

Part number:

HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA
SYSTEMS
UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

XTT

PRESSURE FILTERS

DESCRIPTION

High pressure inline filter

MATERIALS

Head: Cast iron

Bowl: Steel

Bypass valve: Steel

Seals: NBR Nitrile (FKM Fluoroelastomer on request)

Indicator housing: Brass

PRESSURE

Max. working: 31,5 MPa (315 bar)

Collapse, differential for the filter element
series standard 2,1 MPa (21 bar)

BYPASS VALVE

Setting:

350 kPa (3,5 bar) \pm 10%

600 kPa (6 bar) \pm 10%

FLOW RATE

Qmax 95 l/min

WORKING TEMPERATURE

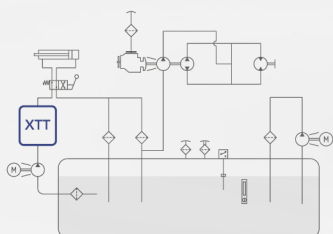
From -25° to +110° C

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 Customer Service

HYDRAULIC DIAGRAM



XTT

PRESSURE FILTERS

ORDERING AND OPTION CHART (SOFIMA CODIFICATION)

X	T	T	COMPLETE FILTER FAMILY				FILTER ELEMENT FAMILY	C	C	H
			SIZE & LENGTH	301	306	302	SIZE & LENGTH			
			FormulaUFI MEDIA*				FormulaUFI MEDIA*			
			FT = FormulaUFI.MICRON 5 $\mu\text{m}_{(ca)}$ $\beta > 1.000$	FT	FT	FT				
			FC = FormulaUFI.MICRON 7 $\mu\text{m}_{(ca)}$ $\beta > 1.000$	FC	FC	FC				
			FD = FormulaUFI.MICRON 12 $\mu\text{m}_{(ca)}$ $\beta > 1.000$	FD	FD	FD				
			FS = FormulaUFI.MICRON 16 $\mu\text{m}_{(ca)}$ $\beta > 1.000$	FS	FS	FS				
			FV = FormulaUFI.MICRON 21 $\mu\text{m}_{(ca)}$ $\beta > 1.000$	FV	FV	FV				
			SEALS				SEALS			
			1 = NBR Nitrile	1	1	1				
			2 = FKM Fluoroelastomer	2	2	2				
			BYPASS VALVE							
			C = 600 kPa (6 bar)	C	C	C				
			D = 350 kPa (3,5 bar)	D	D	D				
			PORT TYPE							
			B = BSP thread	B	B	B				
			M = Metric thread (only M 22 x 1,5)	M	M	M				
			PORT SIZE							
			3 = 1/2" (B) - M 22 x 1,5 (M)	3	3	3				
			4 = 3/4"	4	4	4				
			CLOGGING INDICATOR**							
			03 = port, plugged	03	03	03				
			5E = visual differential 500 kPa (5 bar)	5E	5E	5E				
			6E = electrical differential 500 kPa (5 bar)	6E	6E	6E				
			XD = electrical differential 240 kPa (2,4 bar)	XD	XD	XD				
X	X		ACCESSORI / ACCESSORIES							
			XX = no accessory available	XX	XX	XX				

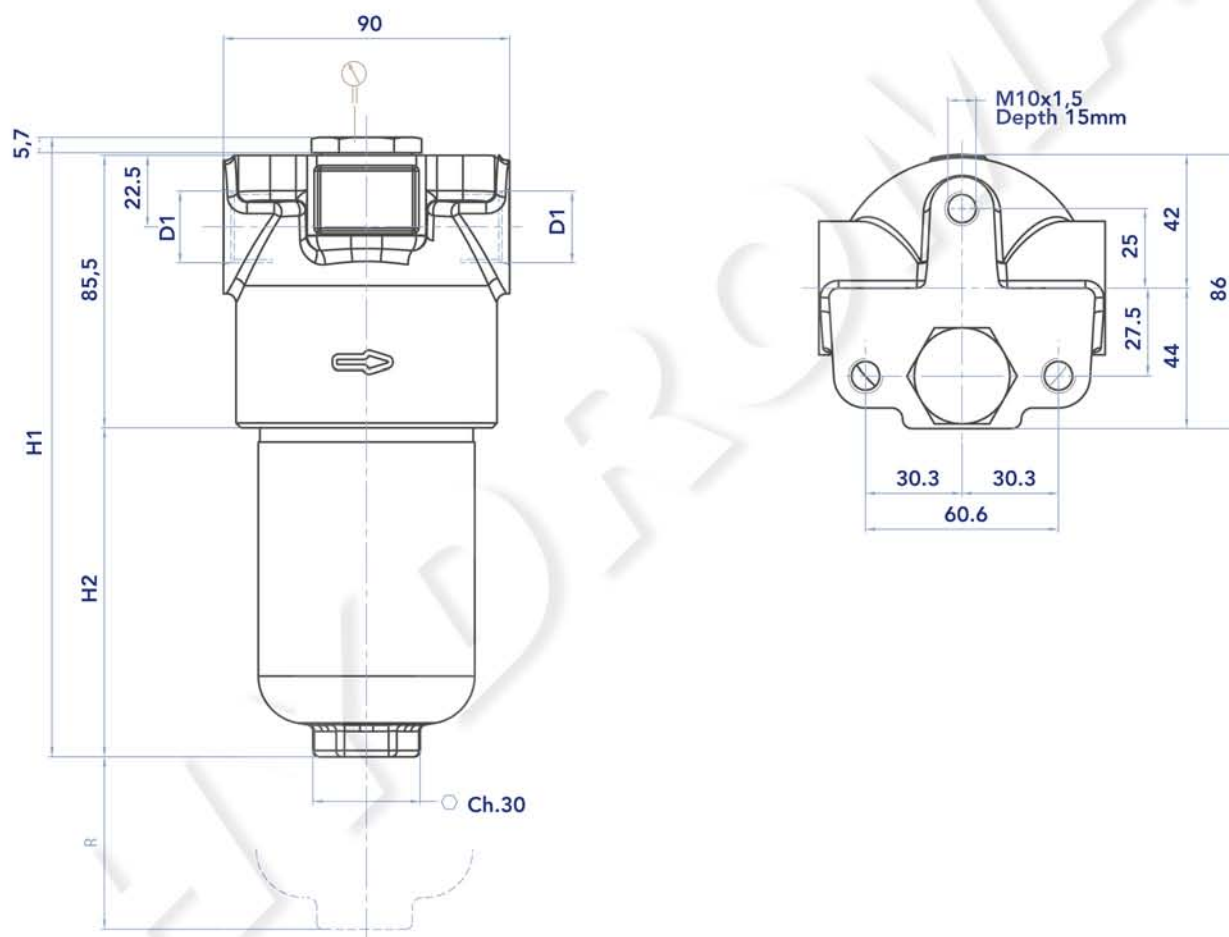
SPARE PARTS

FILTER HOUSING	FILTER ELEMENT	CLOGGING INDICATOR
		
B T T	C C H	

SPARE SEAL KIT

	NBR	FKM
XTT301 - 306 - 302	021.0137.2	021.0210.2

INSTALLATION DRAWING



FILTER HOUSING

	D1	H1	H2	R	Kg
XTT301	M22x1,5 - 1/2" - 3/4"	187	104,0	90,0	3,7
XTT306	M22x1,5 - 1/2" - 3/4"	234	149,0	90,0	4,2
XTT302	M22x1,5 - 1/2" - 3/4"	278	199,0	90,0	4,6

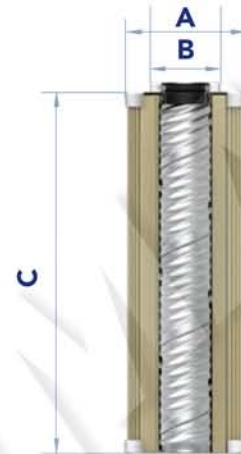
XTT

PRESSURE FILTERS

FILTER ELEMENT

	A	B*	C	Kg	AREA (cm ²) Media F+
CCH301	52	23,5	115	0,25	975
CCH306	52	23,5	161	0,30	1.380
CCH302	52	23,5	210	0,35	1.830

* Connection



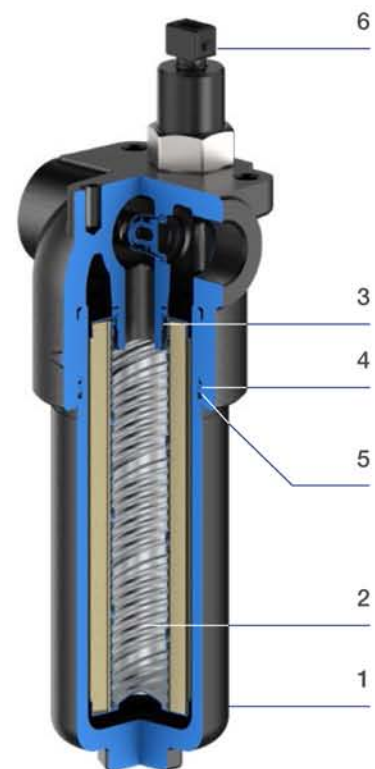
MAINTENANCE

- 1) Stop the system and verify there is no pressure in the filter.
- 2) Collect the oil inside the filter with a suitable container.
- 3) Unscrew the bowl (1) and clean it.
- 4) Remove the dirty filter element (2).
N.B. The used filter elements and oil dirty filter parts dirty are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorized Companies.
- 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 element o-ring gasket (3) with oil.
- 7) Insert the clean element into its seat with care.
- 8) Check the bowl o-ring condition (4) and lubricate with oil.
If damaged, check the seal kit part number in the spare seal kit table.
N.B. The anti-extrusion o-ring (5) must be positioned downwards (under the gasket).
- 9) Screw the bowl (1) until it stops, with a tightening torque of 70 Nm + 5/0.

Accessories:

Clogging indicator (6).

If damaged, unscrew and replace it (check the part number in the ordering and option chart). Lubricate the o-ring gasket with oil and tighten until it stops, with a tightening torque of 40 Nm +5/0.

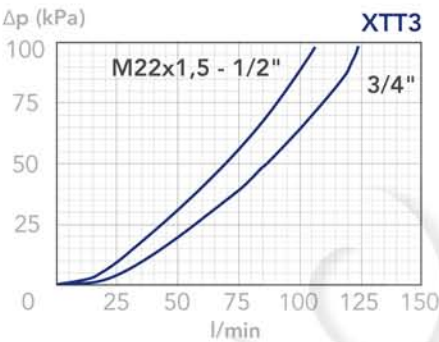


PRESSURE DROP CURVES (ΔP)

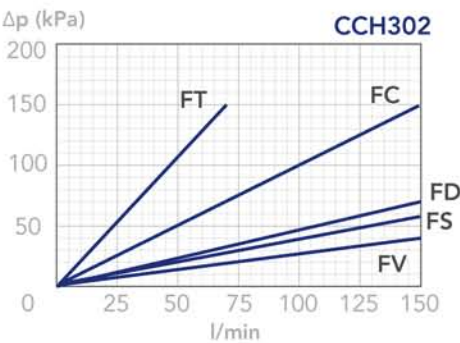
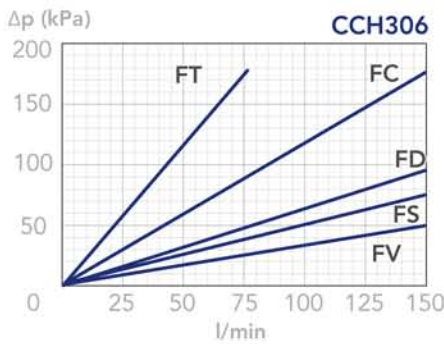
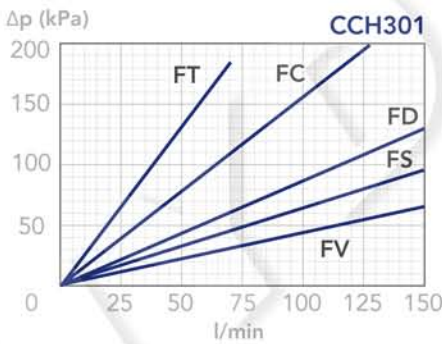
The "Assembly Pressure Drop (Δp)" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be

lower than 120 kPa (1,2 bar). In any case this value 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 WITH F+ MEDIA
(depending both on the internal diameter of the element and on the filter media)

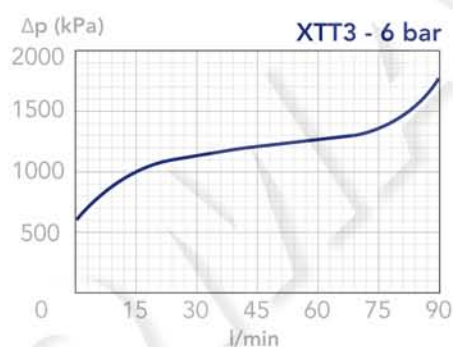
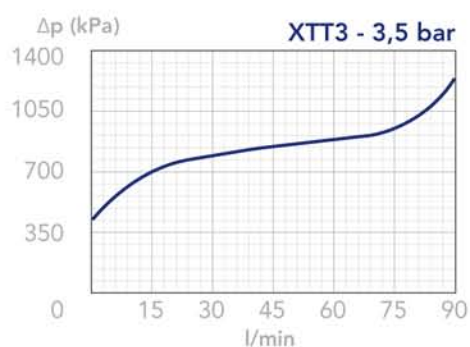


XTT

PRESSURE 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/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 FILTERS HYDRAULICS 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.