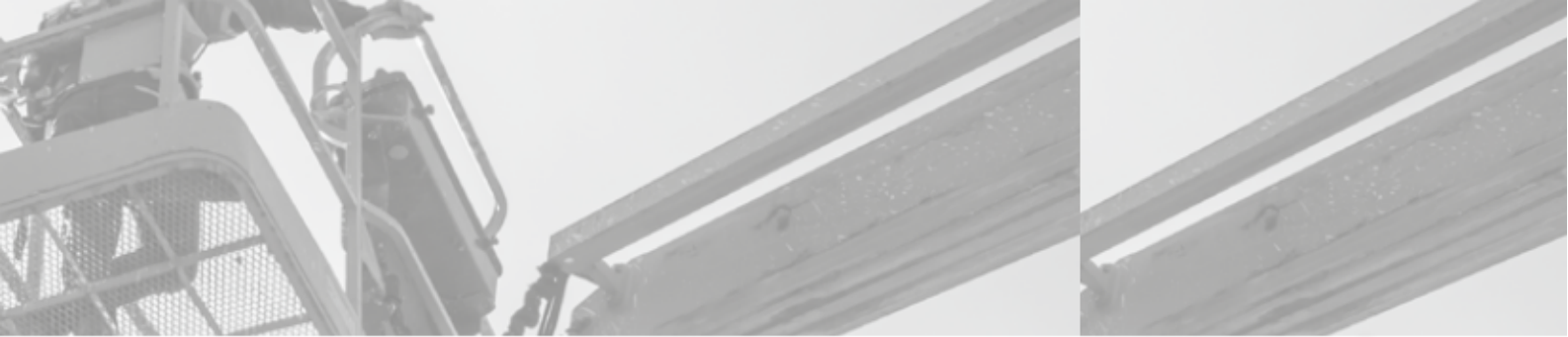


FILTER ELEMENT

	A	B	C	KG	AREA (cm ²)	
					Media M+	Media C+
ESE11 CCA151	96,5	3/4" BSP	146	0,70	980	3.305
ESE12 CCA152	96,5	3/4" BSP	191	0,80	1.390	4.745
ESE21 CCA301	129	1"1/4 BSP	181	1,20	1.940	5.560
ESE22 CCA302	129	1"1/4 BSP	226	1,40	2.570	7.360

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.

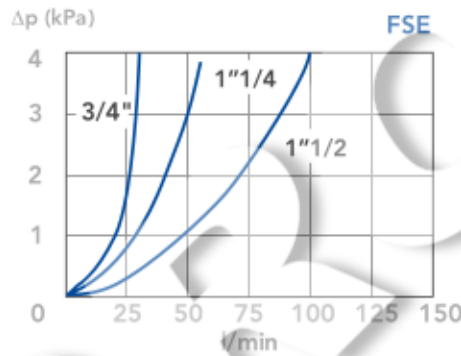


PRESSURE DROP CURVES (ΔP)

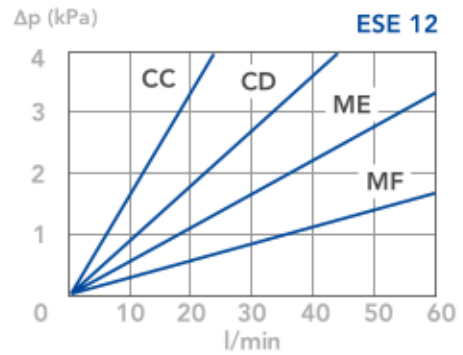
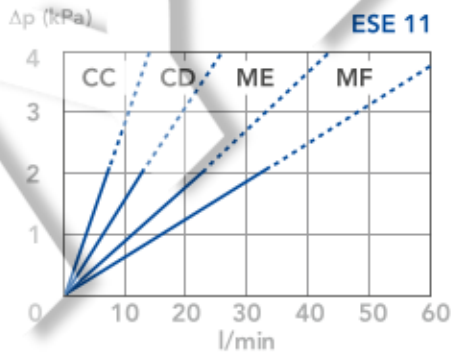
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter

Element corresponding to the considered Flow Rate and it must be lower than 3 kPa (0,03 bar)

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



CLEAN FILTER ELEMENT PRESSURE DROP WITH M+ MEDIA
(depending both on the internal diameter of the element and on the filter media)



N.B.

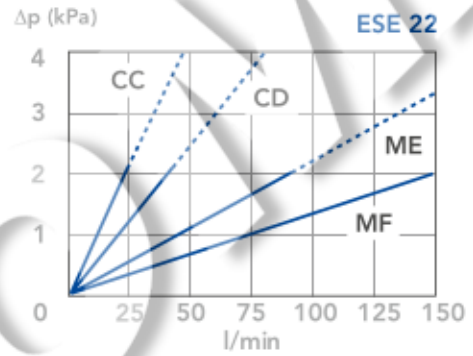
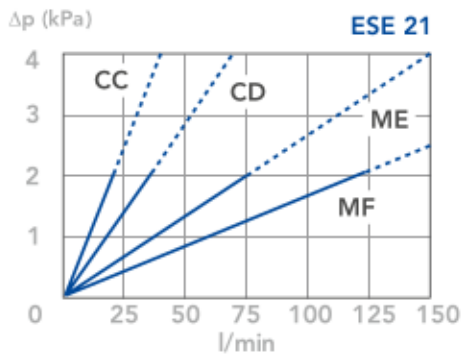
All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 kg/dm³; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves

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.

FSE-AMF

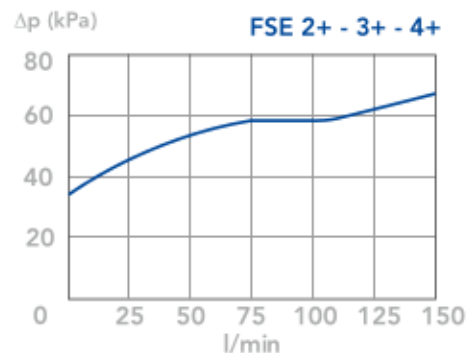
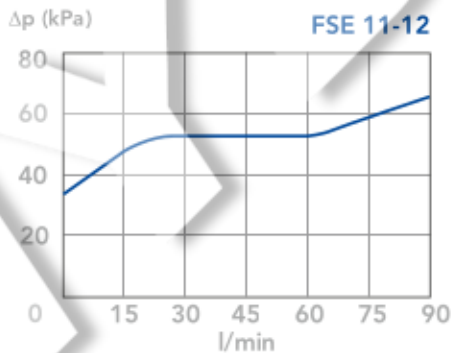
SUCTION FILTERS

FSE3+ and FSE4+ filters use double element canisters. The Assembly Pressure Drop is therefore determined by adding the Housing Pressure Drop at the real flow rate and half the pressure drop of the ESE2+ element. E.g. The pressure drop of a complete FSE31----FC---- filter at a 60 l/min flow rate is obtained by adding the Housing Pressure Drop and half the ESE21NFC element pressure drop at 60 l/min



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.

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