

Series 2000™ Sanitary Single-Tube Cartridge Housings

■ Housings used in critical clarification or sterile filtration applications

Certificate of Quality for this product provided in every box. See inside for details.



Series 2000 housings are designed to handle the most critical clarification and sterile filtration applications for pharmaceutical, biotechnology, food and beverage, and industrial processing applications. Typical applications include the sterile filtration of aqueous and solvent-based solutions, and sterile tank venting.

The Series 2000 sanitary 316L stainless steel housings feature single-tube 10", 20" and 30", T-line and in-line versions. All come standard with sanitary vents and drains. In addition to the standard single-tube versions, the Series 2000 line offers Millidisk™, Milligard®, and Optiseal™ housings for low volume applications. For higher volume applications, 3-, 6- and 12- tube housings are available. ASME code stamped housings are also available.

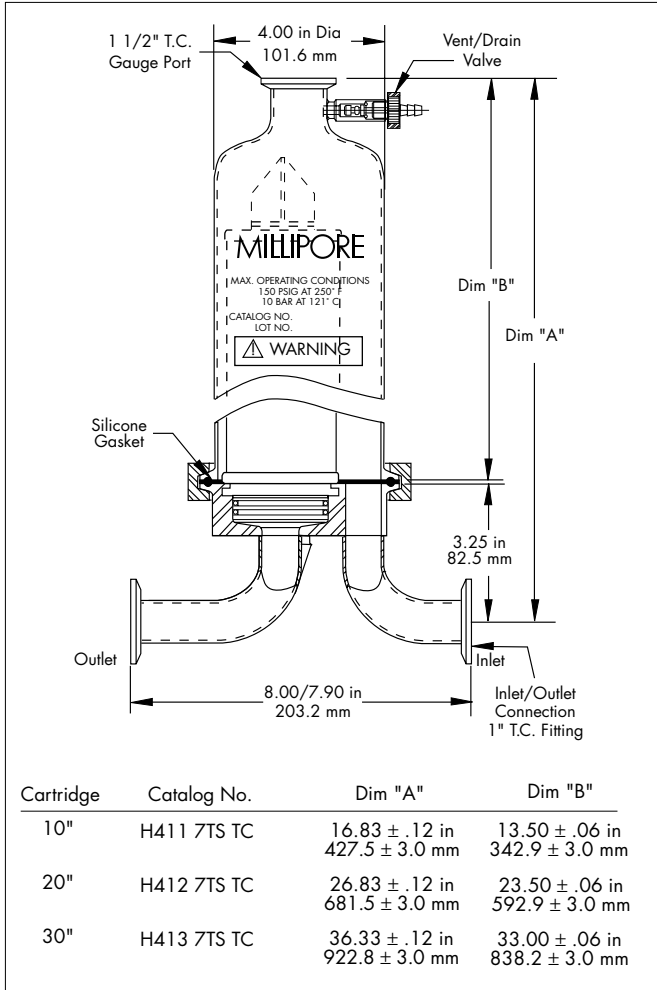
Sanitary Design

All fluid surfaces are 316L stainless steel polished to a high quality, sanitary finish of ≤ 20 Ra and electropolished. All process connections are sanitary TC-type, and all sealing materials are Title 21 CFR-compliant to meet FDA requirements for food and beverage processing. Vent and drain valve assemblies are designed without exposed NPT threads and feature EPDM insulation for both safety and ease of use.

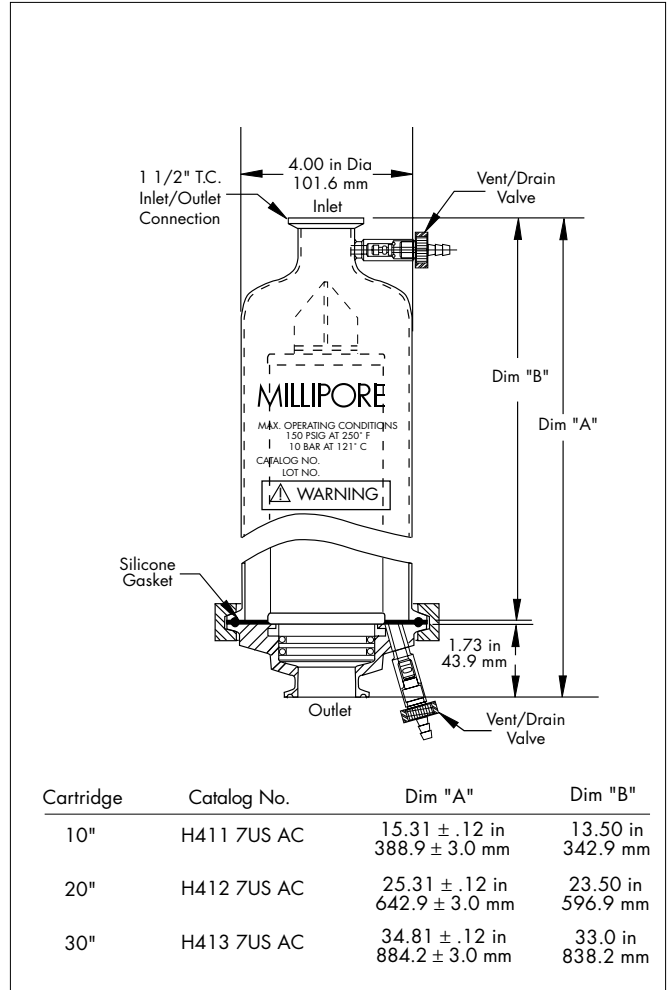
Certification to Quality Standards

Each housing is tested to ensure that it meets specifications for quality standards. To demonstrate Millipore's commitment to quality, each Series 2000 housing includes a Certificate of Quality certifying that the housing conforms to specifications for material, surface finish, pressure rating and dimensions. Each certificate is lot and catalogue number specific.

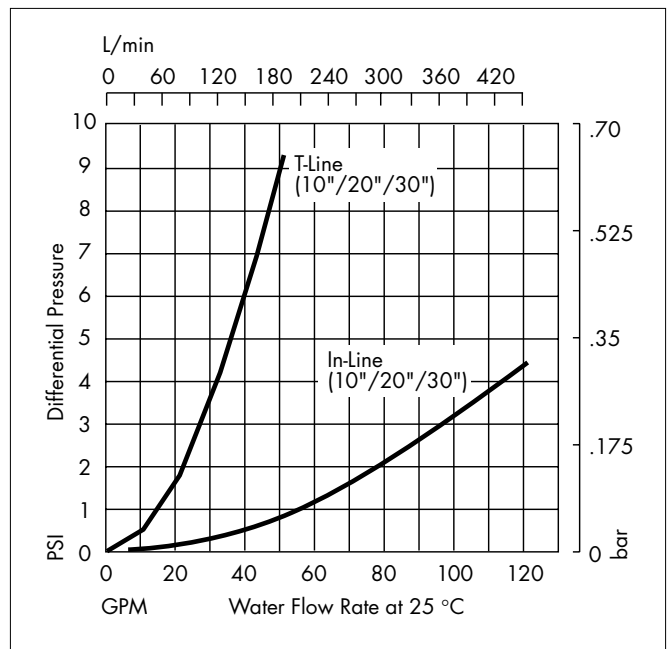
MILLIPORE



T-line single-tube cartridge housing



In-line single-tube cartridge housing



Pressure drop vs. water flow rate at 25 °C for single-tube housings

Specifications

Materials of Construction

<i>Housing</i>	316L stainless steel
<i>Clamp</i>	304 stainless steel
<i>Seal Materials</i>	Silicone O-rings; Teflon® vent sealing tip
<i>Vent Insulators</i>	EPDM

Maximum Operating Conditions

<i>Housing</i>	(10.5 kg/cm ²) 150 psig at (121 °C) 250 °F
<i>Steam Jacket</i>	(3.5kg/cm ²) 50 psig at (149 °C) 300 °F

Surface Finish

<i>Wetted Surfaces</i>	Electropolished < 20 Ra. All welds are ground smooth.
<i>Exterior Surfaces</i>	Electropolished to a sanitary finish. The entire housing is passivated for maximum corrosion resistance.

Connections

<i>Inlet/Outlet</i>	T-line: 1" sanitary flange In-line: 1 1/2" sanitary flange
<i>Gauge Port</i>	1 1/2" TC sanitary flange
<i>Cartridge</i>	Code 7 (2-226 double O-ring with locking tabs), Code 0 (2-222 double O-ring)
<i>Dome to Base</i>	4" TC sanitary gasket pressure seal
<i>Steam Jacket</i>	1/2" NPT

Sterilization Recommendations

Series 2000 housings may be in-line steam sterilized, autoclaved, or hot water sanitized. To assure sterility, Series 2000 single-tube cartridge housings are qualified for an autoclave cycle of 126 °C for 60 minutes.

Ordering Information

Description		Catalogue No.
Series 2000 Single-Tube Housings		
T-line	10"	H411 7TS TC
	20"	H412 7TS TC
	30"	H413 7TS TC
In-line	10"	H411 7US AC
	20"	H412 7US AC
	30"	H413 7US AC
T-line jacketed	10"	H411 7US EC
In-line jacketed	10"	H411 7US CC
Accessories		
Housing legs (3 pcs); T-line housings only		17408
4" TC clamp, 3-piece segmented		P34303
1 1/2" TC clamp		YY20 040 45
1 1/2" TC end cap		YY20 040 17
Vent/drain valve assembly		17402
Sanitary pressure gauge; 0 – 7 bar (0 – 100 psi)		YY18 010 20
Wall bracket set, stainless		YY14 122 21
4" TC gaskets		
Silicone	10/pk	17391X4
Viton®	2/pk	17391X1
EPDM	10/pk	17391X2
Viton encapsulated with Teflon	2/pk	17391X3
1 1/2" TC gaskets		
Silicone	10/pk	YY20 040 55
Viton	10/pk	YY30 001 94
EPDM	10/pk	HGTC 150 EP
Teflon	10/pk	YY20 040 57
Vent/drain valve seal kits		
Silicone	10/pk	17403X1
Viton	10/pk	17403X2
EPDM	10/pk	17403X3

To Place an Order or Receive Technical Assistance

For additional information call your nearest Millipore office.

In the U.S. and Canada, call toll-free **1-800-MILLIPORE (1-800-645-5476)**

In the U.S., Canada and Puerto Rico, fax orders to **1-800-MILLIFX (1-800-645-5439)**

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