

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

FMA-LFM

SUCTION FILTERS

MATERIALS

Head: Aluminium alloy

Bowl: Cold formed steel

Seals: NBR Nitrile (FKM Fluoroelastomer - on request)

Indicator housing: Brass

PRESSURE

Max working: 0,7 MPa (7 bar)

Collapse, differential for the filter element (ISO 2941):
300 kPa (3 bar)

WORKING TEMPERATURE

From -25° to +110° C

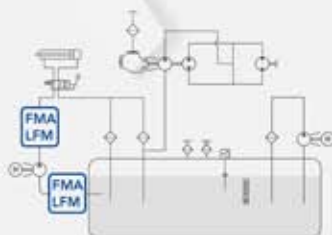
COMPATIBILITY (ISO 2943)

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



FMA

SUCTION FILTERS

ORDERING AND OPTION CHART

F	M	A	COMPLETE FILTER FAMILY						FILTER ELEMENT FAMILY	E	M	A
			SIZE & LENGHT	11	21	22	31	32	SIZE & LENGHT			
		B	PORT TYPE									
			B = BSP thread	B	B	B	B	B				
			PORT SIZE									
			04 = 1/2"	04	-	-	-	-				
			06 = 3/4"	-	06	-	-	-				
			08 = 1"	-	-	08	-	-				
			10 = 1" 1/4	-	-	-	10	-				
			12 = 1" 1/2	-	-	-	-	12				
		X	BYPASS VALVE									
			X = not available	X	X	X	X	X				
			SEALS						SEALS			
			N = NBR Nitrile	N	N	N	N	N				
			F = FKM Fluoroelastomer	F	F	F	F	F				
			FILTER MEDIA						FILTER MEDIA			
			CC = impregnated cellulose 10 µm β>2	CC	CC	CC	CC	CC				
			CD = impregnated cellulose 25 µm β>2	CD	CD	CD	CD	CD				
			MD = metal wire mesh 30 µm	MD	MD	MD	MD	MD				
			ME = metal wire mesh 60 µm	ME	ME	ME	ME	ME				
			MF = metal wire mesh 90 µm	MF	MF	MF	MF	MF				
			MG = metal wire mesh 250 µm	MG	MG	MG	MG	MG				
			WR = water removal*	WR	WR	WR	WR	WR				
			CLOGGING INDICATOR									
			0E = nr. 2x1/8" ports, plugged	0E	0E	0E	0E	0E				
			11 = vacuum gauge**	11	11	11	11	11				
			91 = SPDT, vacuum switch**	91	91	91	91	91				
			33 = pressure gauge***	33	33	33	33	33				
			P1 = SPDT, pressure switch***	P1	P1	P1	P1	P1				
			ACCESSORIES									
			W = without accessory	W	W	W	W	W				
			B = mounting brackets	B	B	B	B	B				
		X	ACCESSORIES									
			X = no accessory available	X	X	X	X	X				

NOTES

* Water removal media - see "Hydro Dry" chapter

** For Suction line

*** For Return and Low Pressure line

LFM

SUCTION FILTERS

ORDERING AND OPTION CHART

L	F	M	COMPLETE FILTER FAMILY						FILTER ELEMENT FAMILY	C	L	E
			SIZE & LENGHT	010	050	070	120	180	SIZE & LENGHT			
			FILTER MEDIA						FILTER MEDIA			
			CD = impregnated cellulose 10 µm β>2	CD	CD	CD	CD	CD				
			CV = impregnated cellulose 25 µm β>2	CV	CV	CV	CV	CV				
			MV = metal wire mesh 30 µm	MV	MV	MV	MV	MV				
			MS = metal wire mesh 60 µm	MS	MS	MS	MS	MS				
			MN = metal wire mesh 90 µm	MN	MN	MN	MN	MN				
			DC = metal wire mesh 250 µm	DC	DC	DC	DC	DC				
			WR = water removal*	WR	WR	WR	WR	WR				
			SEALS						SEALS			
			1 = NBR Nitrile	1	1	1	1	1				
			2 = FKM Fluoroelastomer	2	2	2	2	2				
		0	BYPASS VALVE									
			0 = without	0	0	0	0	0				
		B	PORT TYPE									
			B = BSP thread	B	B	B	B	B				
			PORT SIZE									
			3 = 1/2"	3	-	-	-	-				
			4 = 3/4"	-	4	-	-	-				
			5 = 1"	-	-	5	-	-				
			6 = 1" 1/4	-	-	-	6	-				
			7 = 1" 1/2	-	-	-	-	7				
			CLOGGING INDICATOR									
			0E = nr. 2x1/8" ports, plugged	0E	0E	0E	0E	0E				
			11 = vacuum gauge**	11	11	11	11	11				
			91 = SPDT, vacuum switch**	91	91	91	91	91				
			33 = pressure gauge	33	33	33	33	33				
			P1 = SPDT, pressure switch***	P1	P1	P1	P1	P1				
	X	X	ACCESSORIES									
			XX = no accessory available	XX	XX	XX	XX	XX				

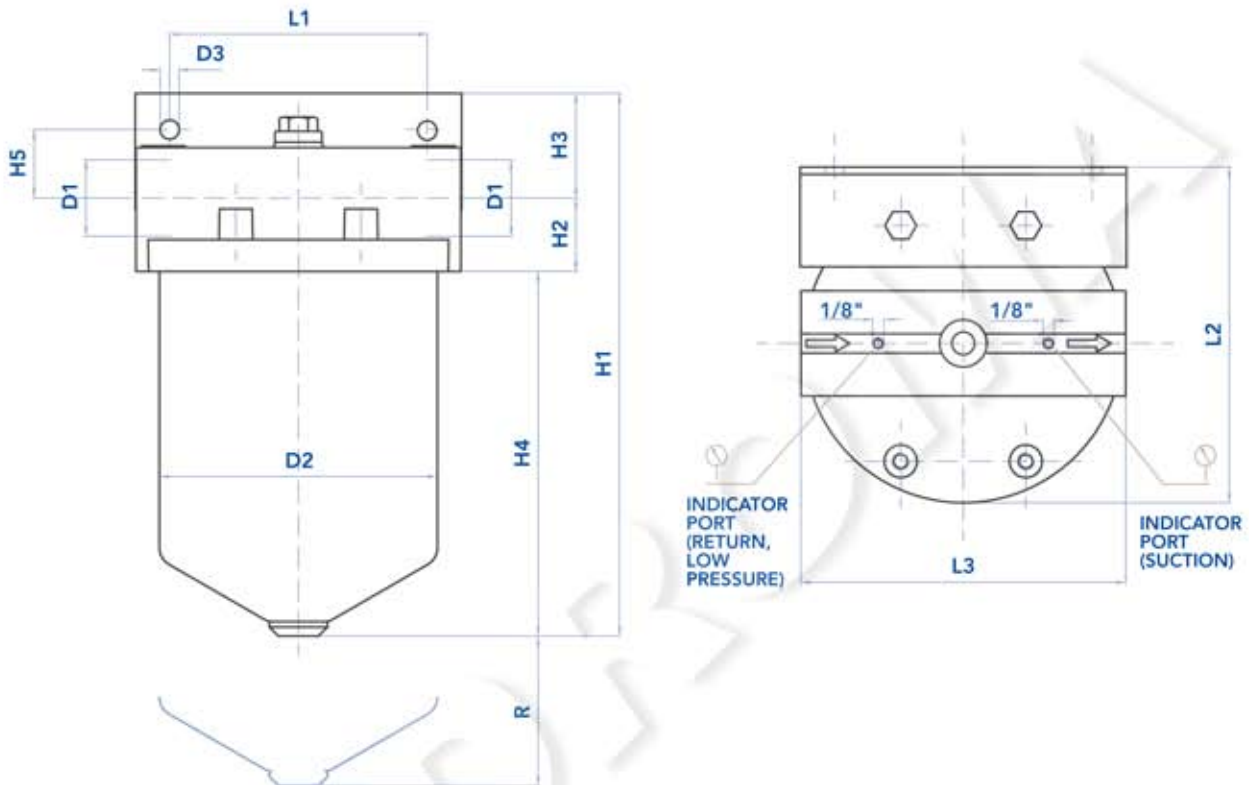
SPARE PARTS ELEMENTS

FILTER HOUSING				FILTER ELEMENT				CLOGGING INDICATOR			
											
B	M	A		E	M	A					

FMA-LFM

SUCTION FILTERS

INSTALLATION DRAWING



FILTER HOUSING

	D1	H1	H2	H3	L1	D2	H4	L2	D3	L3	H5	R	kg
FMA11 LFM010	1/2"	170	22	38	50	81	132	95	6,5	105	26	20	1,0
FMA21 LFM050	3/4"	245	37	39	100	114	206	135	8,5	140	24	25	2,0
FMA22 LFM070	1"	285	37	39	100	114	246	135	8,5	140	24	25	2,5
FMA31 LFM120	1*1/4	290	40	50	150	155	240	185	10,5	178	28	25	6,0
FMA32 LFM180	1*1/2	345	40	50	150	155	295	185	10,5	178	28	25	6,5

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 and make sure there is no pressure in the filter. Unscrew the bowl and remove the dirty filter element. Clean the bowl; check the gaskets conditions and replace

if necessary. Replace the filter element with an original UFI element, verifying the part number on the filter label or on the catalogue. Replace the bowl in contact with the head gasket. Screw the upper tie-rod until the bowl is completely locked on the head ensuring the seal. We recommend the stocking of a spare UFI filter element for timely replacement when required.



FILTER ELEMENT

	A	B	C	AREA (cm ²)	
				Media M+	Media C+
EMA11 CLE010	70	29,5	88	480	1.180
EMA21 CLE050	70	29,5	134	750	1.800
EMA22 CLE070	95	41	175	1.650	2.400
EMA31 CLE120	140	65,5	145	1.740	4.440
EMA32 CLE180	140	65,5	205	2.490	6.390

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.

FMA-LFM

SUCTION FILTERS

RECOMMENDED FLOW RATES TABLE

Type	Media	l/min at Δp	
		0,03 bar (suction line)	0,5 bar (return or low pressure line)
FMA11B03	MD	7	58
	ME	8	62
	MF	8	72
	MG	8	72
	CC	4	45
	CD	6	55
FMA11B04	MD	11	75
	ME	11	79
	MF	12	95
	MG	12	95
	CC	8	58
	CD	10	72
FMA21	MD	21	177
	ME	23	185
	MF	34	197
	MG	34	197
	CC	17	132
	CD	19	148

Type	Media	l/min at Δp	
		0,03 bar (suction line)	0,5 bar (return or low pressure line)
FMA22	MD	35	349
	ME	41	265
	MF	45	303
	MG	45	303
	CC	27	185
	CD	30	220
FMA31	MD	91	535
	ME	106	556
	MF	136	590
	MG	136	590
	CC	45	386
	CD	61	428
FMA32	MD	207	638
	ME	235	749
	MF	329	783
	MG	87	503
	CC	87	503
	CD	140	628

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.