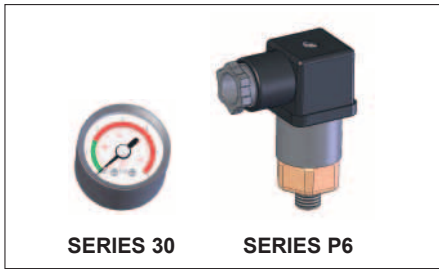




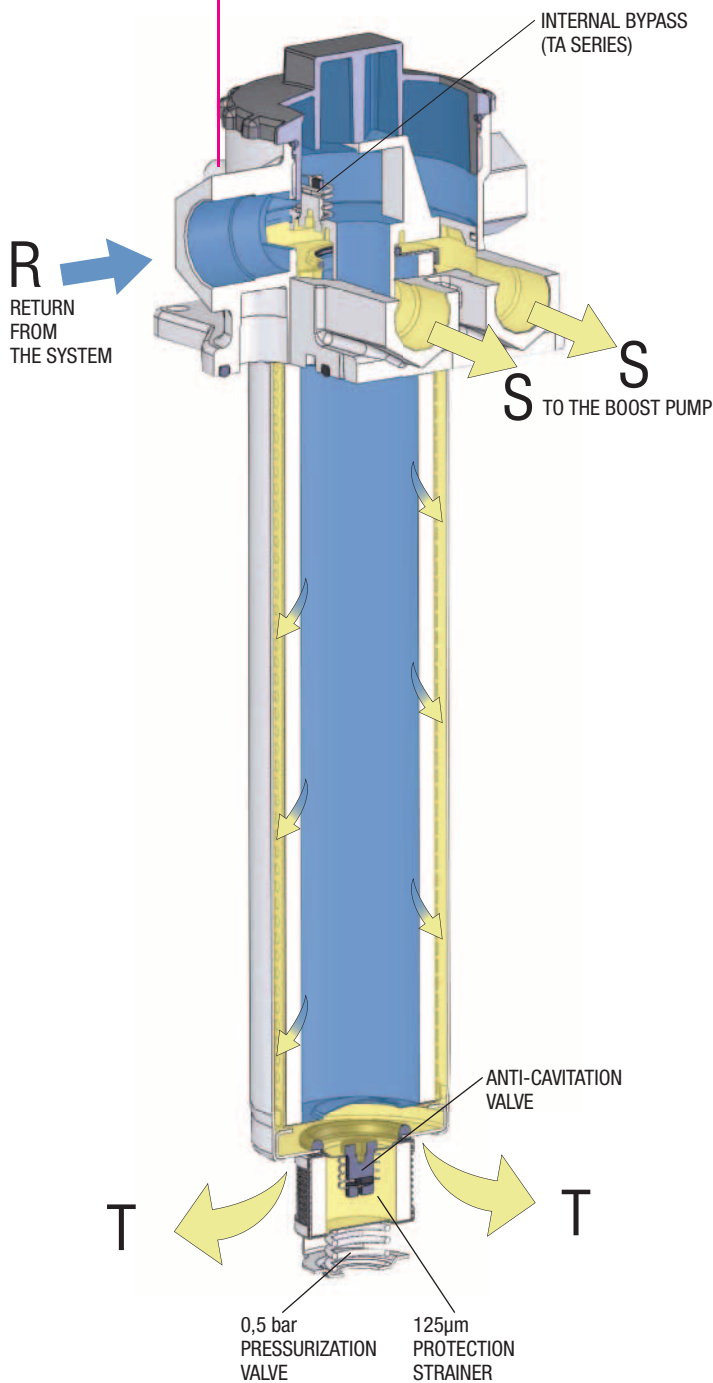
TA-TB
COMBINED
RETURN-SUCTION
FILTER



CLOGGING INDICATOR

A visual or electrical indicator is available as an option and allows to monitor the element condition. The port for the indicator is a standard feature.

CLOGGING INDICATOR



The **TA-TB** filters are designed to work in hydraulic systems combined with hydrostatic transmission, when the return flow is higher than the flow of the boost pump in any operating condition.

The oil from the return line of the system is filtered from the inside to the outside of the filter element and goes to the suction of the boost pump with a 0,5 bar pressurization. The exceeding flow rate goes into the reservoir.

A flow rate 50% higher than the flow required by the boost pump is recommended in normal operating conditions.

TA have an internal bypass system.
TB have external bypass to the reservoir.

ADVANTAGES

- One filter for two functions: filtering the oil returning from the hydraulic system and feeding the boost pump with cleanest oil
- Pressurization allows absolute filtration on the suction of the boost pump
- No cavitation risk
- Filter element working from inside to outside allows retained contamination to be completely removed when replacing the element

FILTER ELEMENT

The filter element is manufactured with filter medias selected in the UFI laboratory and mechanically supported to maintain the highest performance even at high differential pressures.



COMBINED
RETURN-SUCTION
FILTER

TA & TB



MATERIALS

Head:
Aluminium alloy

Cover:
Polyamide TA-TB23
Aluminium alloy TA-TB31-32-33

Bowl:
Steel

Seals:
NBR Nitrile

Indicator housing:
Brass

PRESSURE (ISO 10771-1:2002)

Max working: 1 MPa (10 bar)

Test: 1,5 MPa (15 bar)

Bursting: 3 MPa (30 bar)

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

BYPASS VALVE

Setting:
250 kPa (2,5 bar) \pm 10%

WORKING TEMPERATURE

From -25° to + 110° C

COMPATIBILITY (ISO 2943)

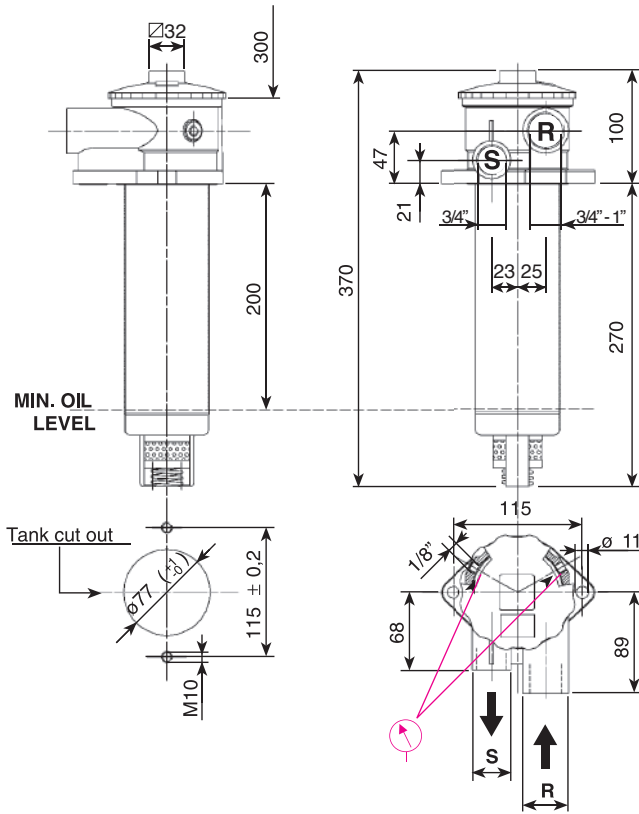
Full with fluids: HH-HL-HM-HV-HTG
(according to ISO 6743/4)
For fluids different than the above
mentioned, please contact our Sales
Department.

APPLICATION EXAMPLE

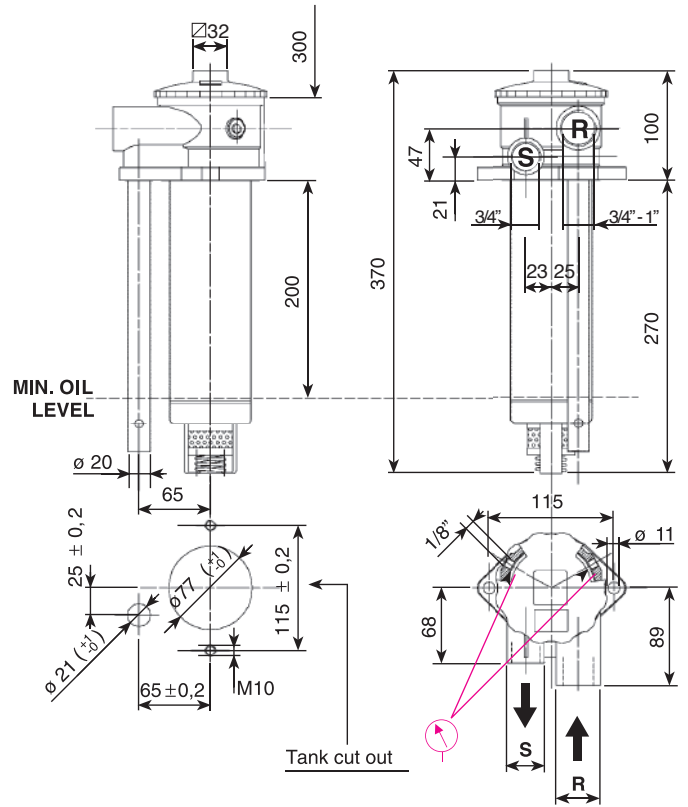


UFI
FILTERS
HYDRAULIC
DIVISION

**TA 23
WITH INTERNAL BYPASS**



**TB 23
WITH EXTERNAL BYPASS**

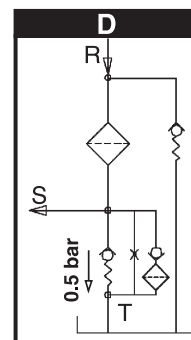
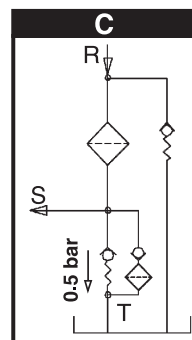
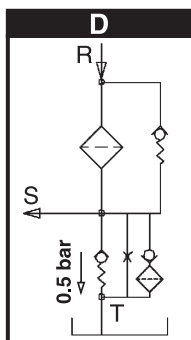
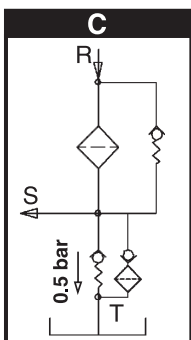
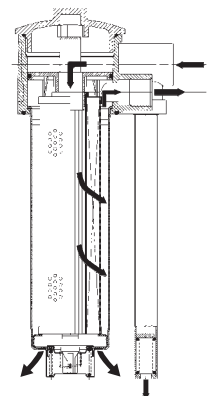
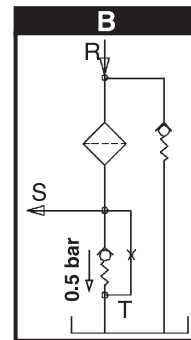
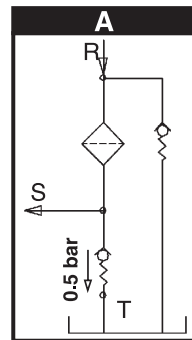
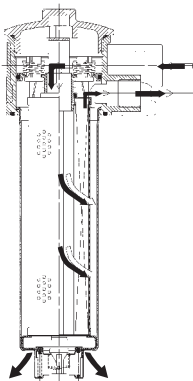
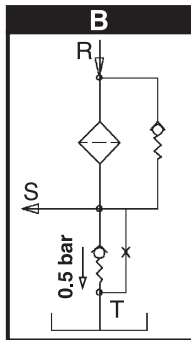
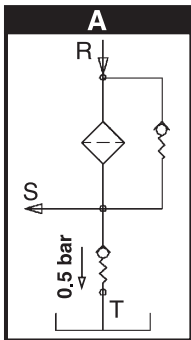


WORKING SCHEME

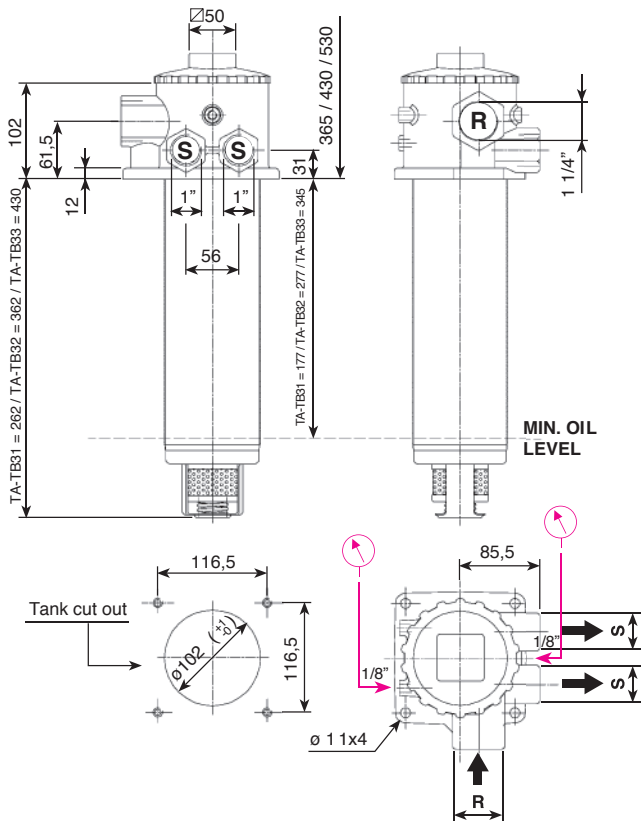
Options A and C
are recommended
for horizontal filter mounting.

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

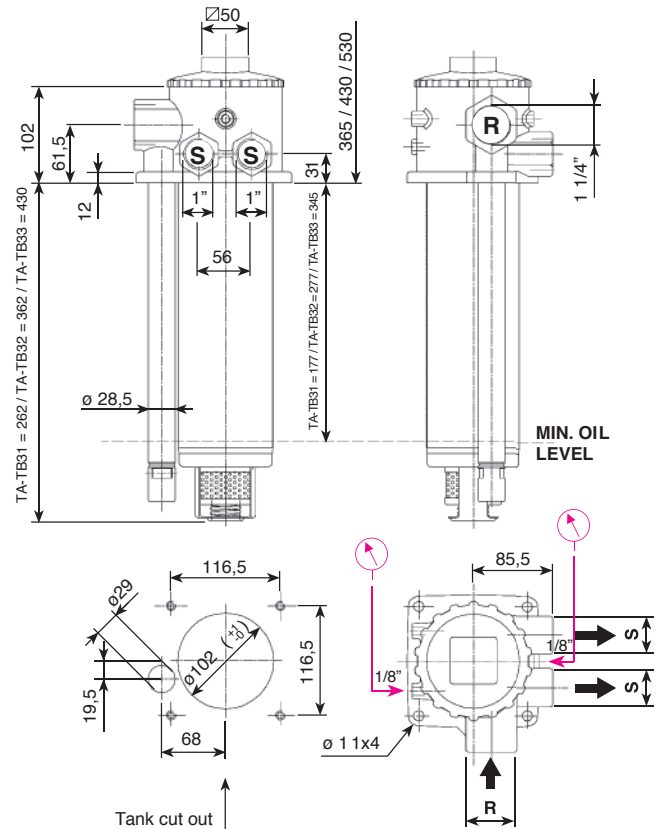
Options C and D
a 125 µm strainer protects the emergency
valve in case of brief lack of oil in the suction
of the boost pump (situation to be anyway
avoided)



**TA 31-32-33
WITH INTERNAL BYPASS**



**TB 31-32-33
WITH EXTERNAL BYPASS**

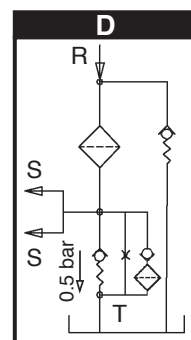
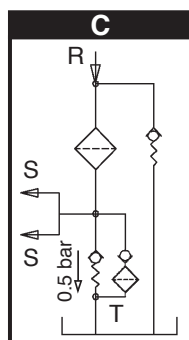
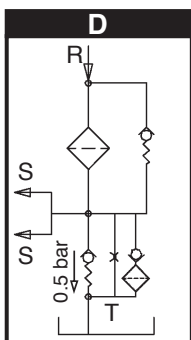
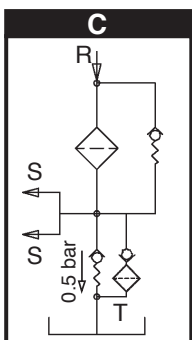
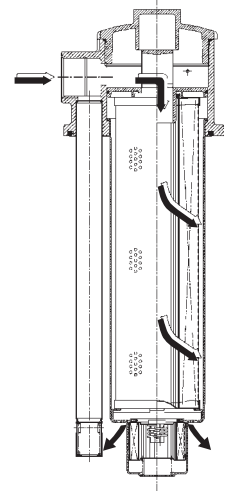
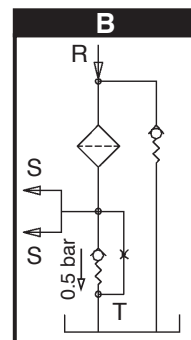
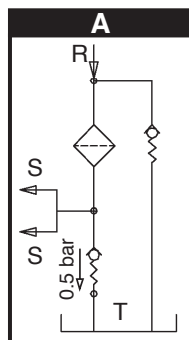
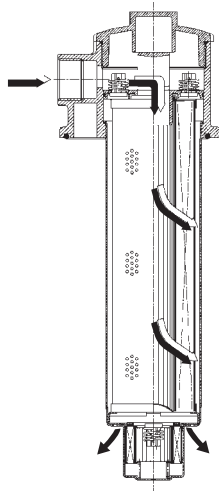
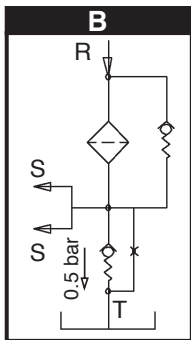
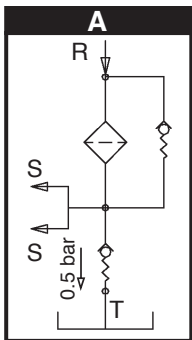


WORKING SCHEME

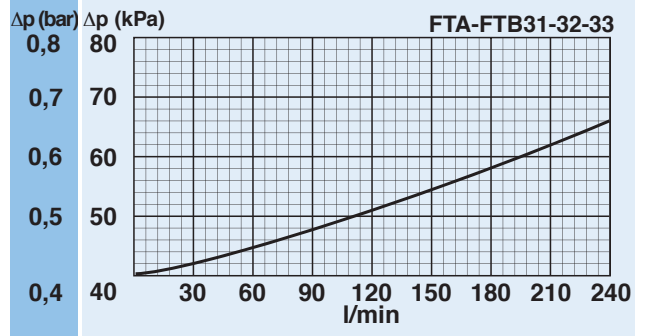
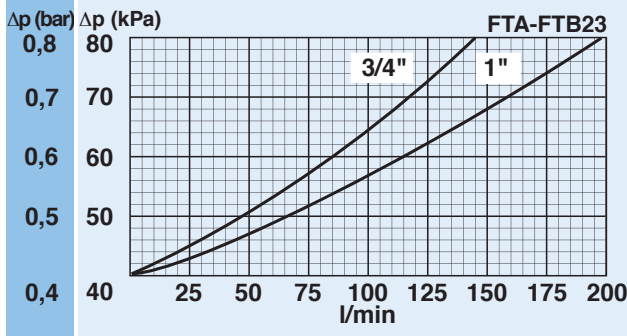
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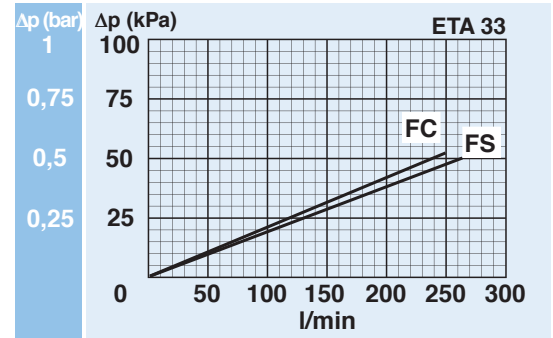
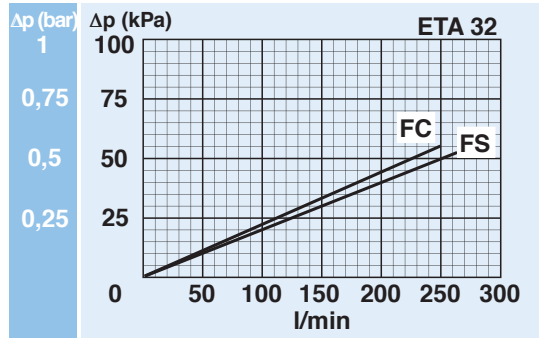
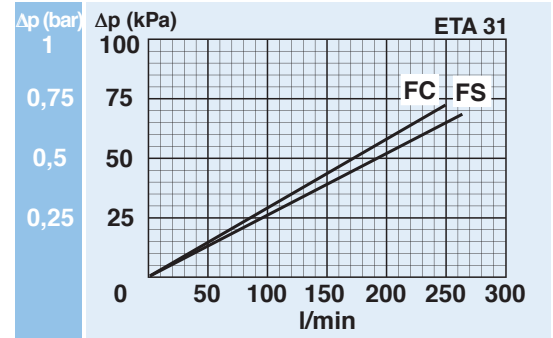
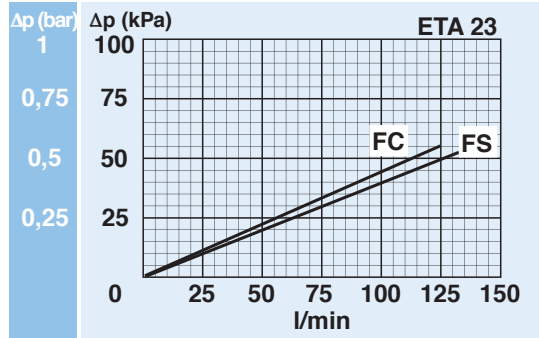
Options C and D
a 125 µm strainer protects the emergency
valve in case of brief lack of oil in the suction
of the boost pump (situation to be anyway
avoided)



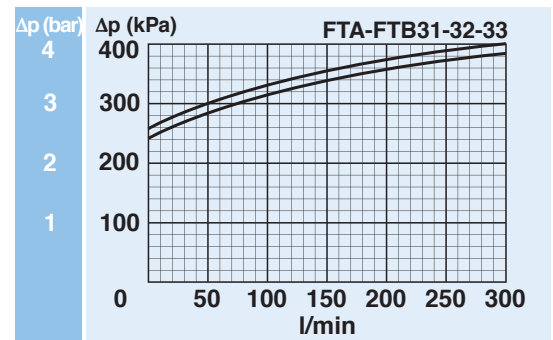
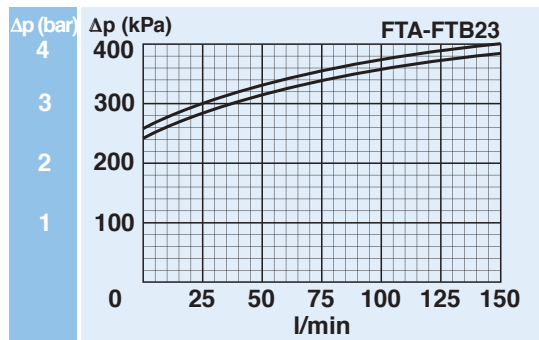
FILTER HOUSING PRESSURE DROP



CLEAN FILTER ELEMENT PRESSURE DROP



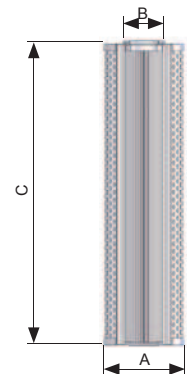
BYPASS VALVE PRESSURE DROP



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.

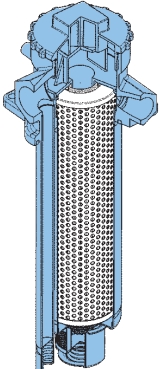
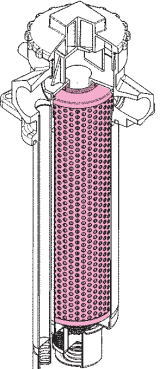
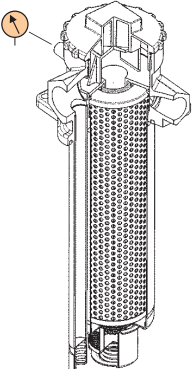
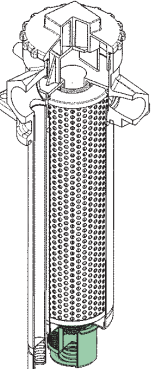
FILTER ELEMENT

	A	B	C	kg	Area (cm ²) 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



		TYPE					
		F = FILTER COMPLETE	F	F	F	F	
		B = FILTER HOUSING	B	B	B	B	ELEMENT E
T		FAMILY, NOMINAL SIZE & LENGTH				FAMILY SIZE & LENGTH T A	
		TA = with internal bypass	23	31	32	33	
		TB = with external bypass	23	31	32	33	
		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 = 250 kPa (2,5 bar) return	B	B	B	B	
N		SEALS				SEALS N	
		N = NBR Nitrile	N	N	N	N	N = NBR
		FILTER MEDIA				FILTER MEDIA	
		FC = fiber 12 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FC	FC	FC	FC	FC = fiber 12 $\mu\text{m}_{(c)}$
		FS = fiber 16 $\mu\text{m}_{(c)}$ $\beta > 1.000$	FS	FS	FS	FS	FS = fiber 16 $\mu\text{m}_{(c)}$
		CLOGGING INDICATORS					
		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 (For filling up see table "Ordering and option chart")

FILTER HOUSING	FILTER ELEMENT	CLOGGING INDICATOR	ACCESSORY
			
BT BN X	E T A N		



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





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e-mail: info@ufihyd.com - www.ufihyd.com

COMPANY
WITH QUALITY SYSTEM
CERTIFIED BY DNV
=ISO 9001/2000=

COMPANY WITH
ENVIRONMENTAL MANAGEMENT
SYSTEM CERTIFIED BY DNV
====ISO 14001====

