

Return line filters

TTU



MATERIALS

Head & cover:
Die cast alluminum alloy

Bowl:
Polyamide 66

Seals:
Nitrile (buna n)

Indicator housing:
Brass



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

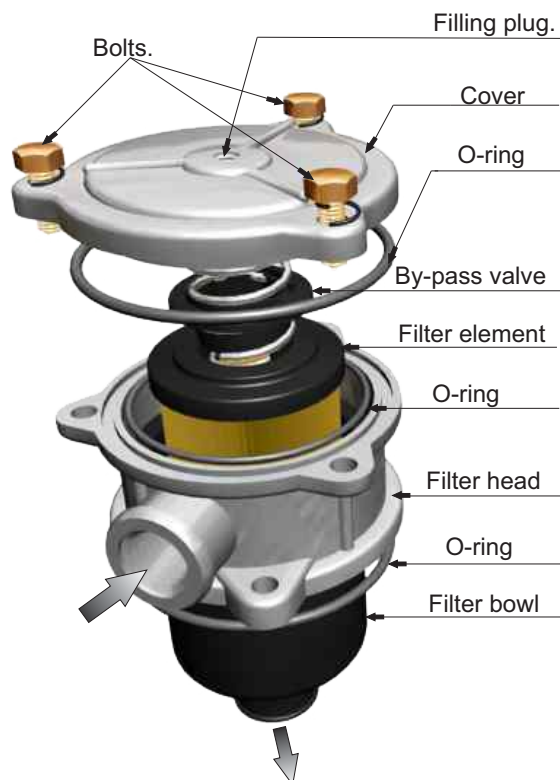
170 kPa (1.7 bar)+/- 10%

WORKING TEMPERATURE

From -25° to +110° C

COMPATIBILITY

Full with fluids:
HH-HL-HM-HR-HV-HG



VISUAL CLOGGING INDICATOR

A visual clogging indicator allows monitoring of the element condition and provides maximum element life by indicating the exact time for the element replacement.

FILLING PLUG

The Filling plug option gives the possibility of easily and efficiently filtering the oil from the tank.

EASY REPLACEMENT

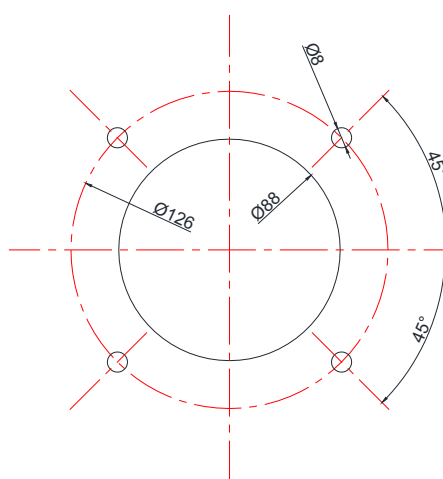
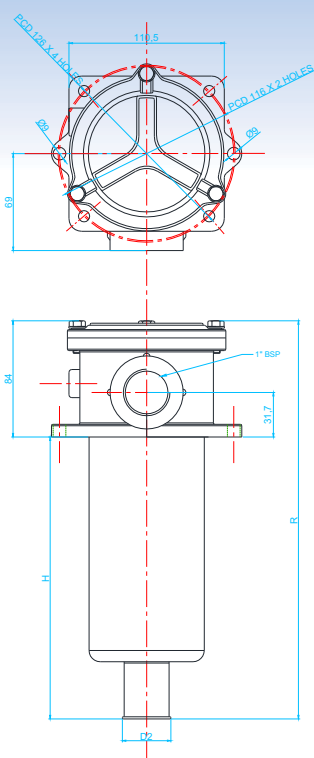
The top end cap includes a handle allowing an easy removal of the element and a complete cleaning of the bowl.

NO LEAKS

The end cap with captive O-ring ensures a perfect seal between filter element and the bowl.

FFP PRODUCTS (HYDRAULICS DIVISION)

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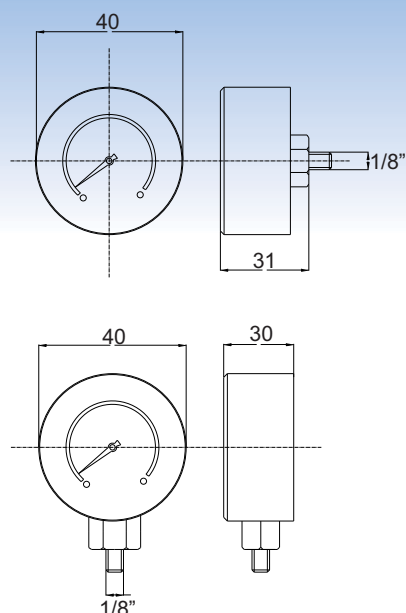
TANK MOUNTING

FILTER HOUSING

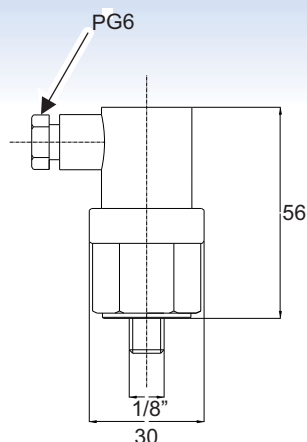
	D1	D2	H	R	kg
TTU31	3/4" - 1" - 1" 1/4	27	106	165	0.95
TTU32	3/4" - 1" - 1" 1/4	27	152	205	1.10
TTU33	3/4" - 1" - 1" 1/4	40	235	285	1.25

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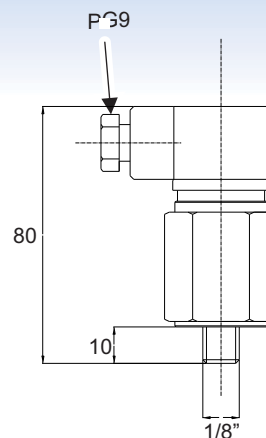
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**Series F30 (rear connection)
& series F32 (bottom connection):**
pressure gauge,
scale 0 - 600 kPa (0 - 6 bar)



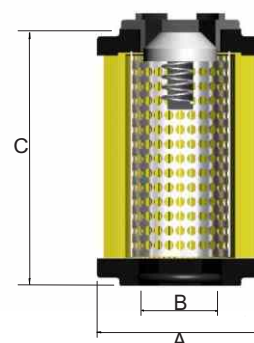
**Series F80 (N.O. contacts)
& series F81 (N.C. contacts):**
pressure switch,
max voltage 220 Vca 50-60 Hz
max current 0,5A resistive, 0,25A inductive
switching power 100 VA,
setting 150 kPa (1,5 bar)
protection IP65.



Series FP1:
SPDT, pressure switch
max voltage 250V - 50Hz
max current 6A resistive, 1A inductive
protection IP65
setting 150 kPa (1,5 bar)

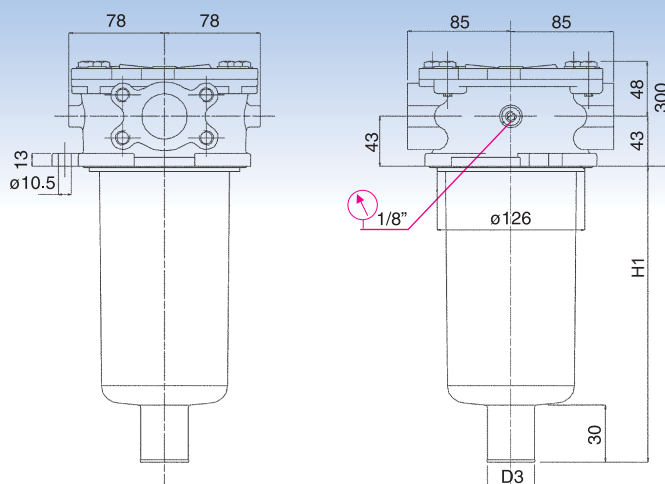
FILTER ELEMENT

	A	B	C	kg	Area (cm ²)	
					Media F+	Media C+
TTUE31	70	28	85	0,20	620	990
TTUE32	70	28	130	0,25	1.000	1.600
TTUE33	70	40	210	0,40	1.660	2.670

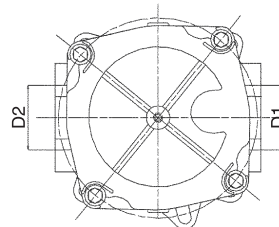
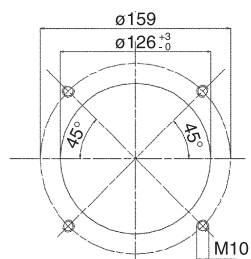


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Tank mounting pattern



FILTER HOUSING

	D1	D2	D3	H1	R	kg
TTU41	1" 1/2	1 1/2"	40	248	289	2,40
TTU42	1" 1/2	1 1/2"	40	265	306	2,60

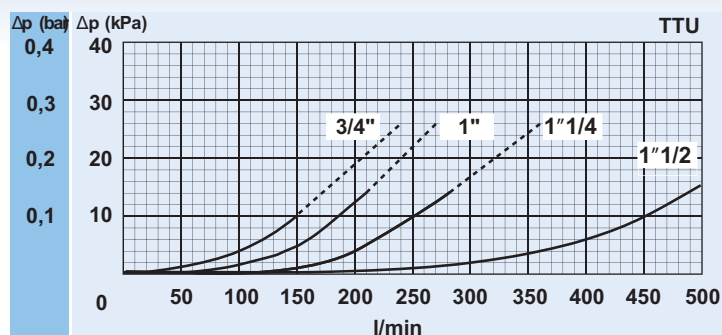
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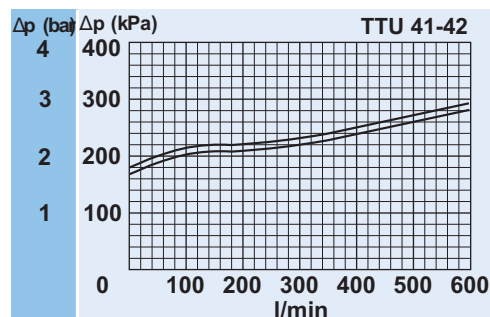
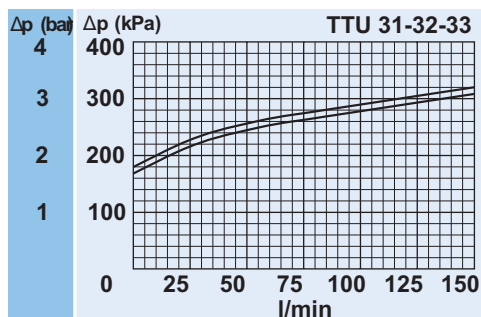
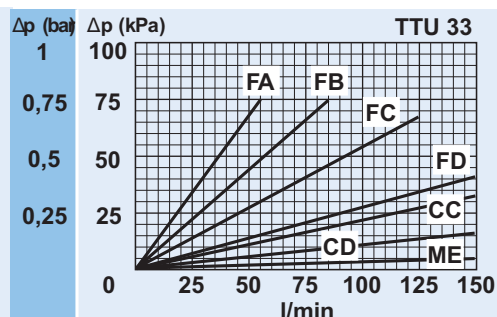
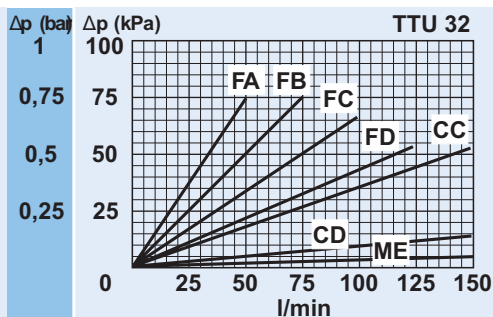
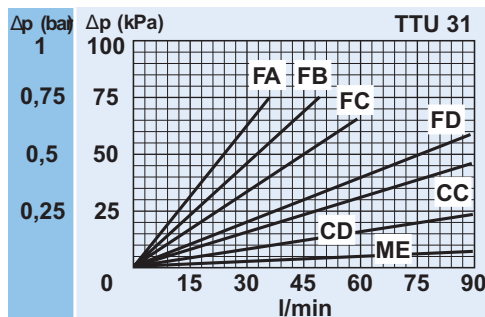
PRESSURE DROP CURVES (Δp)

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



BYPASS VALVE PRESSURE DROP

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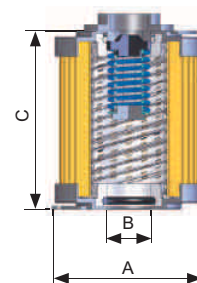
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		TYPE				
		F = FILTER COMPLETE	T	T	T	
		B = FILTER HOUSING	B	B	B	ELEMENT E
T	U	FAMILY,				FAMILY SIZE & LENGTH T U
		NOMINAL SIZE & LENGTH	31	32	33	
		PORT TYPE				
		B = BSP thread	B	B	B	
		A = BSP thread (double port A08 only)	A	A	A	
		N = NPT thread	N	N	N	
		S = SAE thread	S	S	S	
		PORT SIZE				
		06 = 3/4"	06	06	06	
		08 = 1"	08	08	08	
		10 = 1 1/4"	10	10	10	
		B BYPASS VALV E				
		B = 170 kPa (1,7 bar)	B	B	B	
		SEALS				SEALS
		N = NBR Nitrile	N	N	N	N = NBR
		F = FKM Fluoroelastomer	F	F	F	F = FKM
		FILTER MEDIA				FILTER MEDIA
		FA = fiber 5 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FA	FA	FA	FA = fiber 5 μm
		FB = fiber 7 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FB	FB	FB	FB = fiber 7 μm
		FC = fiber 12 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FC	FC	FC	FC = fiber 12 μm
		FD = fiber 21 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FD	FD	FD	FD = fiber 21 μm
		CC = cellulose 10 μm $\beta > 2$	CC	CC	CC	CC = cellulose 10 μm
		CD = cellulose 25 μm $\beta > 2$	CD	CD	CD	CD = cellulose 25 μm
		ME = wire mesh 60 μm	ME	ME	ME	ME = wire mesh 60 μm
		CLOGGING INDICATOR				
		05 = nr. 2 x 1/8" ports, plugged	05	05	05	
		30 = pressure gauge, rear connection	30	30	30	
		P1 = SPDT, pressure switch	P1	P1	P1	
		ACCESSORIES				
		W = without	W	W	W	
		P = with filling plug	P	P	P	

TYPE					
F = FILTER COMPLETE		T	T		
B = FILTER HOUSING		B	B	ELEMENT	E
T U	FAMILY,			FAMILY SIZE & LENGTH	T U
	NOMINAL SIZE & LENGTH	41	42		
P	PORT TYPE				
	P = SAE flange 3000 psi, double port	P	P		
1 2	PORT SIZE				
	12 = 1 1/2"	12	12		
B	BYPASS VALV E				
	B = 170 kPa (1,7 bar)	B	B		
	SEALS			SEALS	
	N = NBR Nitrile	N	N	N = NBR	
	F = FKM Fluoroelastomer	F	F	F = FKM	
	FILTER MEDIA			FILTER MEDIA	
	FA = fiber 5 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FA	FA	FA = fiber 5 $\mu\text{m}_{(c)}$	
	FB = fiber 7 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FB	FB	FB = fiber 7 $\mu\text{m}_{(c)}$	
	FC = fiber 12 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FC	FC	FC = fiber 12 $\mu\text{m}_{(c)}$	
	FD = fiber 21 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FD	FD	FD = fiber 21 $\mu\text{m}_{(c)}$	
	CC = cellulose 10 μm $\beta > 2$	CC	CC	CC = cellulose 10 μ	
	CD = cellulose 25 μm $\beta > 2$	CD	CD	CD = cellulose 25 μ	
	ME = wire mesh 60 μm	ME	ME	ME = wire mesh 60 μ	
	CLOGGING INDICATOR				
	05 = nr. 2 x 1/8" ports, plugged	05	05		
	30 = pressure gauge, rear connection	30	30		
	P1 = SPDT, pressure switch	P1	P1		
	ACCESSORIES				
	W = without	W	W		
	P = with filling plug	P	P		
X	ACCESSORIES				
	X = no other accessory available	X	X		

FILTER ELEMENT

	A	B	C	kg	Area (cm ²)	
					Media F+	Media C+
TTUE41	99	40	211	0,75	3.800	4.280
TTUE42	99	40	250	0,90	4.550	5.100



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