

The CT Series Cartridge Filter Housings are three-piece, all-metal housings with ring nut closures. These housings are designed to meet general industrial filtration needs. The CT Models are available with wetted surfaces in 316 stainless (head, sump and internals) and in one-high (CT101), two-high (CT102), or three-high (CT103) designs. Ring nuts for head to sump sealing are nickle plated brass to eliminate potential thread galling. A ring nut tightening tool is included. All CT Model heads have tapped mounting pads; mounting brackets are available as an accessory. The CT Models have liquid flow rates of up to 98,4 l/min, and a maximum operating pressure and temperature of 20 bar g at 90 °C. For air and gas service, CT Models have a maximum operating pressure and temperature of 12 bar g at 90 °C.

### **Standard Model Specifications**

Table 3 lists standard model materials of construction and connection sizes. Table 4 lists dimensions and shipping weight. All dimensions are nominal and can be used for determining overall space requirements. To find a dimension, locate the model you want in the left column of Table 4 and the selected dimension symbol (A through C) in the top row. Where the column and row meet is the model's dimension.

#### **Operating Parameters**

Table 1 lists standard model operating parameters for the CT models. In Table 1, the maximum operating pressure is the rating for the housing only. Actual filter operating temperature is dependent on the temperature capability of the filter cartridge.

#### **Flow Rates**

Table 2 lists the maximum recommended flow rates in liter per minute (l/min) for the CT101 and 102 Models. Use the data in Table 2 only as a guide in establishing housing flow capability; do not use it for filter sizing. Once you know the flow rate for a selected cartridge, then use Table 2 to check whether the housing's flow rates fall within the recommended guidelines. When selecting a filter's size, make sure you consider the amount of contaminant you want removed as well as the flow requirements; this ensures the longest possible cartridge life.

#### **Cartridge Requirements**

The CT Series Cartridge Filter Housings can use one, two, or three  $9\frac{3}{4}$ " equivalent single-length filter cartridges. The CT102 and 103 Models can also use one  $19\frac{1}{2}$ " filter cartridge and one  $29\frac{1}{4}$ " filter cartridge, respectively.

#### Pressure Equipment Directive 97/23/CE

CT vessels are in compliance with Non Coded Article 3.3. "Sound Engineering Practice". In addition, CT housings are only to be used for the filtration of Group 2 Liquids (and Group 1 Liquids at reduced operating pressures). Do not use CT housings with Group 1 (Hazardous) gas or vapour applications.

#### ATEX Directive 94/9/CE

These CT housings are approved for use in ATEX condition II/2/G/T5.

The operator of these housings must ensure that they are used in accordance with the requirements of these PED and ATEX directives at all times. Please consult your local 3M Purification representative for any other classifications or further information.



## Features and Benefits

Rugged, three-piece, all metal construction • provides long service life and quick & easy cartridge change-out.

#### Design flexibility

• Allows 1, 2 or 3-high cartridge models for use with 9 34, 19 1/2", or 29 1/4" filter cartridges.

Drilled and tapped mounting holes

• Ready for mounting bracket installation.

# **Applicable Filter Cartridges**

Activated Carbon	
Betafine <sup>™</sup> DP & XL Series	3
Betafine <sup>™</sup> PEG, PTG, PBC	G, PBP & PPG Series
Betapure <sup>™</sup> AU Series	Betapure <sup>™</sup> P Series
Betapure <sup>™</sup> BK Series	Betapure <sup>™</sup> NT Series
Micro-Klean <sup>™</sup> G Series	Micro-Klean™ RT Series
Micro-Klean <sup>™</sup> D Series	
LifeASSURE <sup>™</sup> 045SA, 020	SP, 045 SP & 020ST Series
LifeASSURE <sup>™</sup> PFS & MF	E Series





Table 1 : Operating Parameters			Table 2 : Max. Recommended Flow Rates (I/min)						
Maximum Operating Pressure	Maximum Operating Temperature	Flow Rate (I/min)	Inlet/ Outlet	Water	80 SSU	150 SSU	300 SSU	600 SSU	1000 SSU
20 bar g (Liquids)	90 °C	See Table	3/4" BSPT Female	60.6	53.0	49.2	45.4	37.9	30.3
12 bar g (Air/Gas)	90 0	2	1" BSP Female	98.4	83.3	75.7	68.1	60.6	49.2

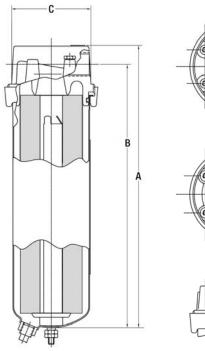
#### Table 3 : Standard Model Connection Sizes and Materials of Construction

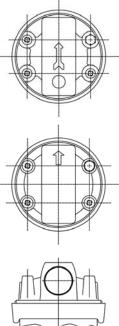
המוכים - כומותמות אוסטבו לטווורכנוטור סובכיס מות אומנרומוס טר לטוומו מכווטור								
	CT101	CT102	CT103	CT101	CT102	CT103		
Part Number	70020254853	70020254861	70020254879	70020254887	700202895	70020254903		
Connection Sizes	34" BSPT Female 1" BSP Female							
Materials of Construction	Materials of Construction							
Head	316 Stainless Steel - F0 = Acid pickle passivated surface finish							
Head Gasket	NB = Nitrile (Contact your local 3M Purification representative for other gasket materials)							
Ring Nut	Nickel Plated Brass							
Sump	316 Stainless Steel							
Centrepost with Seal Plate	316 Stainless Steel							
Drain Plug - 1/4" NPT	316 Stainless Steel							
Optional Mounting Bracket	Zinc Plated Steel (order separately)							

Table 4 : Dimensions							
Housing	Catalogue	А	В	С	Shipping	Volume	
Model	odel Number in mm				Weight	in liter	
CT101	70020254853	313	295	90	0.7 kg	1.83	
01101	70020254887	321	299	90	2.7 kg		
CT102	70020254861	560	543	90	0.41kg	3.30	
61102	70020254895	568	547	90	3.4 kg		
CT103	70020254879	808	791	90	4.0 kg	4.77	
01103	70020254903	816	794	90		4.//	

# Ordering Guide CT Range

Housing Model	Catalogue Number	Inlet/ Outlet	Housing Material	Mounting Bracket Kit	Ring Nut Tool
CT101 CT102 CT103	70020254853 70020254861 70020254879	<sup>3</sup> ⁄4" BSPT Female	316 Stainless Steel Head and 316 Stainless	Order	included
CT101 CT102 CT103	70020254887 70020254895 70020254903	1" BSP Female	Steel (wetted parts) Sump with Vent/Drain	Separately	Included





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