

"TANK CARE" - Return filters

RH



TECHNICAL DATA

DOUBLE PORT MODEL

ORDERING AND OPTIONS CHART

CLOGGING INDICATORS

PRESSURE DROP (Δp) CURVES

CROSS FUNCTIONAL VIEW

SPARE PARTS ORDERING INFORMATION

DIMENSIONS OF THE FILTER ELEMENT

"TANK CARE" RETURN FILTERS

MATERIALS

Head and cover	Aluminium alloy
Bowl	Polyamide
Bypass valve	Polyamide
Seals	NBR Nitrile (FKM - on request fluoroelastomer)
Indicator housing	Brass

COMPATIBILITY

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.

PRESSURE

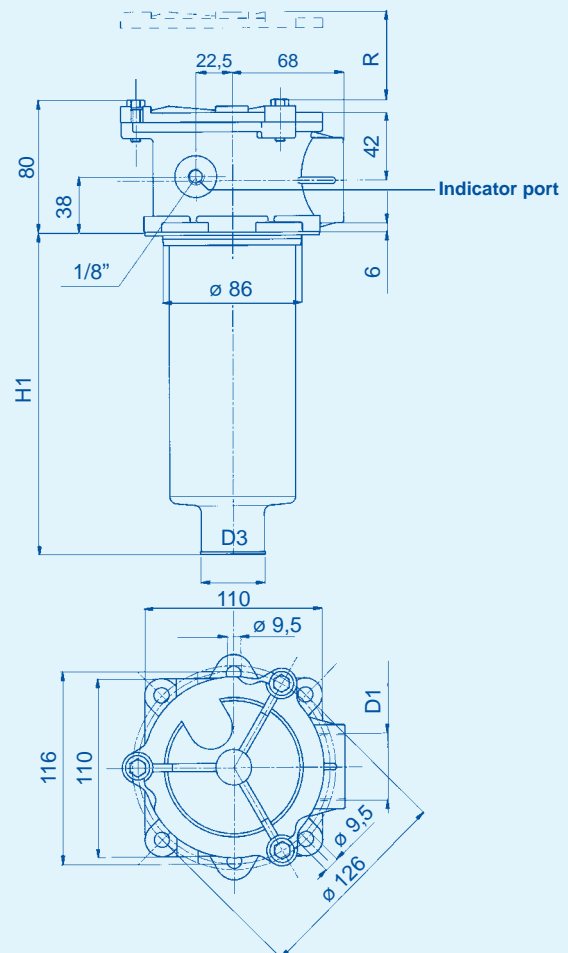
Max working	300 kPa (3 bar)
Test	500 kPa (5 bar)
Bursting	1 MPa (10 bar)
Collapse, differential for the filter element	300 kPa (3 bar)

BYPASS VALVE

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

From -25° to +110° C



	D1	Tank hole ∅	D3	H1	Element replacement R	Weight Kg.
FRH 31	3/4" - 1" - 1 1/4"	90	27	106	165	0,95
FRH 32		90	27	152	205	1,10
FRH 33		90	40	235	285	1,25

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DOUBLE PORT MODEL

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Head and cover	Aluminium alloy
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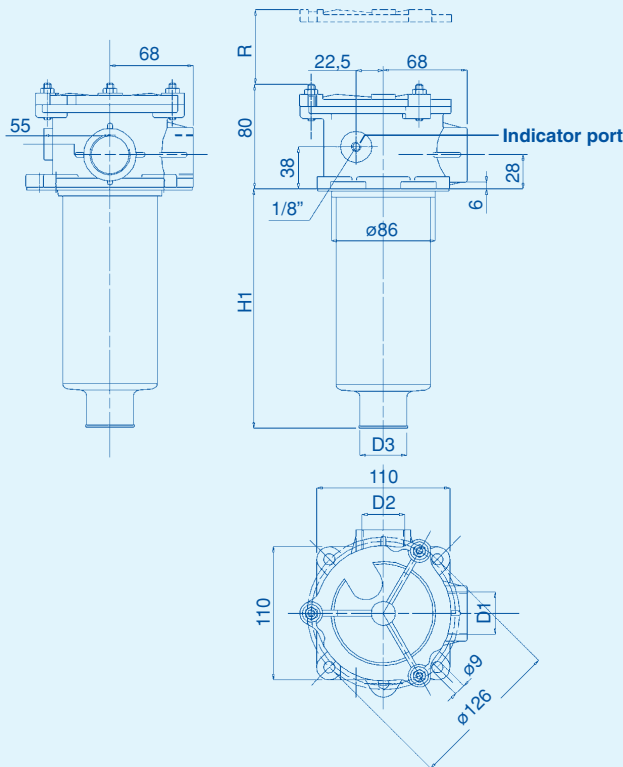
BYPASS VALVE

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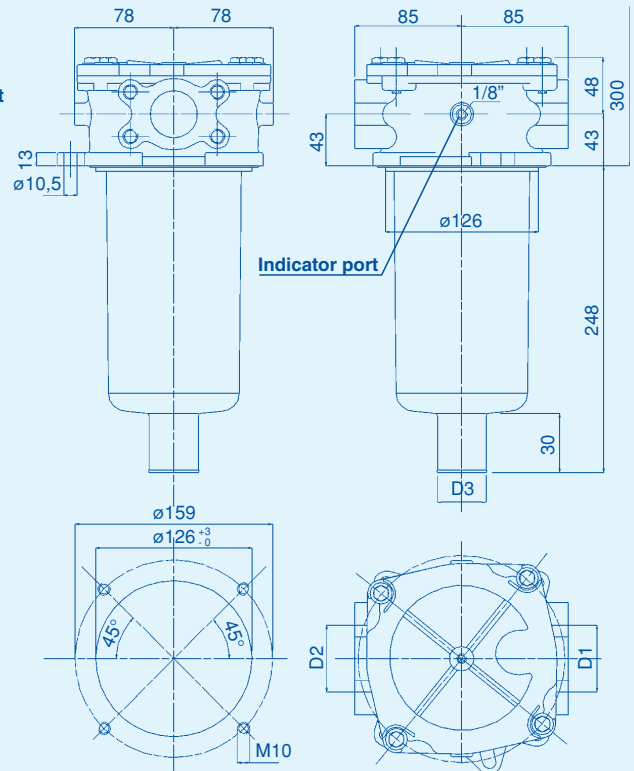
WORKING TEMPERATURE

From -25° to +110° C

FRH 31 - 32 - 33



FRH 41



	D1	D2	D3	Tank hole ø	H1	Element replacement R	Weight Kg.
FRH 31			27	90	106	165	0,95
FRH 32	1"	1"	27	90	152	205	1,10
FRH 33			40	90	235	285	1,25
FRH 41	1 1/2"	1 1/2"	=	127	=	300	2,40

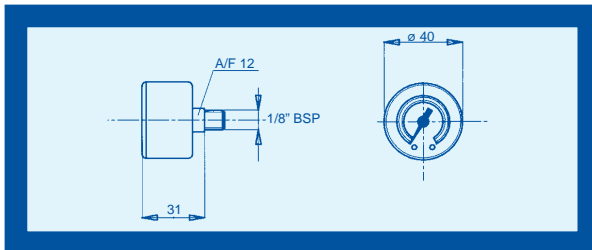
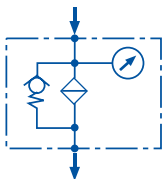
RH

"TANK CARE" RETURN FILTERS

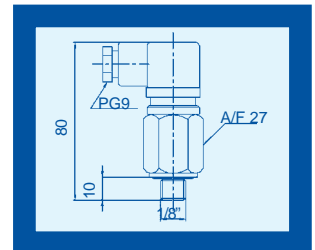
ORDERING AND OPTIONS CHART

F FILTER COMPLETE					ELEMENT		E	
R	H	FAMILY, NOMINAL SIZE & LENGTH			FAMILY SIZE & LENGTH		R	A
		31	32	33	41			
PORT TYPE								
B = BSP thread		B	B	B	=			
A = BSP thread, double port (A08 only)		A	A	A	=			
N = NPT thread		N	N	N	=			
S = SAE thread		S	S	S	=			
P = SAE flange 3000 psi, double port		=	=	=	P			
PORT SIZE								
06 = 3/4"		06	06	06	=			
08 = 1"		08	08	08	=			
10 = 1 1/4"		10	10	10	=			
12 = 1 1/2"		=	=	=	12			
B BYPASS VALVE								
B = 170 kPa (1,7 bar)		B	B	B	B			
SEALS								
N = NBR Nitrile		N	N	N	N	SEALS		
F = FKM Fluoroelastomer		F	F	F	F	N = NBR		
						F = FKM		
FILTER MEDIA								
FA = fiber 3μ β >200		FA	FA	FA	FA	FILTER MEDIA		
FB = fiber 6μ β >200		FB	FB	FB	FB	FA = fiber 3μ		
FC = fiber 12μ β >200		FC	FC	FC	FC	FB = fiber 6μ		
FD = fiber 25μ β >200		FD	FD	FD	FD	FC = fiber 12μ		
CC = cellulose 10μ β >2		CC	CC	CC	CC	FD = fiber 25μ		
CD = cellulose 25μ β >2		CD	CD	CD	CD	CC = cellulose 10μ		
ME = wire mesh 60μ β >2		ME	ME	ME	ME	CD = cellulose 25μ		
						ME = wire mesh 60μ		
CLOGGING INDICATOR								
05 = nr. 2 x 1/8" ports, plugged		05	05	05	05			
30 = pressure gauge, rear connection		30	30	30	30			
80 = pressure switch, N.O. contacts		80	80	80	80			
81 = pressure switch, N.C. contacts		81	81	81	81			
P1 = SPDT, pressure switch		P1	P1	P1	P1			
ACCESSORIES								
W = without		W	W	W	W			
P = with filling plug		P	P	P	P			

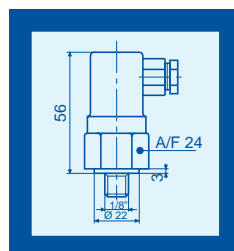
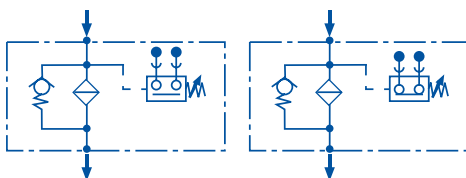
CLOGGING INDICATORS



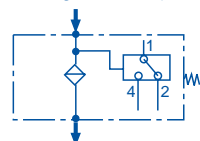
Series 30
(rear connection) :
pressure gauge, scale
0 - 600 kPa (0 - 6 bar)



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



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

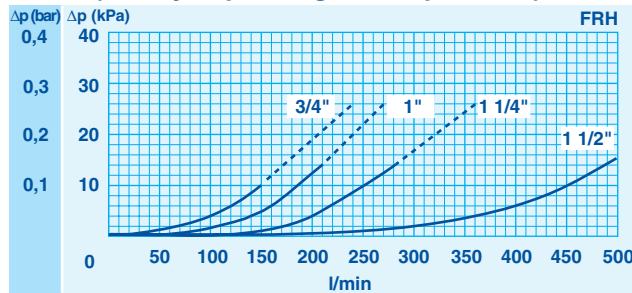


PRESSURE DROP (Δp) CURVES

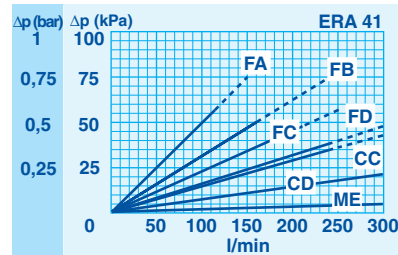
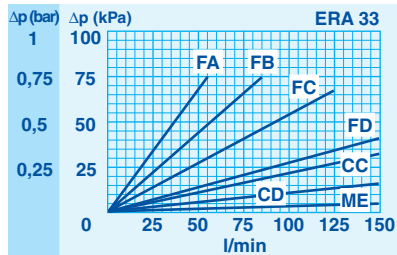
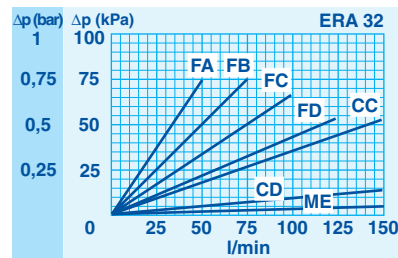
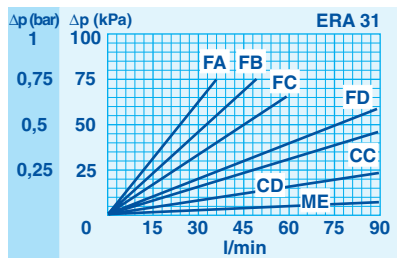
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the

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

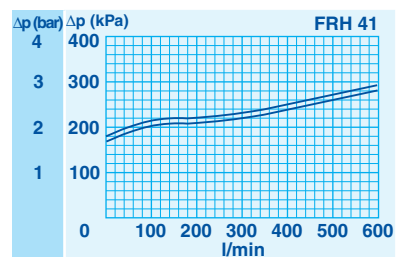
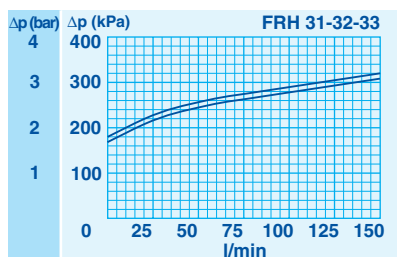


N.B. All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,9 ; for fluids with different features, please consider the factors described in the first part of this catalogue.

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.

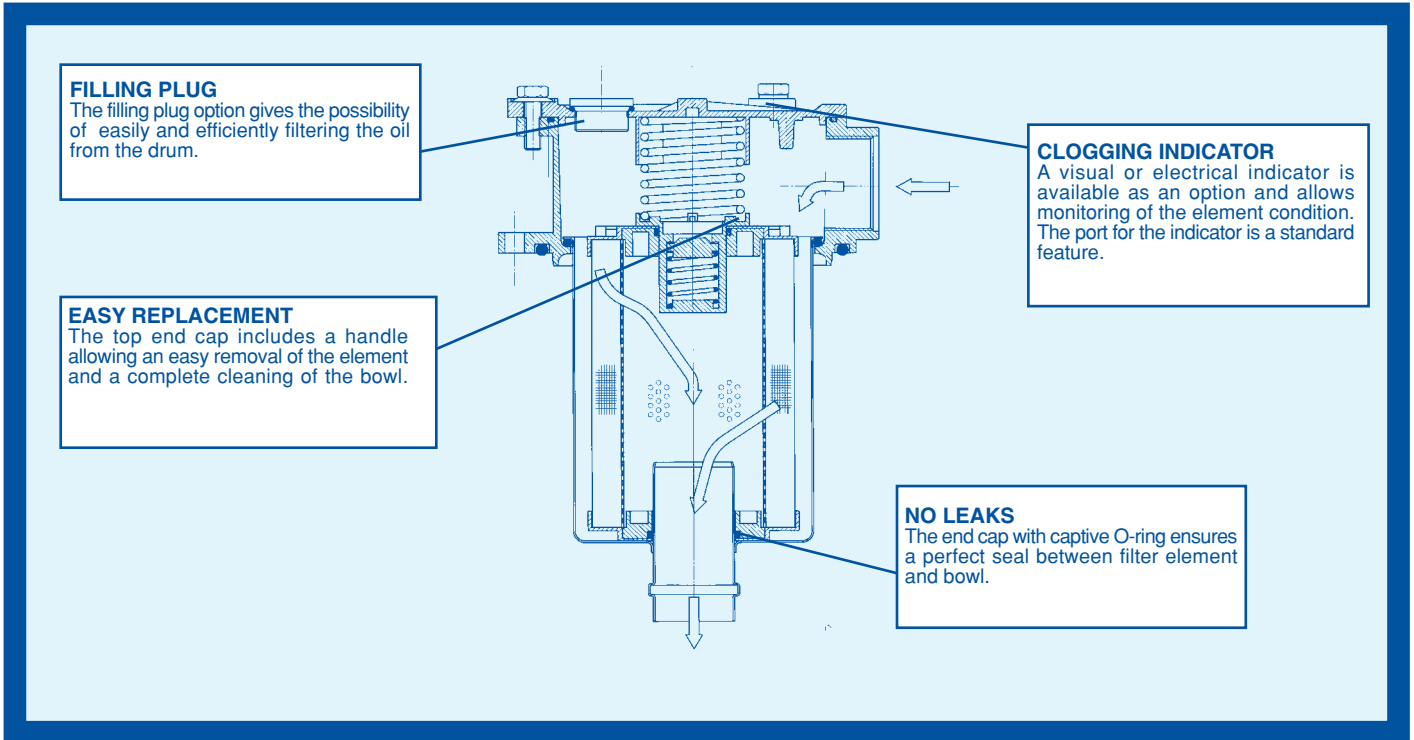


N.B. All the curves are obtained from test done at the UFI HYDRAULIC DIVISION Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.

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"TANK CARE" RETURN FILTERS

CROSS FUNCTIONAL VIEW

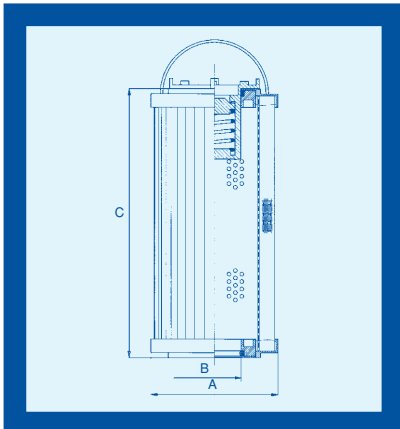


SPARE PARTS ORDERING INFORMATION

(from the code of the complete filter, fill the digits corresponding to the boxes)

Filter housing	B	R	H	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cover	S	R	H	<input type="checkbox"/>	X	X	X	X	X	<input type="checkbox"/>	X	X	<input type="checkbox"/>	<input type="checkbox"/>
Head	S	R	H	<input type="checkbox"/>	X	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>	X	X	X	X
Bowl	S	R	H	<input type="checkbox"/>	<input type="checkbox"/>	X	X	X	X	<input type="checkbox"/>	X	X	X	X
Seal kit	S	R	H	<input type="checkbox"/>	X	X	X	X	X	<input type="checkbox"/>	X	X	X	X

DIMENSIONS OF THE FILTER ELEMENTS



Type	A	B	C	Area (cm ²)	
				Media F+	Media C+
ERA31	70	28	85	620	990
ERA32	70	28	130	1.000	1.600
ERA33	70	40	210	1.660	2.670
ERA41	99	40	211	3.800	4.280