

TANK CARE

Return Filters



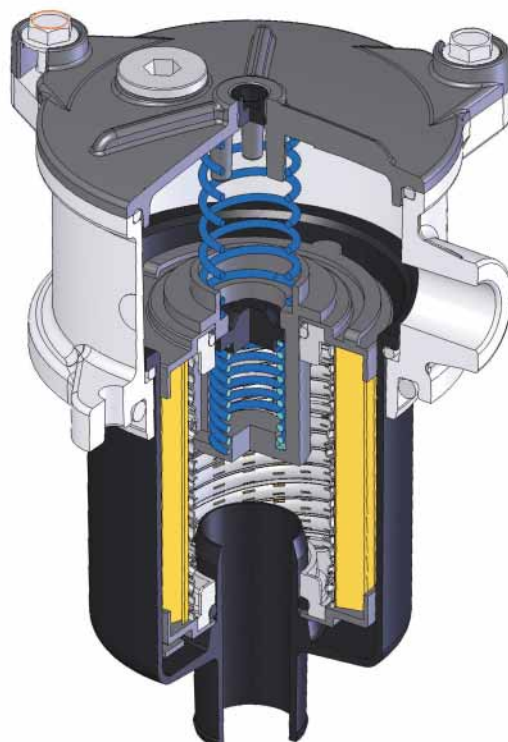
CLOGGING INDICATOR
 A visual or electrical indicator is available as an option and allows monitoring of the element condition. The port for the indicator is a standard feature.



FILLING PLUG
 The filling plug option gives the possibility of easily and efficiently filtering the oil from the drum.

EASY REPLACEMENT
 The top end cap includes a handle allowing an easy removal of the element and a complete cleaning of the bowl.

NO LEAKS
 The end cap with captive O-ring ensures a perfect seal between filter element and bowl.



MATERIALS

Head and cover:
 Aluminium alloy

Bowl :
 Polyamide for FRA21-31-32-33-41
 Zinc plated steel for FRA11-51-52-53

Bypass valve:
 Polyamide

Seals:
 NBR Nitrile

Indicator housing:
 Brass

PRESSURE (ISO 10771-1:2002)

Max working:
 300 kPa (3 bar)

Test:
 500 kPa (5 bar)

Bursting:
 1 MPa (10 bar)

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

BY-PASS VALVE

Setting:
 170 kPa (1,7 bar) +/-10%

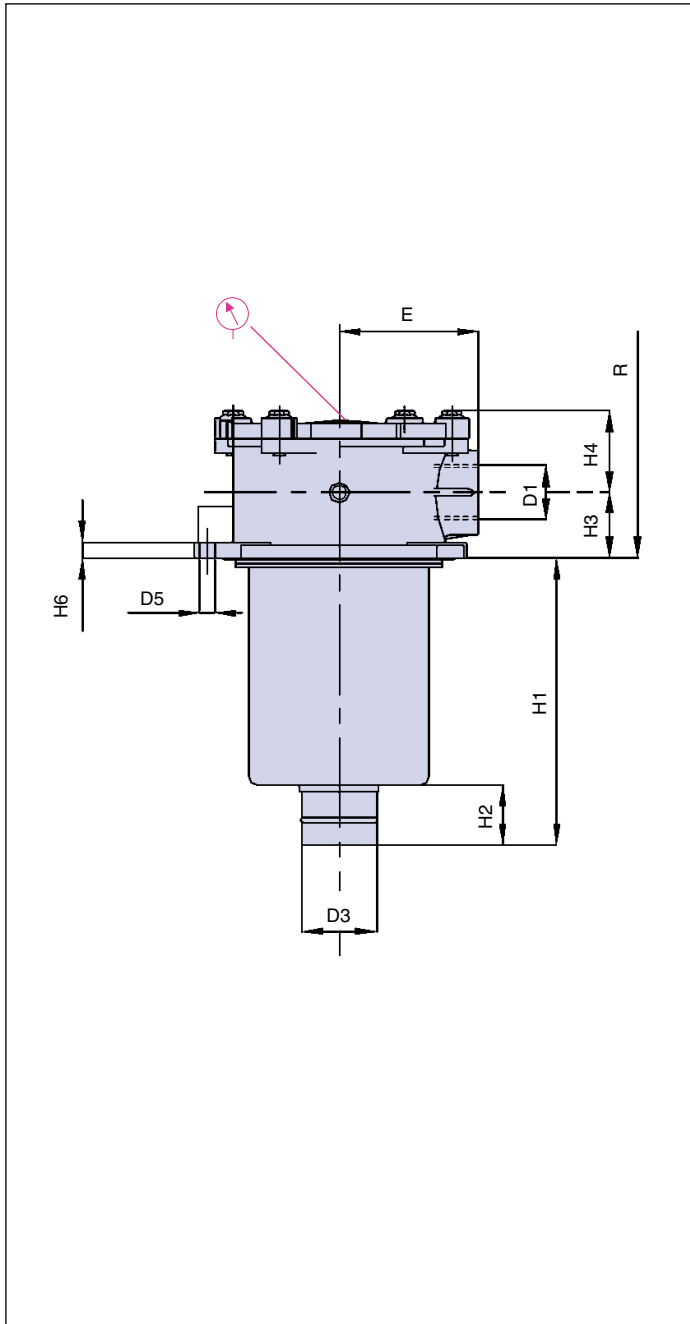
WORKING TEMPERATURE

From -25° to +110° C

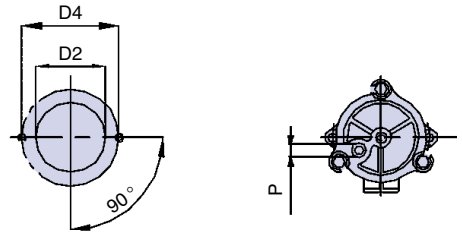
COMPATIBILITY (ISO 2943:1999)

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

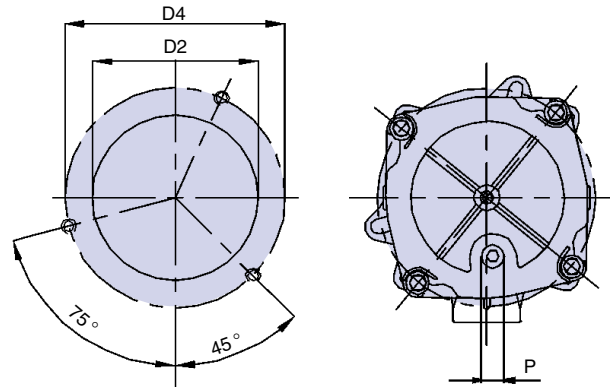
INSTALLATION DRAWING



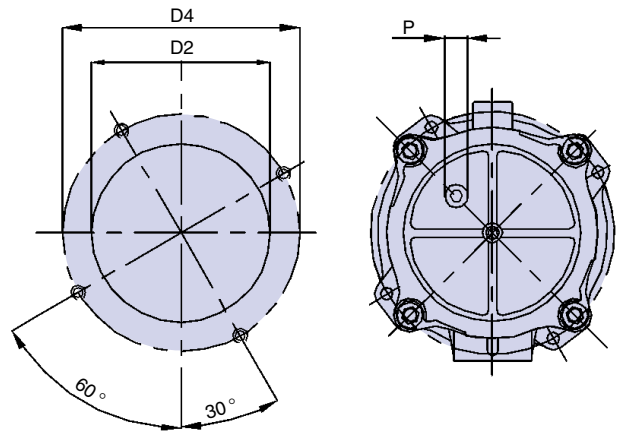
FRA 11 - 21 - 31 - 32 - 33



FRA 41



FRA 51 - 52 - 53

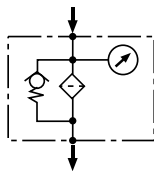
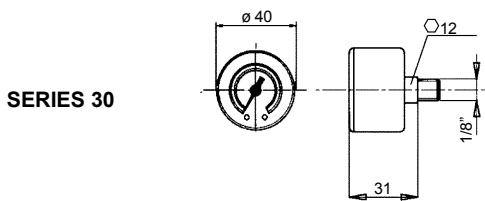


DIMENSIONS AND WEIGHTS

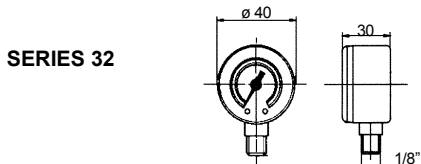
FILTER HOUSING

	D1	min D2	max D2	D3	D4	D5	E	H1	H2	H3	H4	H6	P	R	kg
FRA11	3/8"	50	50	12	80	6,5	40	59	16	12	33	9	1/8"	90	0,30
FRA21	1/2"	67	68	24	90	6,5	50	80	20	22	33	9	3/8"	120	0,45
FRA31	1/2" - 3/4"	89	90	28	115	9	67	102	25	28	47	10	3/8"	150	0,80
FRA32	3/4" - 1"	89	90	28	115	9	67	150	25	28	47	10	3/8"	190	0,95
FRA33	3/4" - 1"	89	90	40	115	9	67	234	30	28	47	10	3/8"	270	1,10
FRA41	1" - 1 1/2"	126	131	40	175	10,5	95	248	50	35	56	13	1/2"	289	2,10
FRA51	1 1/4" - 1 1/2"	174	180	50	220	10,5	115	178	50	55	69	13	1/2"	250	3,10
FRA52	1 1/2" - 2" - 2 1/2"	174	180	63,5	220	10,5	115	240	50	55	69	13	1/2"	315	3,60
FRA53	1 1/2" - 2" - 2 1/2"	174	180	63,5	220	10,5	115	285	50	55	69	13	1/2"	355	4,10

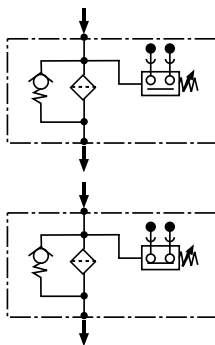
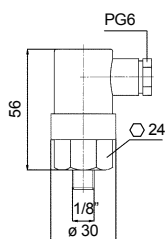
CLOGGING INDICATORS



Series 30 (rear connection) & series 32 (bottom connection):
pressure gauge,
scale 0 - 600 kPa (0 - 6 bar)

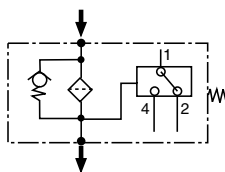
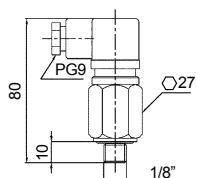


SERIES 80 & 81



Series 80 (N.O. contacts) & series 81 (N.C. contacts):
pressure switch,
max voltage 220 Vca 50-60 Hz
max current 0,5A resistive, 0,25A inductive
switching power 100 VA,
setting 150 kPa (1,5 bar)
protection IP65.

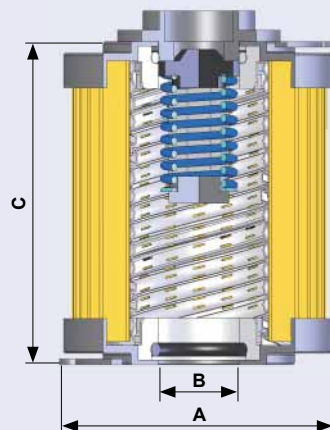
SERIES P1



Series P1:
SPDT, pressure switch
max voltage 250V - 50Hz
max current 6A resistive, 1A inductive
protection IP65
setting 150 kPa (1,5 bar)

FILTER ELEMENT

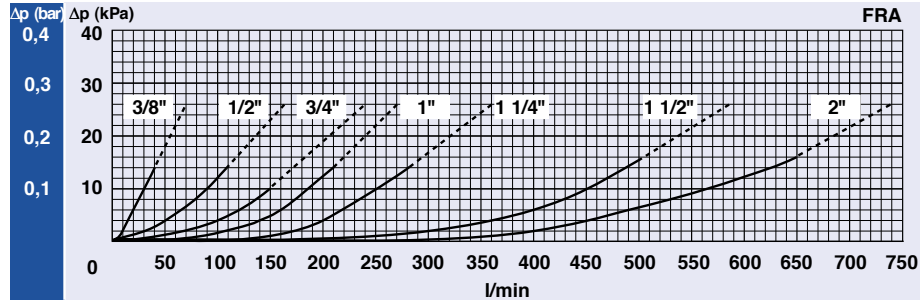
	A	B	C	kg	Area (cm ²)	
					Media F+	Media C+
ERA11	38	13	50	0,05	270	345
ERA21	52	24	70	0,10	310	380
ERA31	70	28	85	0,20	620	990
ERA32	70	28	130	0,25	1.000	1.600
ERA33	70	40	210	0,40	1.660	2.670
ERA41	99	40	211	0,75	3.800	4.280
ERA51	130	51	140	1,00	4.140	4.360
ERA52	130	63	200	1,35	6.190	6.520
ERA53	130	63	251	1,50	7.930	8.350



PRESSURE DROP CURVES (Δp)

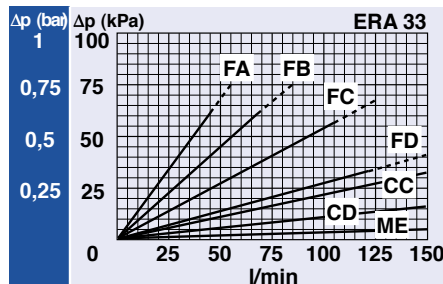
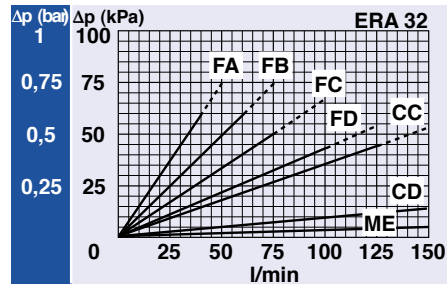
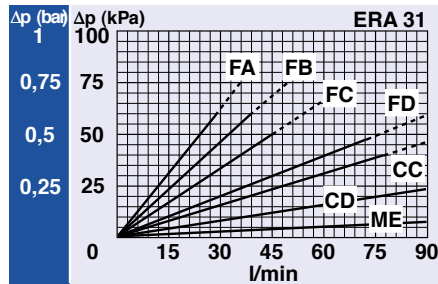
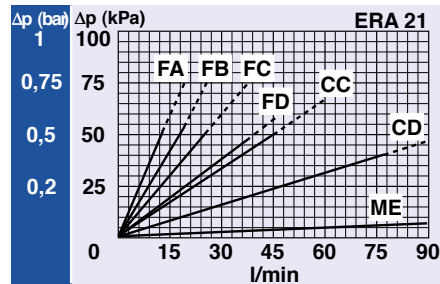
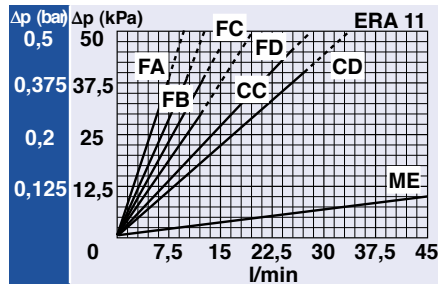
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be lower than 50 kPa (0,5 bar).

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



CLEAN FILTER ELEMENT PRESSURE DROP WITH F+, C+ AND ME MEDIA

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



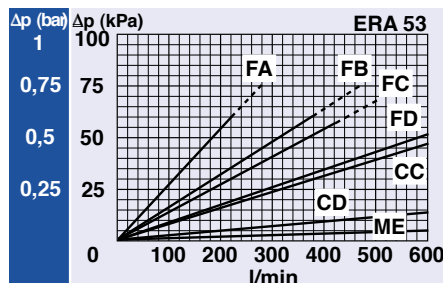
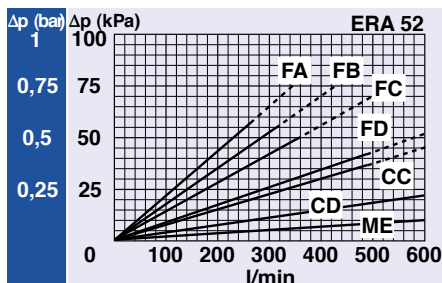
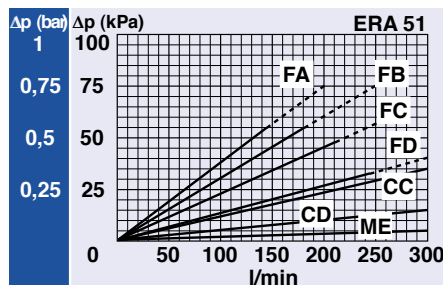
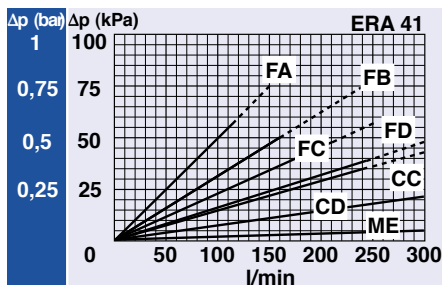
N.B. All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,9 kg/dm³; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968:2005. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

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 50 kPa (0,5 bar).

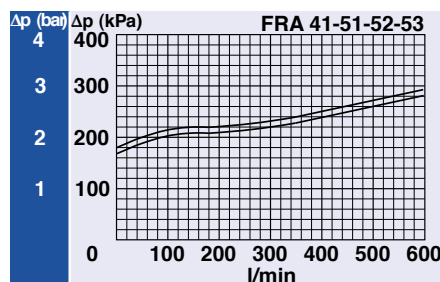
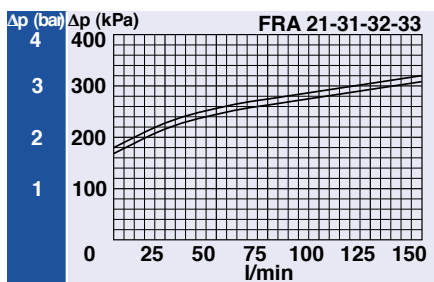
CLEAN FILTER ELEMENT PRESSURE DROP WITH F+, C+ AND ME MEDIA

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



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.



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