

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

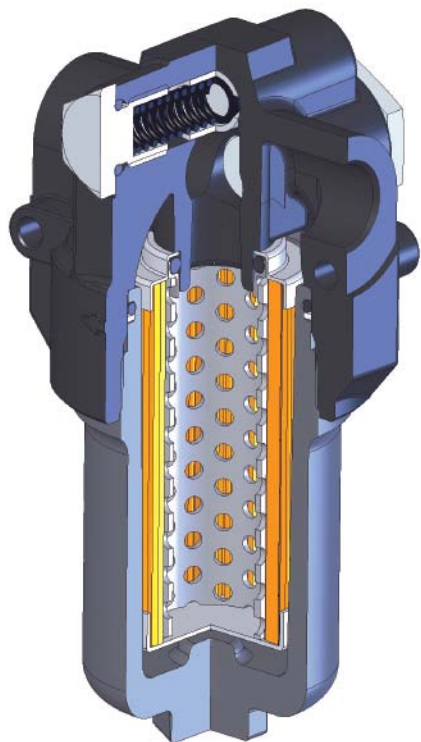
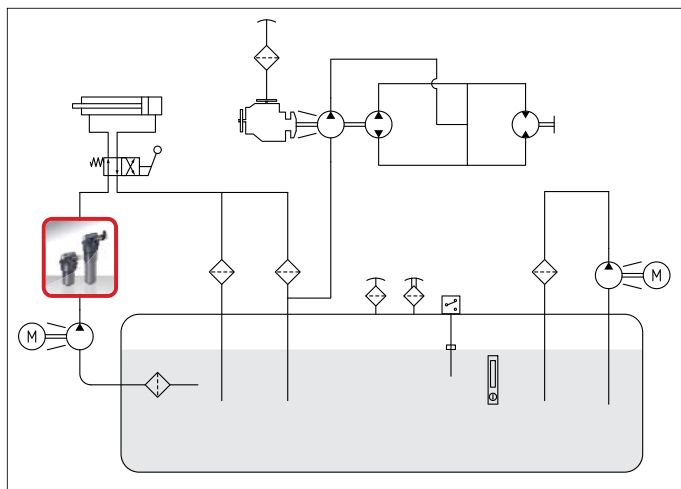
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

MDM



Pressure Filters

MEDIUM PRESSURE INLINE FILTER



MDM

11 MPa (110 bar)

Port sizes: 1/2"

Flow rates: 8 ÷ 75 l/min

TECHNICAL DATA

Max. working pressure: 11 MPa (110 bar)

Max. testing pressure: 16 MPa (160 bar)

Bursting pressure: 30 MPa (300 bar)

Fatigue test: 0 ÷ 9 MPa (90 bar) / 1.000.000 cycles

Working temperature: -25°C ÷ +110°C

Bypass valve: Δp 600 kPa (6 bar) \pm 10%

Filter element collapse pressure:

standard: Δp 8 MPa (80 bar)

except CD-CV series Δp 2 MPa (20 bar)

Working temperature: -25 ÷ +110°C

MATERIAL

Head and bowl: anodized aluminium

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.

MDM	Type			Type	CDM
		101	102		

	Filter media			Filter media	
	FT = 5µm _(e)	FT	FT	FT = 5µm _(e)	
	FC = 7µm _(e)	FC	FC	FC = 7µm _(e)	Inorganic fiber β>1000
	FD = 12µm _(e)	FD	FD	FD = 12µm _(e)	
	FV = 21µm _(e)	FV	FV	FV = 21µm _(e)	
	CD = 10µ	CD	CD	CD = 10µ	Paper
	CV = 25µ	CV	CV	CV = 25µ	
	RD = 10µ	RD	RD	RD = 10µ	
	MV = 25µ	MV	MV	MV = 25µ	Steel wire mesh
	MS = 60µ	MS	MS	MS = 60µ	

	Seals			Seals	
	1 = NBR Nitrile	1	1	1 = NBR Nitrile	
	2 = FKM Fluoroelastomer	2	2	2 = FKM Fluoroelastomer	

	Bypass type		
	S = Without	S	S
	C = 600 kPa (6 bar)	C	C

	Ports		
	B = BSP	B	B
	N = NPT	N	N
	S = SAE	S	S

3	Port size		
	3 = 1/2"	3	3

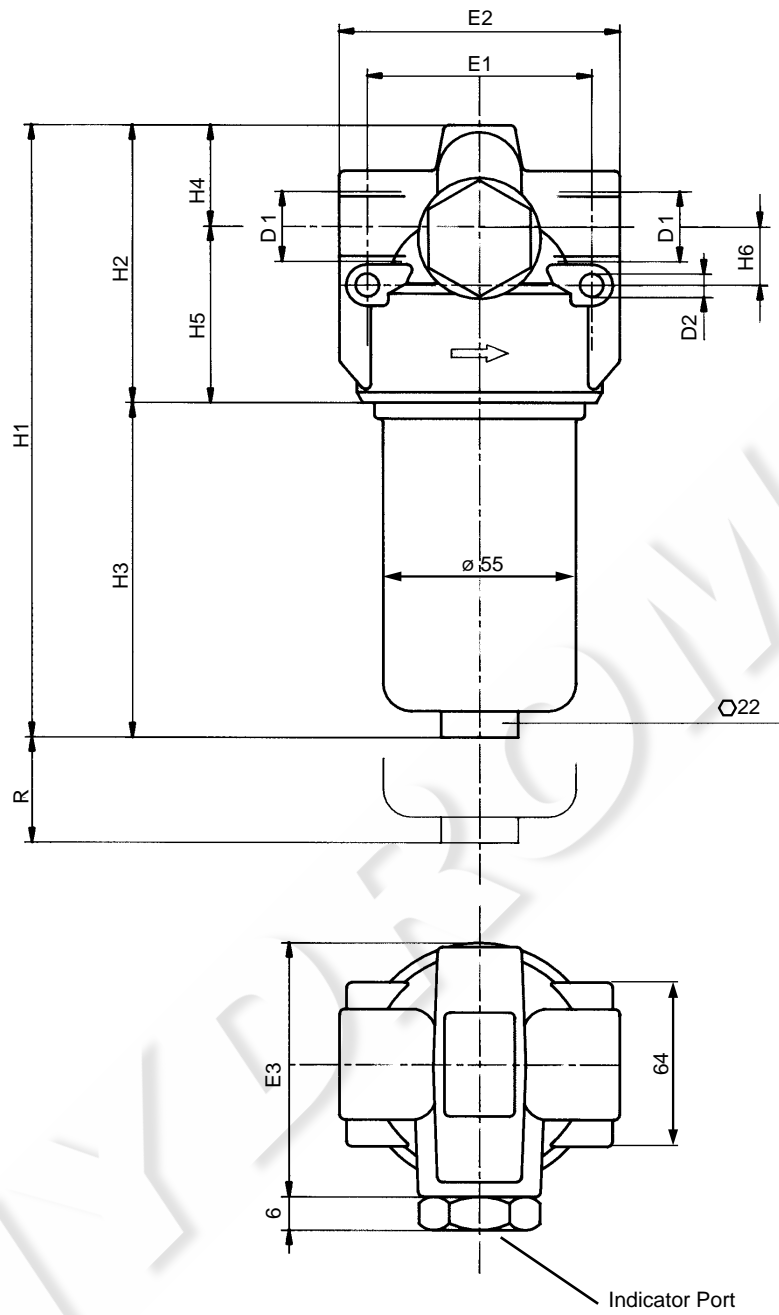
	Indicators			
	03 = Port, plugged	03	03	
	5E = Visual differential 500 kPa (5 bar)	5E	5E	
	6E = Electrical differential 500 kPa (5 bar)	6E	6E	
	7E = 6E with LED	7E	7E	
	T2 = Electrical 500 kPa (5 bar) with thermostat 30°C	T2	T2	
				Indicator 72 on request only

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

XX	Accessories		
	XX = Not available	XX	XX

DIMENSIONAL LAYOUT

(mm)



Type	D1	D2	H1	H2	H3	H4	H5	H6	E1	E2	E3	R	⊘	Weight Kg
MDM 101	1/2"	6,5	157	78	79	28	50	17	64	76	75	60	22	0,65
MDM 102	1/2"	6,5	244	78	166	28	50	17	64	76	75	60	22	0,85

CLOGGING INDICATORS

NBR	FKM	Differential VISUAL indicators
5E	AE	Setting 500 kPa (5 bar)
5F	AF	Setting 800 kPa (8 bar)

Recommended tightening torque 90 Nm

NBR	FKM	Differential ELECTRICAL indicators
6E	CE	Setting 500 kPa (5 bar)
6F	CF	Setting 800 kPa (8 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

Recommended tightening torque 90 Nm

NBR	FKM	Differential ELECTRICAL indicators with LED (24 V) for visual indication
7E	EE	Setting 500 kPa (5 bar)
7F	EF	Setting 800 kPa (8 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

Recommended tightening torque 90 Nm

NBR	FKM	Differential ELECTRICAL indicators with THERMOSTAT 30°C
T2	DE	Setting 500 kPa (5 bar)
T3	DF	Setting 800 kPa (8 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

Recommended tightening torque 90 Nm

NBR	FKM	Differential VISUAL ELECTRICAL indicators
72	E2	Setting 500 kPa (5 bar)
73	E3	Setting 800 kPa (8 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

Recommended tightening torque 90 Nm

FLOW RATES

(l/min)

Type	Filter Media	Δ p		
		50 kPa (0,5 bar)	100 kPa (1 bar)	150 kPa (1,5 bar)
MDM 101	FT	8	15	20
	FC	12	22	27
	FD	21	35	45
	FV	25	45	55
	CD	28	47	58
	CV	33	52	65
	RD	31	50	61
	MV	35	56	60
	MS	38	60	75

Type	Filter Media	Δ p		
		50 kPa (0,5 bar)	100 kPa (1 bar)	150 kPa (1,5 bar)
MDM 102	FT	10	17	22
	FC	14	25	30
	FD	25	44	52
	FV	38	50	65
	CD	40	53	70
	CV	43	58	75
	RD	45	64	75
	MV	46	66	75
	MS	47	68	75

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 Δp = 500 kPa (5 bar)

Type	Filter Media			
	FT	FC	FD	FV
CDM 101	1,70	2,50	2,80	4,20
CDM 102	3,40	5,10	5,90	8,70

FILTER AREA(cm²)

Type	Filter Media				
	RD	MV	MS	CD	CV
CDM 101	290	290	290	295	295
CDM 102	600	600	600	600	600