FTA-FTB

TRANSMISSION FILTERS

DESCRIPTION

Hydrostatic transmission filter

MATERIALS

Head: Aluminum alloy
Cover: Polyamide FTA-FTB2
Aluminum alloy FTA-FTB3
Bowl: Steel
Seals: NBR Nitrile
Indicator housing: Brass

PRESSURE

Max working: 1 MPa (10 bar)
Collapse, differential for the filter element: 1 MPa (10 bar)

BYPASS VALVE

Setting: 250 kPa (2,5 bar) ± 10%

FLOW RATE

Qmax 240 l/min

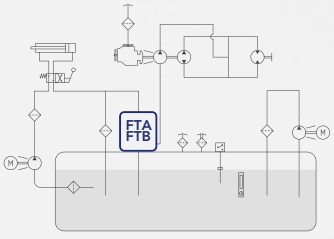
WORKING TEMPERATURE

From -25° to +110° C

COMPATIBILITY (ISO 2943)

From -25° to + 110° C
COMPATIBILITY (ISO 2943)
Full with fluids: HH-HL-HM-HV-HTG
(according to ISO 6743/4)
For fluids different than the above mentioned,
please contact our Customer Service

HYDRAULIC DIAGRAM



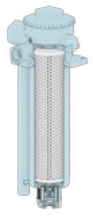
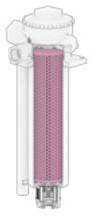
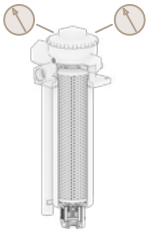
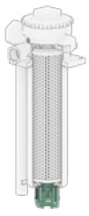
Is this datasheet the latest release? Please check on our website

FTA-FTB
TRANSMISSION FILTERS

ORDERING AND OPTION CHART

F	T		**COMPLETE FILTER FAMILY**										
			A = with internal bypass										
			B = with external bypass								**FILTER ELEMENT FAMILY**	E	T	A
			SIZE & LENGTH	23	31	32	33				**SIZE & LENGTH**			
		B	**PORT TYPE**										
			B = BSP thread	B	B	B	B						
			PORT SIZE										
			D3 = 3/4" suction + 3/4" return	D3	-	-	-						
			D4 = 3/4" suction + 1" return	D4	-	-	-						
			T1 = 1 1/4" return + 2x1" suction	-	T1	T1	T1						
		B	**BYPASS VALVE**										
			B = 170 kPa (1,7 bar)	B	B	B	B						
		N	**SEALS**								**SEALS**		
			N = NBR Nitrile	N	N	N	N						
			FormulaUFI MEDIA								**FormulaUFI MEDIA**			
			FC = FormulaUFI.MICRON 12 $\mu m_{(c)}$ >1.000 Δp 2MPa (20 bar)	FC	FC	FC	FC						
			FS = FormulaUFI.MICRON 16 $\mu m_{(c)}$ >1.000 Δp 2MPa (20 bar)	FS	FS	FS	FS						
			CLOGGING INDICATOR										
			05 = nr. 2 x 1/8" ports, plugged	05	05	05	05						
			30 = pressure gauge, rear connection	30	30	30	30						
			P6 = SPDT, pressure switch	P6	P6	P6	P6						
			ACCESSORIES										
			A = pressurisation valve	A	A	A	A						
			B = press. valve + drain hole	B	B	B	B						
			C = press. valve + suction bypass	C	C	C	C						
			D = press. valve + drain hole + suction bypass	D	D	D	D						
		X	**ACCESSORIES**										
			X = no other accessory available	X	X	X	X						

SPARE PARTS ELEMENTS

FILTER HOUSING	FILTER ELEMENT	CLOGGING INDICATOR	ACCESSORIES
			
B T B N X	E T A N		

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TRANSMISSION FILTERS

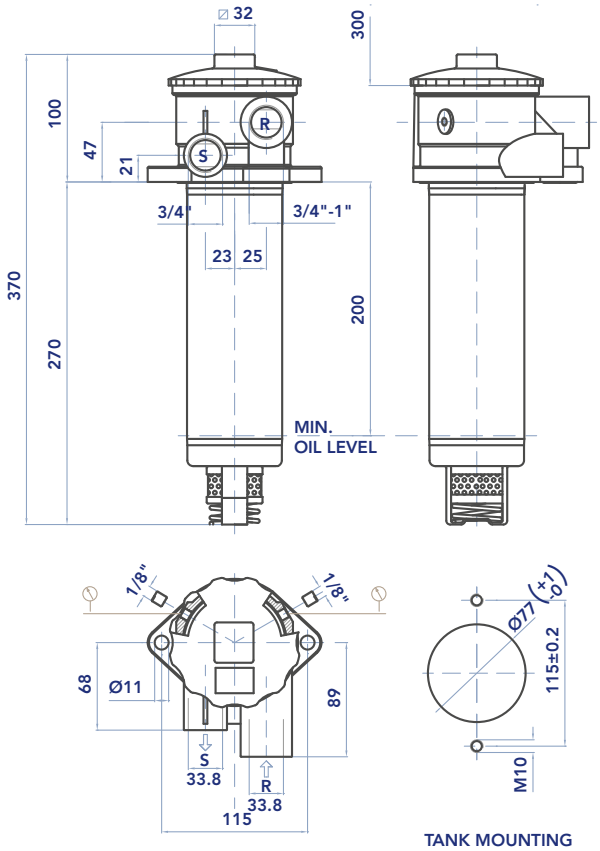
SPARE SEAL KIT

	NBR	FKM
FTA2-FTB2	521.0121.2	521.0122.2
FTA3-FTB3	521.0123.2	521.0124.2

* For any different media requirement, please check the availability with our Customer Service

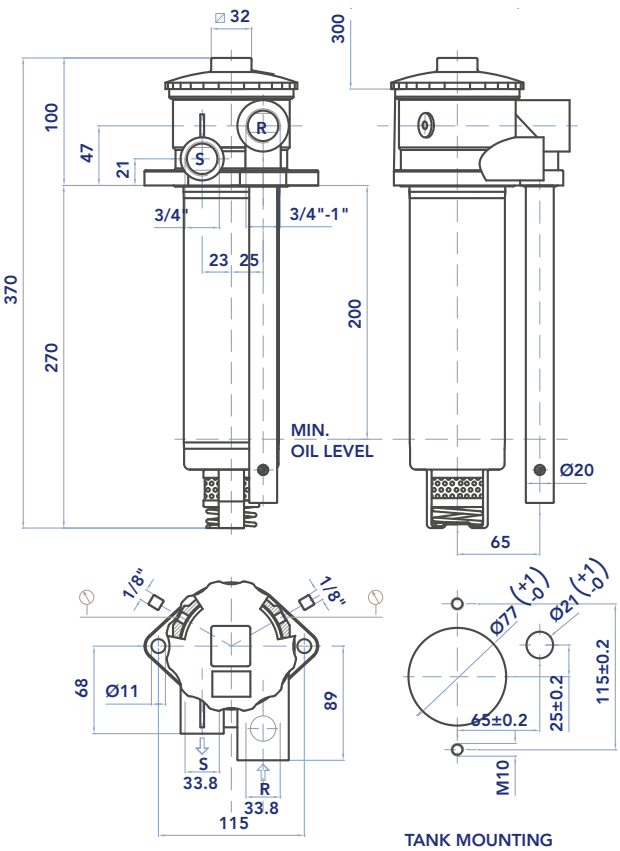
INSTALLATION DRAWING

FTA 23
WITH INTERNAL BY-PASS



TANK MOUNTING
PATTERN

FTB 23
WITH EXTERNAL BY-PASS



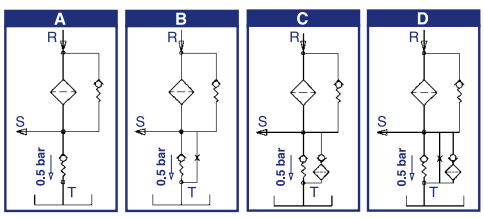
TANK MOUNTING
PATTERN

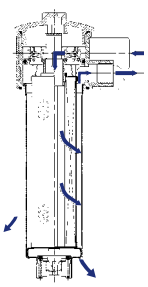
WORKING SCHEME

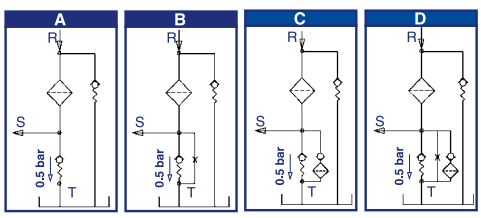
Options A and C
are recommended for horizontal filter mounting.

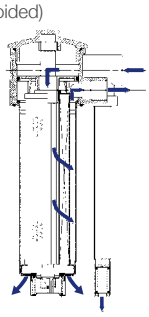
Options B and D
are recommended for vertical filter mounting (drain hole).

Options C and D
a 125 µm strainer protects the emergency valve in case of brief lack of oil in the suction of the boost pump (situation to be anyway avoided)









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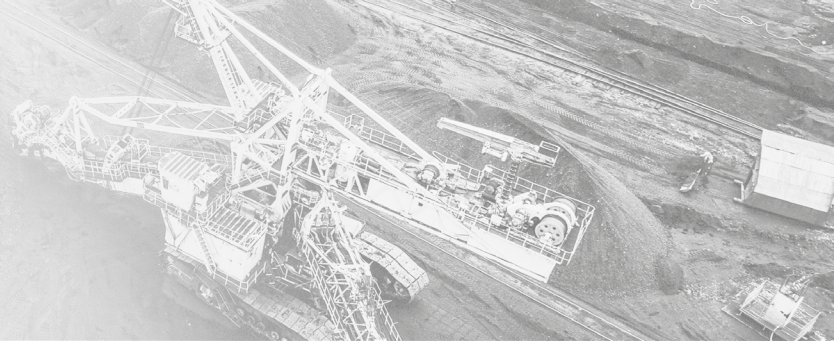
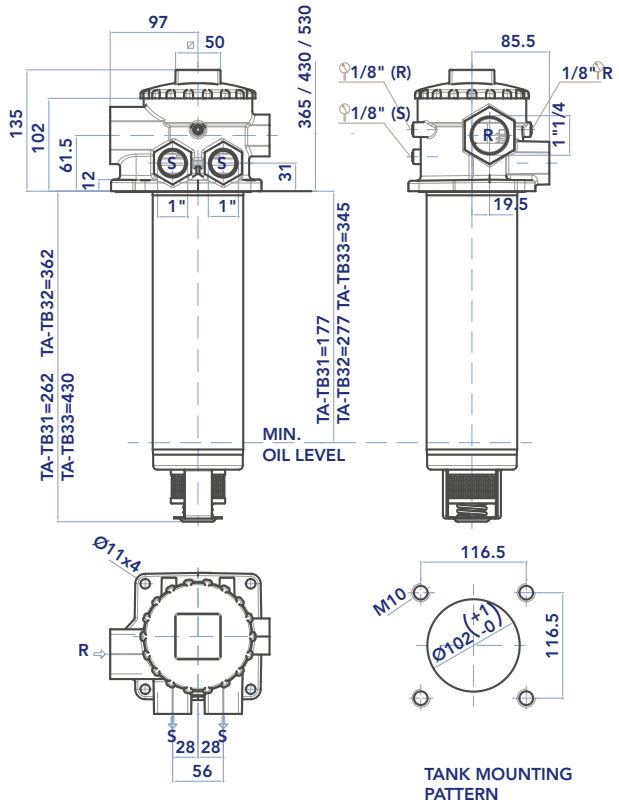
TRANSMISSION FILTERS



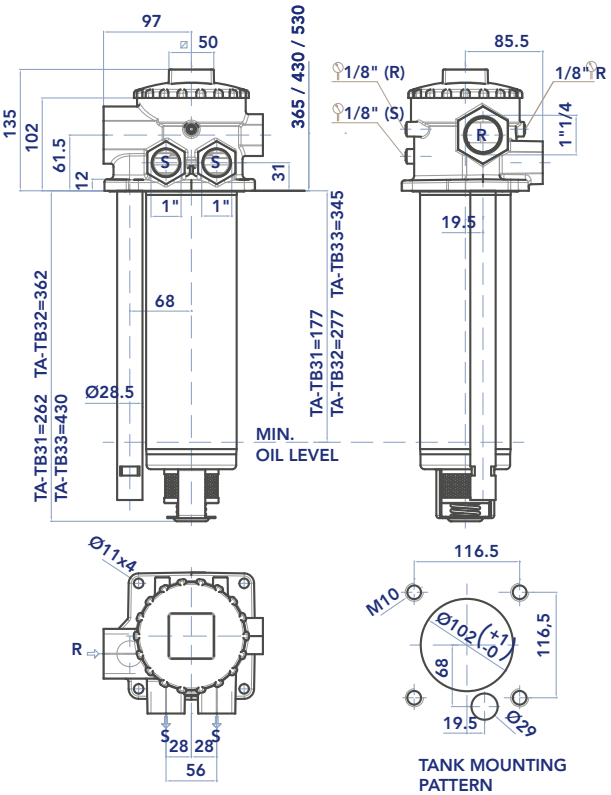
INSTALLATION DRAWING

FTA 31 - 32 - 33
WITH INTERNAL BY-PASS



TANK MOUNTING
PATTERN

FTB 31 - 32 - 33
WITH EXTERNAL BY-PASS



TANK MOUNTING
PATTERN

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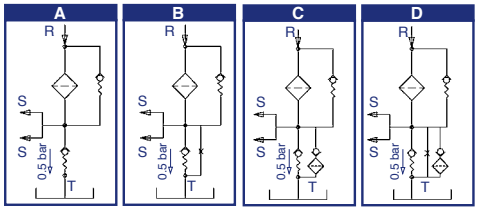

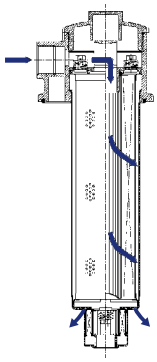

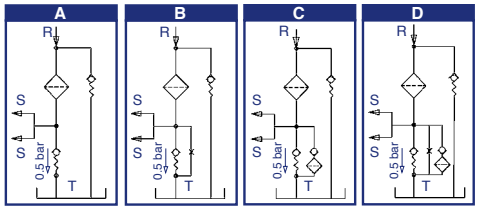

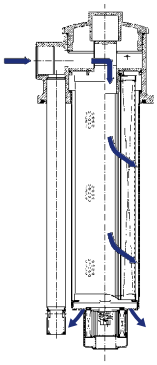

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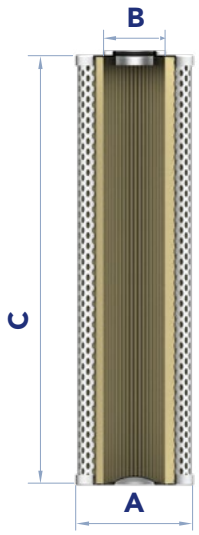
FILTER ELEMENT

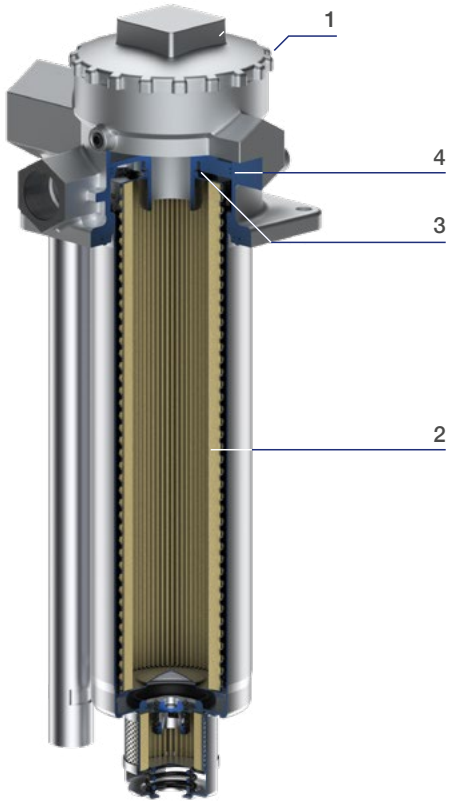
					AREA (cm^2)
	A	B	C	Kg	Media F+
ETA23	63,5	28	230	0,40	1.900
ETA31	90	40	232	0,55	2.800
ETA32	90	40	333	0,77	4.100
ETA33	90	40	400	0,85	4.900

The used filter elements cannot be cleaned and are classified as "Dangerous waste material". They must be disposed according to local laws by authorized Companies.
Verify that the Company you choose has the expertise and authorization to dispose this type of waste material.



MAINTENANCE

1) Stop the system and verify there is no pressure in the filter and collect the oil inside the filter with a suitable container.
2) Unscrew the plug (1).
3) Remove the filter element (2) using the handle.
   N.B. The exhausted filter elements and the oil dirty filter parts are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorized Companies.
4) Extract the filter element (2) from its handle.
5) Check the filter element part number on the filter label or in the ordering and option chart.
   Use only original spare parts.
6) Lubricate the new filter element O-ring gasket (3) with oil
7) Insert the clean element on the handle, handling with care.
8) Check the handle O-ring gasket (4) and lubricate with oil. Insert the handle assembled with the filter element in the housing.
9) Check the plug O-ring condition and lubricate with oil. If damaged, check the catalogue or call the customer service.
10) Tighten the plug (1) until it stops with the following tightening torques: Series FT2: 25 Nm +5/0 Series FT3: 35 Nm +5/0.



Accessories:
Clogging indicator.
If damaged, unscrew and replace it (check the part number in the ordering and option chart).
Apply a thread-sealing and screw until tight. N.B. an over-tightening can damage the thread.

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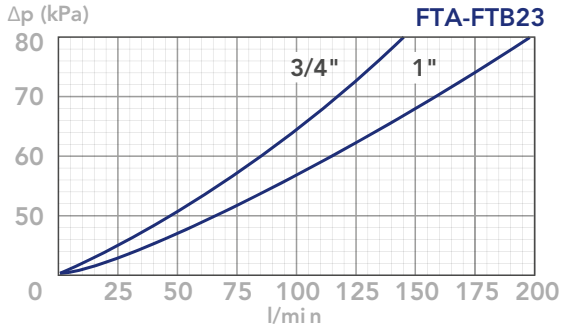
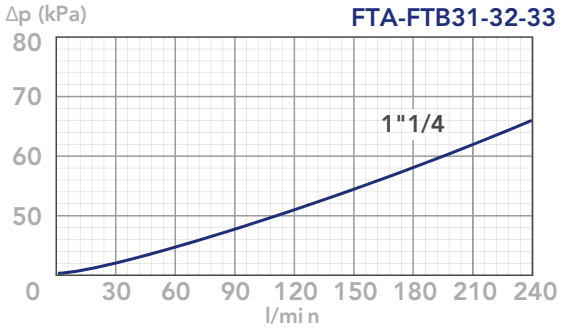
TRANSMISSION FILTERS

PRESSURE DROP CURVES (ΔP)

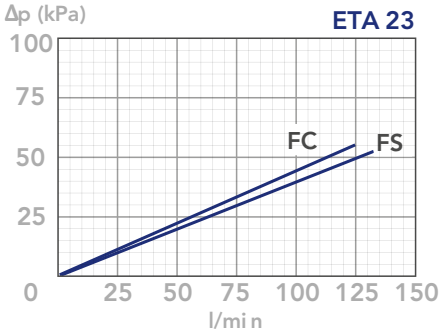
The “Assembly Pressure Drop (Δp)” is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be lower than 40 kPa (0,4 bar) and should never exceed 1/3 of the bypass valve setting.

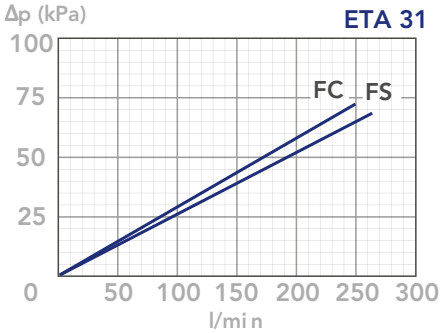
FILTER HOUSING PRESSURE DROP
(mainly depending on the port size)

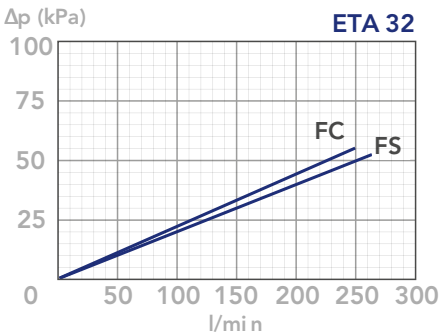


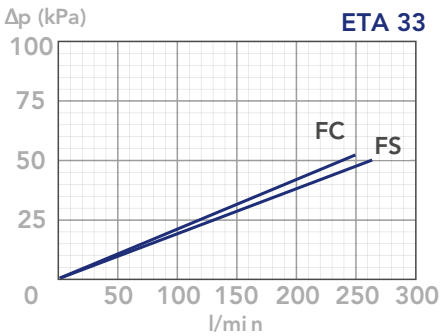


CLEAN FILTER ELEMENT PRESSURE DROP
(depending both on the internal diameter of the element and on the filter media)









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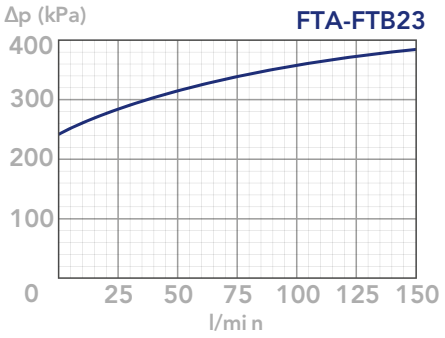
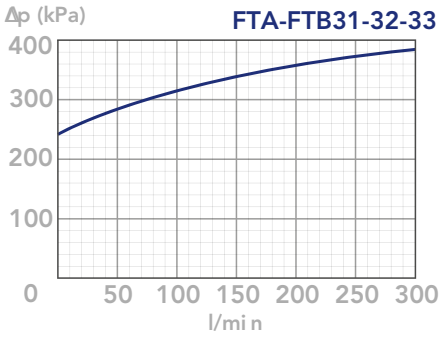
TRANSMISSION FILTERS

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 have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 Kg/dm^3; 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 FILTERS HYDRAULICS Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.