



## **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) ± 10% 600 kPa (6 bar) ± 10%

### **FLOW RATE**

Qmax 95 I/min

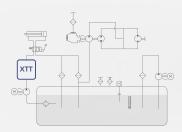
### **WORKING TEMPERATURE**

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**



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





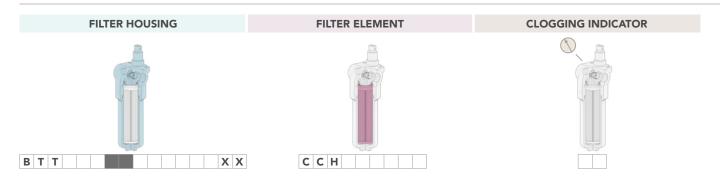
# **ORDERING AND OPTION CHART (SOFIMA CODIFICATION)**

Т	Т	COMPLETE FILTER FAMILY				FILTER ELEMENT FAMILY	С	С
		SIZE & LENGTH	301	306	302	SIZE & LENGTH		
		FILTER MEDIA				FormulaUFI MEDIA*		
		FT = FormulaUFI.MICRON 5 μm(c) β>1.000	FT	FT	FT			
		FC = FormulaUFI.MICRON 7 μm(c) β>1.000	FC	FC	FC			
		FD = FormulaUFI.MICRON 12 μm(c) β>1.000	FD	FD	FD			
		FS = FormulaUFI.MICRON 16 μm(c) β>1.000	FS	FS	FS			
		FV = FormulaUFI.MICRON 21 μm(c) β>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)	С	С	С			
		D = 340 kPa (3,4 bar)	D	D	D			
		PORT TYPE				_		
		B = BSP thread	В	В	В			
		M = Metric thread (only M 22 x 1,5)	М	М	М			
		PORT SIZE				_		
		3 = 1/2" (B) - M 22 x 1,5 (M)	3	3	3			
		4 = 3/4"	4	4	4			
		CLOGGING INDICATOR**				_		
		00 = without predisposition	00	00	00			
		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			
		7E = indicator 6E with LED 500 kPa (5 bar)	7E	7E	7E			
		T2 = elec. diff. 500 kPa (5 bar) with thermostat 30°C	T2	T2	T2			
		XE = electrical differential 500 kPa (5 bar)	XE	XE	XE			
		5D = visual differential 240 kPa (2,4 bar)	5D	5D	5D			
		6D = electrical differential 240 kPa (2,4 bar)	6D	6D	6D			
		7D = indicator 6D with LED 240 kPa (2,4 bar)	7D	7D	7D			
		T6 = elec. diff. 240 kPa (2,4 bar) with thermostat 30°C	T6	Т6	Т6			
		XD = electrical differential 240 kPa (2,4 bar)	XD	XD	XD			
Х	Х	ACCESSORI / ACCESSORIES				_		
		XX = no accessory available	XX	XX	XX			





# **SPARE PARTS**

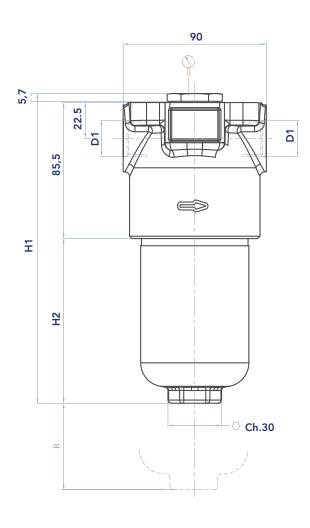


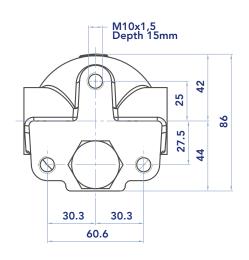
# **SPARE SEAL KIT**

	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"	195	110,0	90,0	3,7
XTT306	M22x1,5 - 1/2" - 3/4"	240	155,0	90,0	4,2
XTT302	M22x1,5 - 1/2" - 3/4"	290	205,0	90,0	4,6



#### **FILTER ELEMENT**

	A	B*	С	Kg	AREA (cm²) 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

<sup>\*</sup> Connection



# **MAINTENANCE**

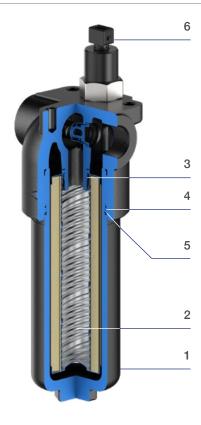
- Stop the system and verify there is no pressure in the filter.
- 2) Collect the oil inside the filter with a suitable container.
- 3) Unscrew the bowl (1) and clean it.
- 4) Remove the dirty filter element (2).
  - N.B. The used filter elements and oil dirty filter parts dirty are classified "Dangerous 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  $40 \, \text{Nm} + 5/0$ .



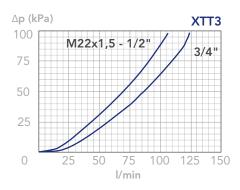


# PRESSURE DROP CURVES (ΔP)

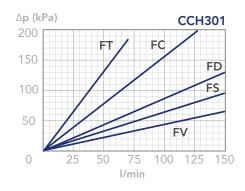
The "Assembly Pressure Drop ( $\Delta p$ )" is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must be

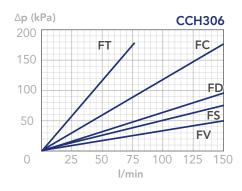
lower than 120 kPa (1,2 bar). In any case this value should never exceed 1/3 of the bypass valve setting.

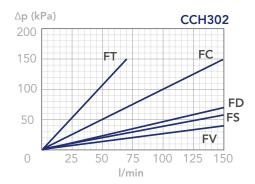
FILTER HOUSING PRESSURE DROP (mainly depending on the port size)



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



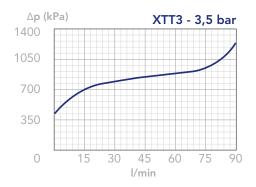






#### BYPASS VALVE PRESSURE DROP

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.