

## UFI FILTERS

Filtri Oleodinamici  
Filtri per trasmissioni

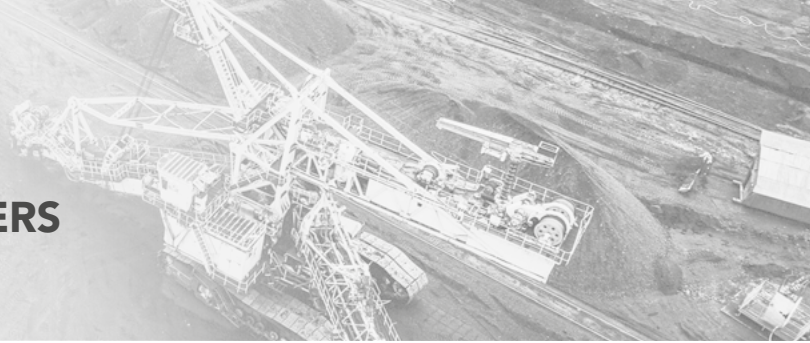


 HYDRAULIC  
COMPONENTS  
& FLUID CONTAMINATION  
CONTROL



# 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)  $\pm$  10%

### FLOW RATE

Qmax 240 l/min

### WORKING TEMPERATURE

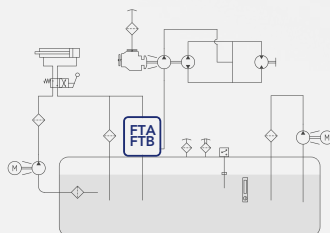
From -25° to +110° C

### 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

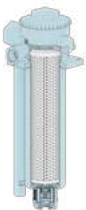
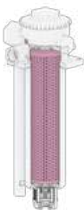
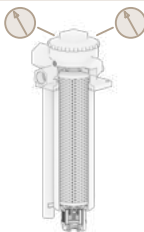
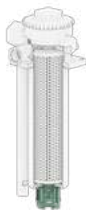
# FTA-FTB

## TRANSMISSION FILTERS

### ORDERING AND OPTION CHART

F	T	COMPLETE FILTER FAMILY				FILTER ELEMENT FAMILY				E	T	A
		A = with internal bypass										
		B = with external bypass										
		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 $\mu\text{m}_{(c)}$ >1.000 $\Delta p$ 2MPa (20 bar)	FC	FC	FC	FC						
		FS = FormulaUFI.MICRON 16 $\mu\text{m}_{(c)}$ >1.000 $\Delta p$ 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		

# FTA-FTB

## TRANSMISSION FILTERS

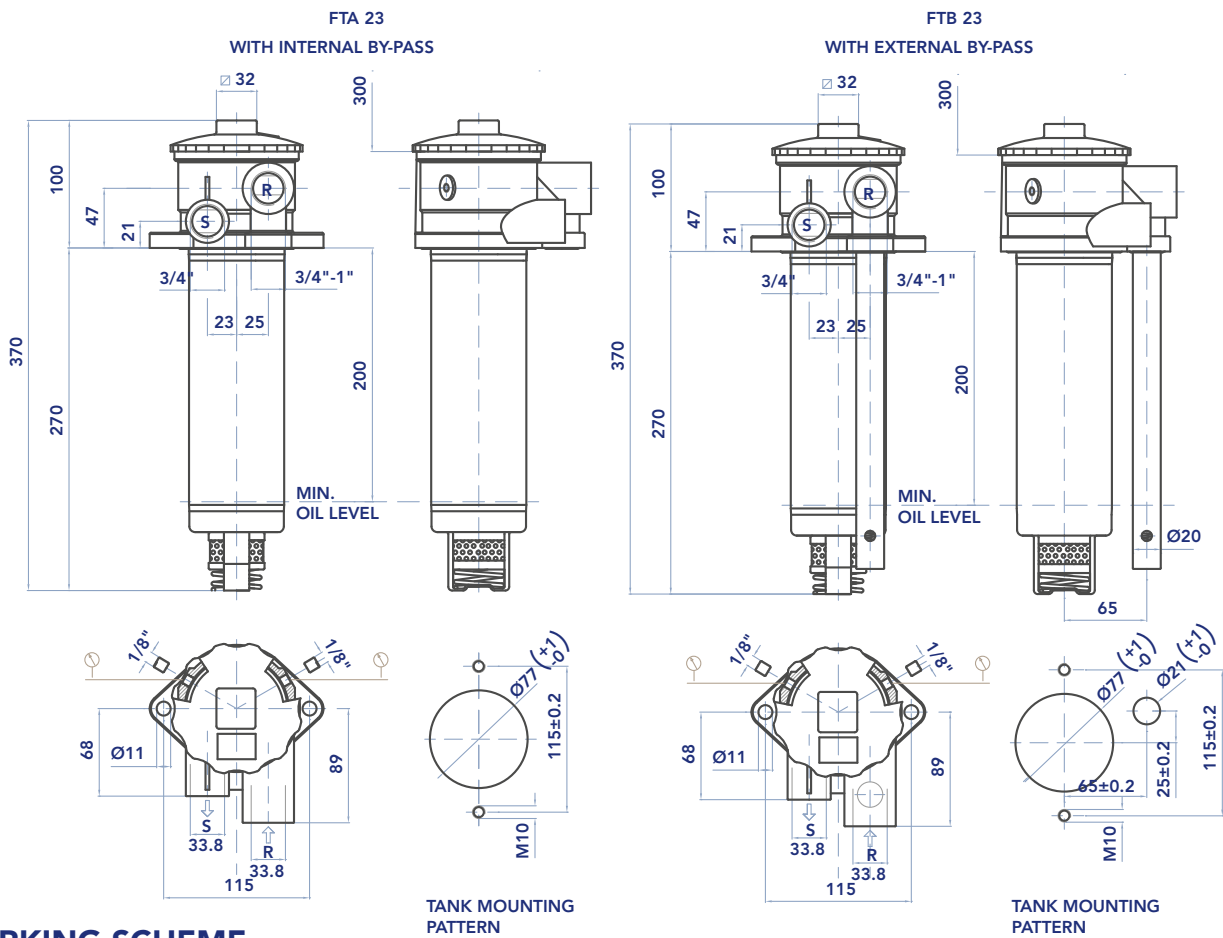


### SPARE SEAL KIT

	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

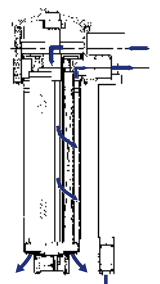
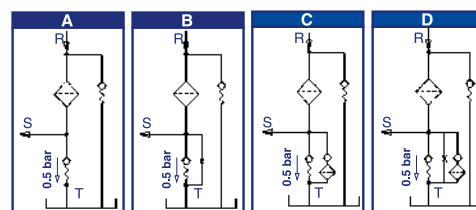
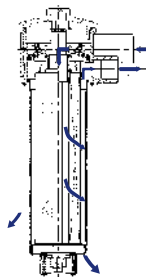
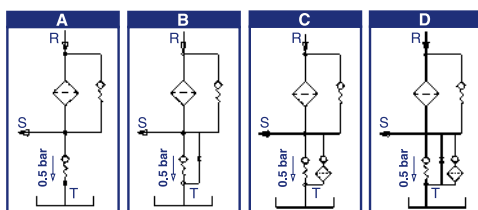


### WORKING SCHEME

Options A and C are recommended for horizontal filter mounting.

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

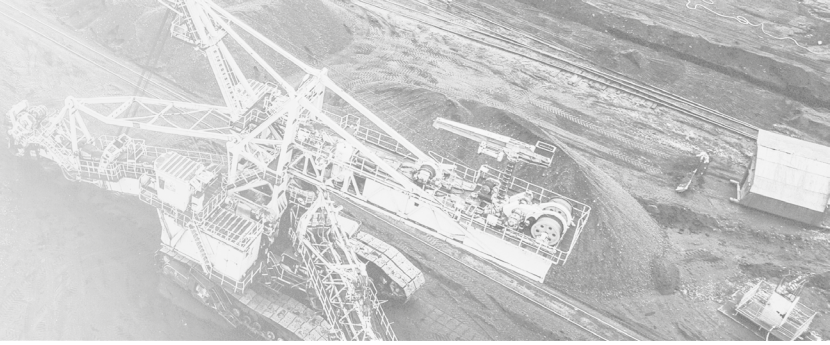
Options C and D a 125 µm strainer protects the emergency valve in case of brief lack of oil in the suction of the boost pump (situation to be anyway avoided)



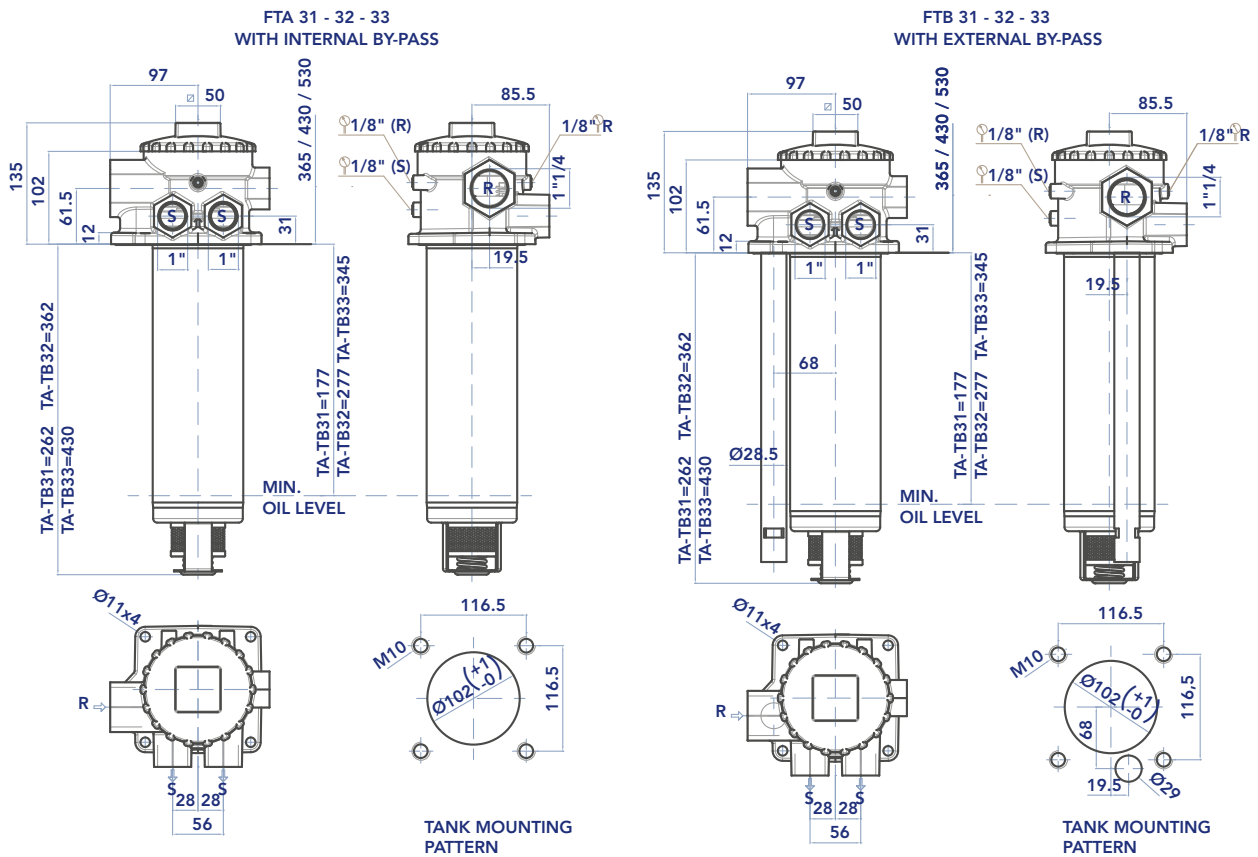


# FTA-FTB

## TRANSMISSION FILTERS



### INSTALLATION DRAWING

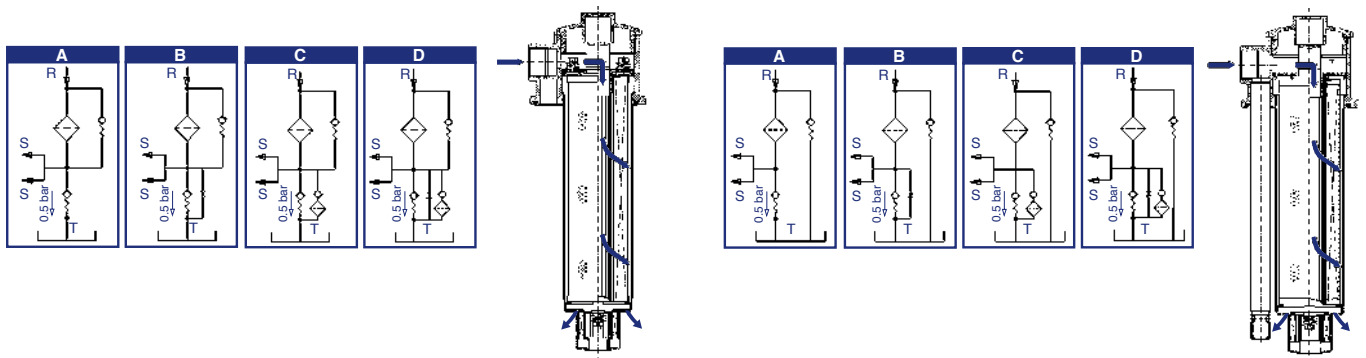


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# FTA-FTB

## TRANSMISSION FILTERS

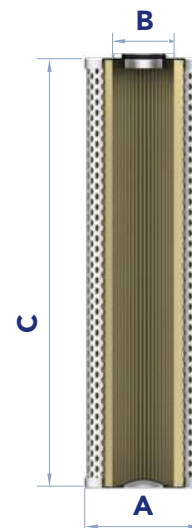


### FILTER ELEMENT

	AREA (cm <sup>2</sup> )				Media F+
	A	B	C	Kg	
<b>ETA23</b>	63,5	28	230	0,40	1.900
<b>ETA31</b>	90	40	232	0,55	2.800
<b>ETA32</b>	90	40	333	0,77	4.100
<b>ETA33</b>	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.
 

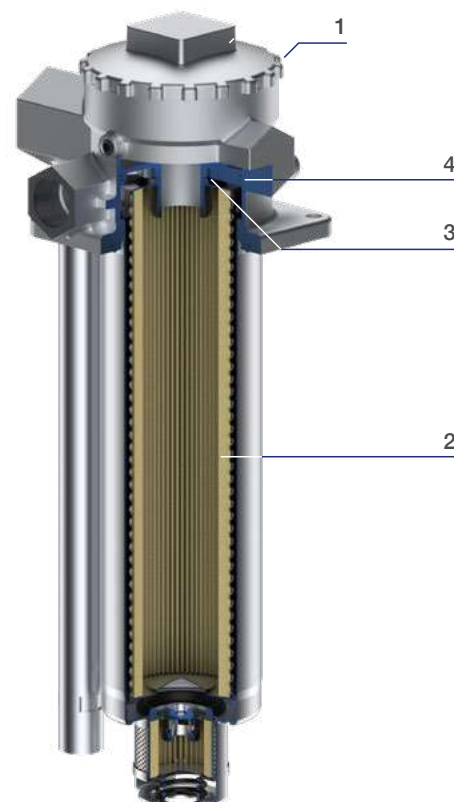
Use only original spare parts.
- 6) Lubricate the new filter element O-ring gasket (3) with oil
- 7) Insert the clean element on the handle, handling with care.
- 8) Check the handle O-ring gasket (4) and lubricate with oil. Insert the handle assembled with the filter element in the housing.
- 9) Check 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.



# FTA-FTB

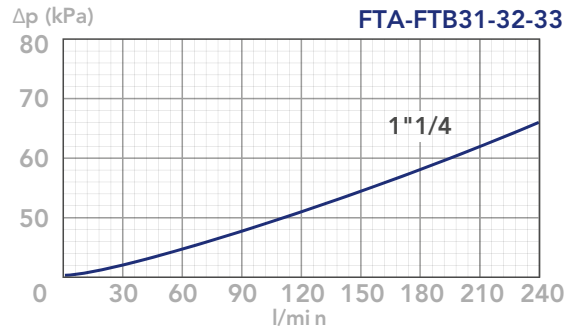
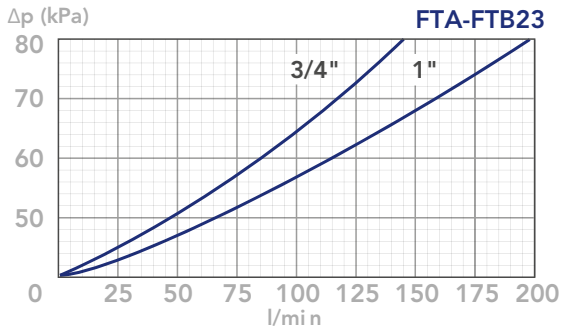
## TRANSMISSION FILTERS

### PRESSURE DROP CURVES ( $\Delta P$ )

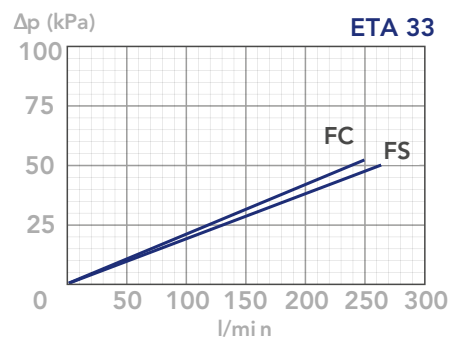
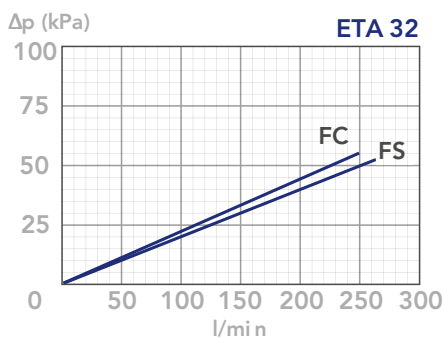
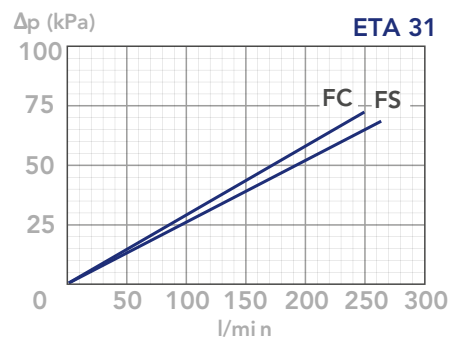
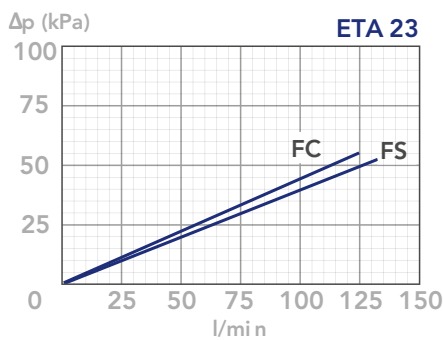
The "Assembly Pressure Drop ( $\Delta p$ )" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must

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)



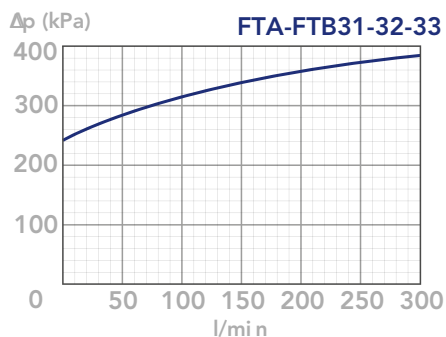
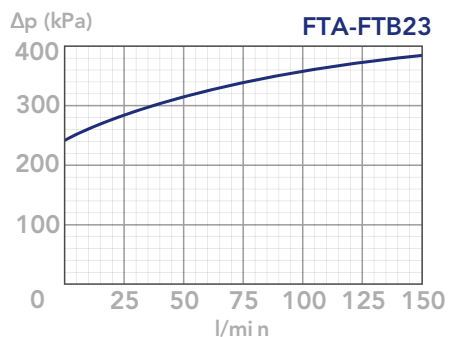
# FTA-FTB

## 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<sup>3</sup>; 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.





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