

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

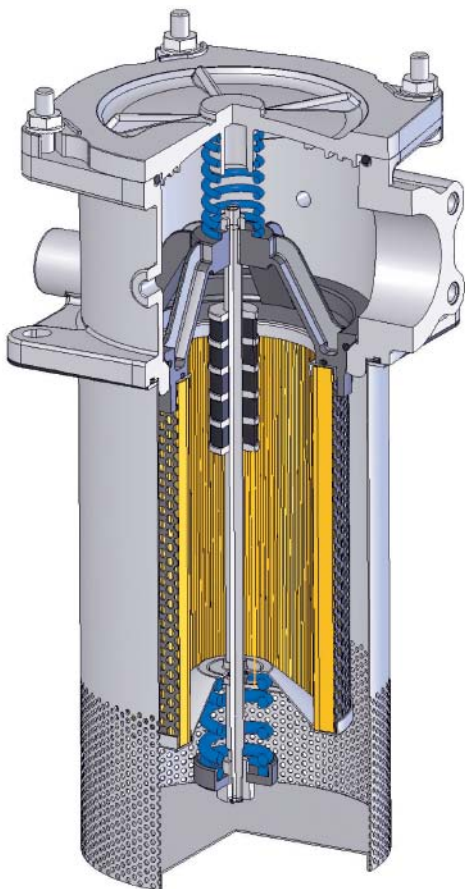
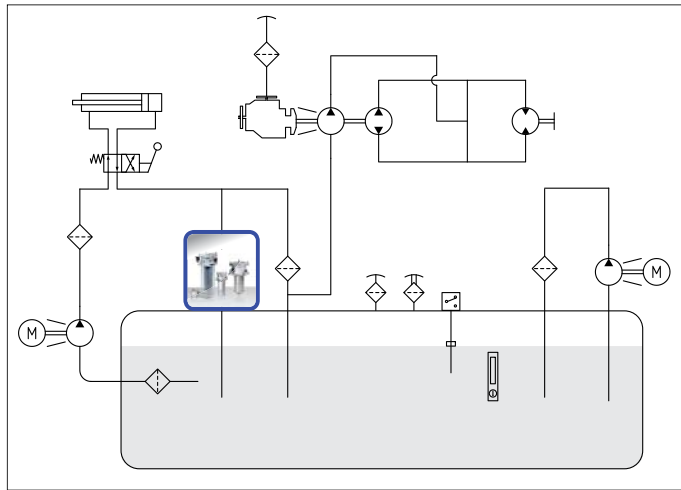
HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

RFC



TANK TOP RETURN FILTER, INSIDE TO OUTSIDE FILTRATION



RFC

1 MPa (10 bar)

Port sizes: 3/4" ÷ 2" 1/2
Flow rates: 20 ÷ 1000 l/min

TECHNICAL DATA

Max. working pressure: 1 MPa (10 bar)
Max. testing pressure: 2 MPa (20 bar)
Bursting pressure: 3 MPa (30 bar)
Fatigue test: 0 ÷ 500 kPa (5 bar) / 1.000.000 cycles
Bypass valve: Δp 150 kPa (1,5 bar) \pm 0,2
Filter element collapse pressure: Δp 1 MPa (10 bar)
Working temperature: -25 ÷ +110°C

MATERIALS

Head and cover: aluminium
Bowl: steel
Element support:
size 100 - 200 polyamide
size 300 aluminium
Diffusor: zinc plated steel
Magnetic core: sinterized magnetic material
Seals: standard NBR
on request FKM

COMPATIBILITY (ISO 2943:1999)

Full with fluids: HH-HL-HM-HV-HTG
(according to ISO 6743/4).
For fluids different than the above mentioned,
please contact our Sales Department.

All tests performed according
to the following standards:
ISO 2941: Element collapse resistance test
ISO 2942: Production integrity test
ISO 2943: Fluids compatibility
ISO 3723: End load test method
ISO 3724: Flow fatigue resistance method
ISO 3968: Pressure drop versus flow rate
ISO 16889: Multipass test.
For further information contact our Technical Dept.

RFC	Type	110	120	130	140	220	230	240	310	320	330	340	Type	CRC
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Filter media	Filter media
FC = 7µm(c) FD = 12µm(c) Inorganic fiber β>1000 FV = 21µm(c)	FC = 7µm(c) FD = 12µm(c) Inorganic fiber β>1000 FV = 21µm(c)
CD = 10µ Paper RT = 30µ Steel wire mesh MS = 60µ	CD = 10µ Paper RT = 30µ Steel wire mesh MS = 60µ

1	Seals	1	1	1	1	1	1	1	1	1	1	1	Seals	1
	1 = NBR Nitrile	1 = NBR Nitrile												

F	Bypass type	F	F	F	F	F	F	F	F	F	F	F
	F = 150 kPa (1,5 bar)	F = 150 kPa (1,5 bar)										

Ports	B	B	B	B	B	B	B	-	-	-	-
B = BSP	N	N	N	N	N	N	N	-	-	-	-
N = NPT	S	S	S	S	S	S	S	-	-	-	-
S = SAE	-	-	-	-	F	F	F	F	F	F	F
F = SAE flange 3000 psi/M											

Port size	4	4	4	4	-	-	-	-	-	-	-
4 = 3/4"	5	5	5	5	-	-	-	-	-	-	-
5 = 1"	6	6	6	6	-	-	-	-	-	-	-
6 = 1" 1/4	-	-	-	-	7	7	7	-	-	-	-
7 = 1" 1/2	-	-	-	-	-	-	-	9	9	9	9
9 = 2" 1/2											

Indicators	05	05	05	05	05	05	05	05	05	05	05
05 = Port, plugged	30	30	30	30	30	30	30	30	30	30	30
30 = Pressure gauge 0 ÷ 600 kPa (6 bar)	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1	P1
P1 = Pressure switch	-	-	-	-	03	03	03	03	03	03	03
03 = Port for differential indicator	-	-	-	-	5B	5B	5B	5B	5B	5B	5B
5B = Visual differential 130 kPa (1,3 bar)	-	-	-	-	6B	6B	6B	6B	6B	6B	6B
6B = Electrical differential 130 kPa (1,3 bar)	-	-	-	-	7B	7B	7B	7B	7B	7B	7B
7B = 6B with LED	-	-	-	-	T0	T0	T0	T0	T0	T0	T0
T0 = Electrical 130 kPa (1,3 bar) with thermostat 30°C	Indicator 70 on request only										

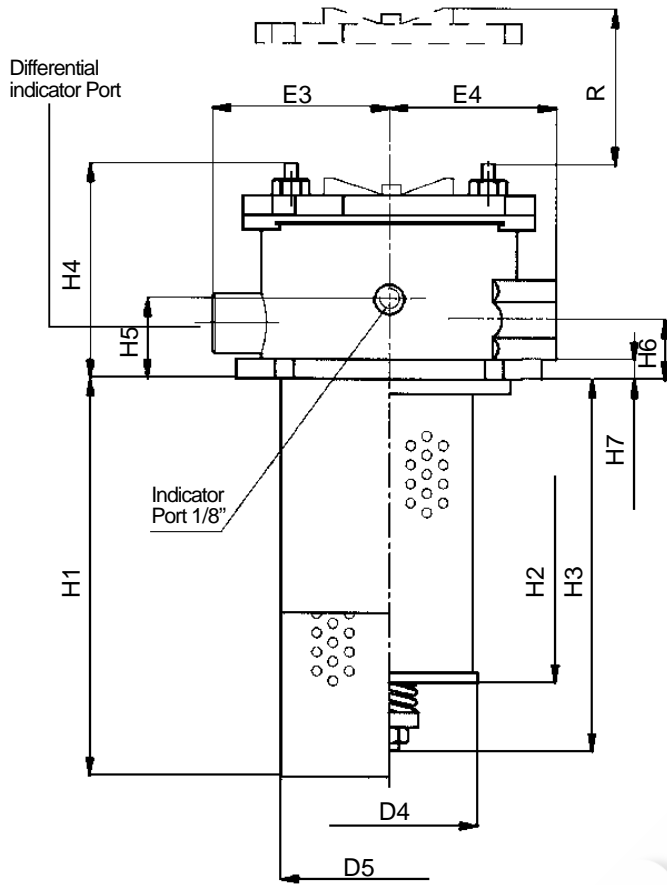
When the filter is ordered with FKM seals, the first digit of the indicator code is a letter (please see page 188-189).

Accessories	S	S	S	S	S	S	S	S	S	S	S
S = Without	D	D	D	D	D	D	D	D	D	D	D
D = With diffusor											

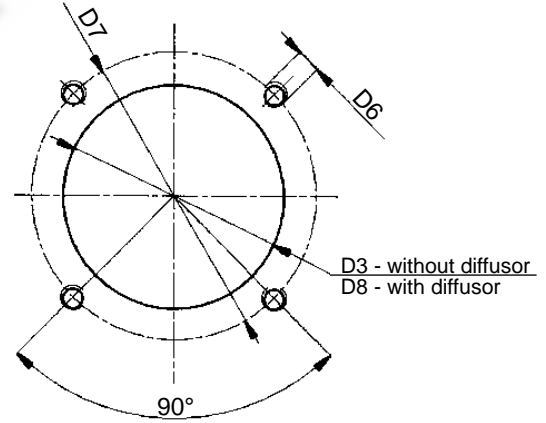
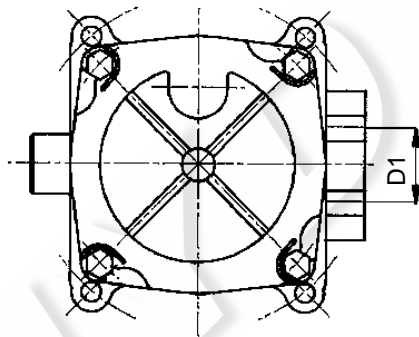
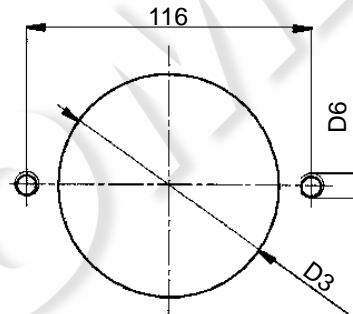
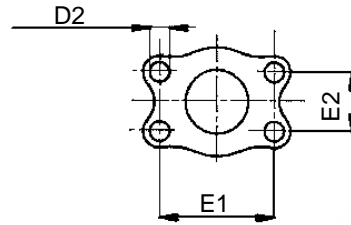
Accessories	S	S	S	S	S	S	S	S	S	S	S
S = Without	M	M	M	M	M	M	M	M	M	M	M
M = With magnetic core											

DIMENSIONAL LAYOUT

(mm)



Extra inlet on request for type RFC2...



Type	D1	D2	D3	D4	D5	D6	D7	D8	E1	E2	E3	E4	H1	H2	H3	H4	H5	H6	H7	R	Weight Kg
RFC 110	3/4" - 1" - 1" 1/4	-	88	72	89	M8	126	90	-	-	-	68	198	106	140	90	38	28	6	230	1,2
RFC 120		-	88	72	89	M8	126	90	-	-	-	68	198	150	185	90	38	28	6	275	1,4
RFC 130		-	88	72	89	M8	126	90	-	-	-	68	250	200	235	90	38	32	6	325	1,5
RFC 140		-	88	72	89	M8	126	90	-	-	-	68	350	300	335	90	38	32	6	445	1,7
RFC 220	1" 1/2 SAE 3000	M12	131	106	133	M10	175	134	70	35,7	100	90	250	190	225	129	50	36	12	310	4,2
RFC 230		M12	131	106	133	M10	175	134	70	35,7	100	90	320	260	295	129	50	36	12	380	4,7
RFC 240		M12	131	106	133	M10	175	134	70	35,7	100	90	525	465	500	129	50	36	12	580	5,0
RFC 310	2" 1/2 SAE 3000	M12	164	126	165,5	M10 - M12	215 ÷ 220	167	89	50,8	113	110	290	210	260	155	55	55	14	350	8,0
RFC 320		M12	164	126	165,5			167	89	50,8	113	110	370	290	340	155	55	55	14	430	8,4
RFC 330		M12	164	126	165,5			167	89	50,8	113	110	470	390	440	155	55	55	14	580	8,6
RFC 340		M12	164	126	165,5			167	89	50,8	113	110	560	480	530	155	55	55	14	620	9,1

CLOGGING INDICATORS

NBR	FKM	Pressure gauge		
30	-	Scale 0 ÷ 600 kPa (600 bar)		
NBR	FKM	Differential VISUAL indicator	Recommended tightening torque 90 Nm	
5B	AB	Setting 130 kPa (1,3 bar)		
NBR	FKM	Differential ELECTRICAL indicator	Recommended tightening torque 90 Nm	
6B	CB	Setting 130 kPa (1,3 bar)		
SPDT differential switch. C.C. 14 - 30 V: > max resistive or inductive load 4 - 3 A respectively C.A. 125-250 V: > max resistive or inductive load 1 A - Protection IP65 - Connector DIN 43650				
NBR	FKM	Differential ELECTRICAL indicator with LED (24V) for visual indicator	Recommended tightening torque 90 Nm	
7B	EB	Setting 130 kPa (1,3 bar)		
SPDT differential switch. C.C. 14 - 30 V: > max resistive or inductive load 4 - 3 A respectively C.A. 125-250 V: > max resistive or inductive load 1 A - Protection IP65 - Connector DIN 43650				
NBR	FKM	Differential ELECTRICAL indicator with THERMOSTAT 30°C	Recommended tightening torque 90 Nm	
T0	DB	Setting 130 kPa (1,3 bar)		
SPDT differential switch. C.C. 14 - 30 V: > max resistive or inductive load 4 - 3 A respectively C.A. 125-250 V: > max resistive or inductive load 1 A - Protection IP65 - Connector DIN 43650				
NBR	FKM	Pressure switch		
P1	-	Setting 150 kPa (1,5 bar)		ATEX 3 GD EEx e T6
SPDT, C.C. 30V: > max resistive or inductive load 3A - 1A respectively C.A. 125 or 250V: > max resistive or inductive load 3A - 0,5A respectively Protection IP65 - Connector DIN 43650				

FLOW RATES

(l/min)

 $\Delta p = 30 \div 40 \text{ kPa (0,3} \div \text{0,4 bar)}$

Type	Filter Media					
	FC	FD	FV	CD	RT	MS
RFC 110	20	35	100	110	125	125
RFC 120	35	50	125	125	150	150
RFC 130	50	65	180	200	250	250
RFC 140	80	120	150	170	250	250
RFC 220	80	120	150	170	250	250
RFC 230	100	140	200	230	400	400
RFC 240	160	240	300	300	400	400
RFC 310	140	180	300	300	500	500
RFC 320	120	200	380	390	500	500
RFC 330	180	310	480	500	850	850
RFC 340	250	380	600	600	1000	1000

The reference fluid has a kinematic viscosity of 30 cSt and a density of 0,86 Kg/dm³.
For different oil viscosity please contact our Sales Department for further information.

DIRT HOLDING CAPACITY(g) ISO MTD $\Delta p = 500 \text{ kPa (5 bar)}$

Type	Filter Media		
	FC	FD	FV
CRC 110	6,6	7,36	10,9
CRC 120	10,2	11,1	16,5
CRC 130	13,8	14,9	22,2
CRC 140	20,7	22,6	33,5
CRC 220	34,1	37,38	55,3
CRC 230	47,3	51,7	76,5
CRC 240	85,1	92,9	137,6
CRC 310	48,3	52,6	78,2
CRC 320	67,5	73,8	109,2
CRC 330	91,2	99,6	147,5
CRC 340	112,3	122,5	181,7

FILTER AREA(cm²)

Type	Filter Media		
	RT	MS	CD
CRC 110	460	460	1250
CRC 120	650	650	1800
CRC 130	880	880	2450
CRC 140	1320	1320	3600
CRC 220	1500	1500	4600
CRC 230	2050	2050	6400
CRC 240	3670	3670	11800
CRC 310	2250	2250	6650
CRC 320	3150	3150	9200
CRC 330	4250	4250	12400
CRC 340	5250	5250	15400