



## Series 4000<sup>™</sup> Single-Round Filter Housings

# Reliable filter housing design to meet all your biopharmaceutical filtration needs.

The Series 4000<sup>™</sup> single-round filter housing line provides a range of pre-configured designs to meet all your process and filtration needs. It is available in T-Line and In-Line designs, with a wide range of tube sizes.

Series  $4000^{\text{TM}}$  filter housings make it easy for you to select and purchase the right filter housing for a wide range of filtration applications.

Using proven stainless steel components to build all housings, ensures consistent quality and performance. The 5, 10, 20, and 30 inch sizes, are available with a Code 7 base dedicated to critical applications.

A full range of cartridge filters is also available to suit your application requirements and complement your housing choice.

### How to make your choice:

EMDMillipore.com/DE/en/20140103\_194216



## **Benefits**

**Direct availability:** The Series 4000<sup>™</sup> filter housings are available and ready to be shipped to your location.

**Compliance:** All filter housings are shipped with an enhanced documentation package (User Guide, Certificate of Quality, Safety Instructions...) to ensure regulatory compliance. **Design:** Series 4000<sup>™</sup> filter housings are designed to low dead volume, minimizing product loss and enhancing cleanability.

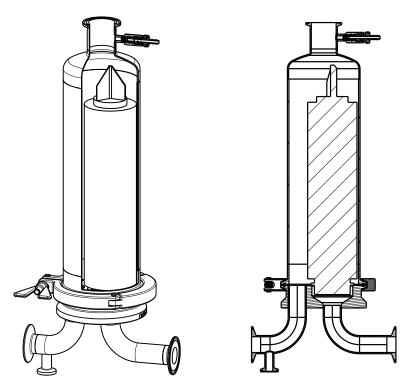
**Support:** Our technical service experts provide unparalleled support and service, helping you find the filter housing that will best fit your needs.



## **Standard Housing Type**

## Series 4000<sup>™</sup> T-Line Single-Round Housings

#### Exploded view with cartridge



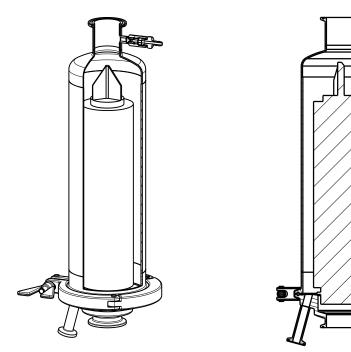
#### **T-Line Connection**

Typically liquid applications

Can also be used for compressed gas filtration

#### Series 4000<sup>™</sup> In-Line Single-Round Housings

#### Exploded view with cartridge



#### In-Line Connection

Typically venting applications

## **Specifications**

Description	North America and Europe
Pressure Equipment Directive	Series 4000 <sup>™</sup> housings are designed and manufactured according to Sound Engineering Practice (SEP)
	Series 4000 <sup>™</sup> 30 inches housings comply with the essential safety requirements of product Cat I of the Pressure Equipment Directive (2014/68/EU) for Gaz group 2 and liquid group 1, and will be CE marked. Otherwise, all other Series 4000 <sup>™</sup> housings are designed and manufactured according to Sound Engineering Practice (SEP), and must not be CE marked. Series S4000 <sup>™</sup> housing are not CRN compliant and not Atex compliant.
Biocompatibility	<b>FDA Indirect Food Additive Requirements</b> All seal materials meet the FDA Indirect Food Additive requirements cited in 21 Code of Federal Regulations, section 177–2600 for rubber compounds or 177.1550 for fluorocarbon resin, based on information provided by raw material suppliers
	USP <88> Class VI Seal materials* meet the criteria for Class VI testing based on USP <88> Biological Reactivity, <i>in vivo</i> * <i>Exception of PTFE seal material</i>
	Animal origin statement Available
Operating Conditions Range	Design temperature Maximum allowed temperature : 150°C (293°F)
	<b>Design pressure</b> Maximum allowed pressure : 10 bar (145 psig)
Materials of Construction	Wetted parts (all surfaces in contact with the product) 316 L (EN 1.4404) stainless steel Bell to base gasket + plunger valve seal (if applicable) : silicone Plunger valve seal tip: PTFE (if applicable)
	Non wetted part Clamp 304 stainless steel
Surface finish for stainless steel wetted parts	<b>Electropolished</b> Ra ≤ 0.38 μm (15 μinch) internal Ra ≤ 0.8 μm (32 μinch) external
Cartridge compatibility	Adapter code Code 7
	Compatible cartridges have two 2-226 O-rings and locking tabs
	Cartridge diameter Recommended: 6.9 cm (2.7 inch)
Clamp	4 in. sanitary flange, 304 stainless steel clamps
Base Type	Wire form or recessed base
Design	T-Line, In-Line
Quality	All housings are shipped with a complete Documentation Package guaranteeing conformance to stated requirements.
	Main content of the Documentation Package: User Guide Safety Instructions Chemical compatibility Drawing Certificate of Quality and Declaration of Conformity to CE/PED Surface Finish and Pressure test statements Material Certificates Weld Maps WPS (Welding Procedure Specification)/WPQR (Welding Procedure Qualification Record) and Welders Certificates

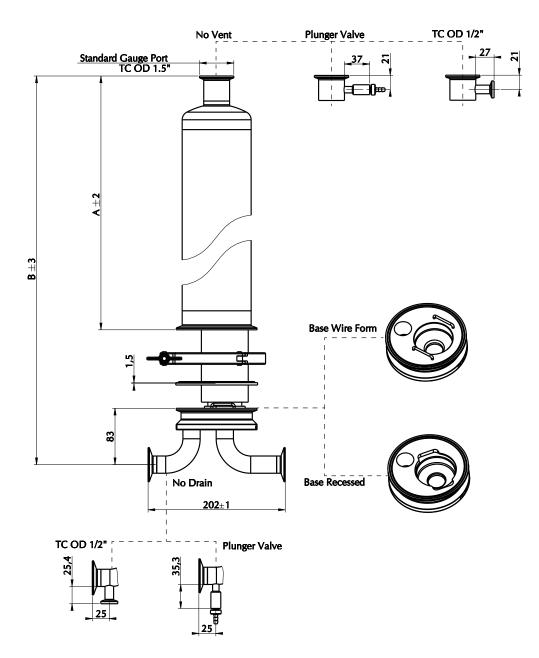
#### **Example of** Name Plate

Example for Series 4000<sup>™</sup> Housing 30"



\*CE Marking only on housing 30"

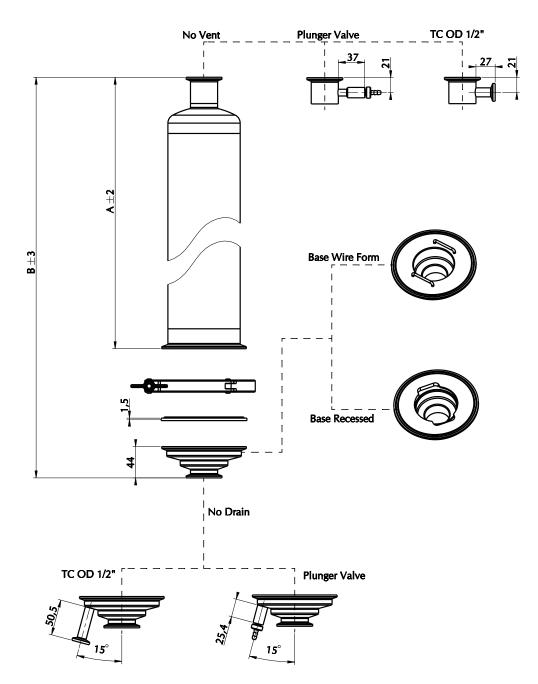
## **T-Line Housing Dimensions**



Cartridge Length	Dimension A mm (inch)	Dimension B mm (inch)	PED Application	PED Category
5''	239 (9.409)	323 (12.717)	_	Art.4.3
10''	366 (14.409)	450 (17.717)	Liquids	No CE
20''	620 (24.409)	704 (27.717)	Group 1 Gaz Group 2	marking
20//	0(1 (21 525)	045 (27 205)		Cat 1
30′′	861 (31.535)	535) 945 (37.205)		CE marking

Inlet/Outlet Connections	Dimension mm (inch)
TC/TC	202 mm (7.953 inch)

## **In-Line Housing Dimensions**



Cartridge Length	Dimension A mm (inch)	Dimension B mm (inch)	PED application	PED category
5′′	239 (9.409)	284 (11,18)		Art. 4.3 No CE marking
10''	366 (14.409)	411 (16,18)	Liquids group 1 gaz group 2	
20''	620 (24.409)	665 (26,18)		

## **T-Line Ordering Information**

Housing S4000 <sup>™</sup> Single Round T-Line	Height	Cat. No.	Code 7	Vent	Drain
	5"	H1WT5G01CC	WIRE FORM	FERRULE TC OD $^{1}/_{2}$	FERRULE TC OD 1/2
		H1WT5G01NN	WIRE FORM	NO VENT	NO DRAIN
		H1WT5G01PC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD $^{1}/_{2}$
		H1WT5G01PN	WIRE FORM	PLUNGER VALVE	NO DRAIN
		H1WT5G01PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
		H1WT1G01CC	WIRE FORM	FERRULE TC OD 1/2	FERRULE TC OD $^{1}/_{2}$
		H1WT1G01NN	WIRE FORM	NO VENT	NO DRAIN
		H1WT1G01PC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD 1/2
		H1WT1G01PN	WIRE FORM	PLUNGER VALVE	NO DRAIN
	10"	H1WT1G01PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
Inlet/outlet TC OD 1 inch		H1RT1G01CC	RECESSED	FERRULE TC OD 1/2	FERRULE TC OD 1/2
Tube = 25.4 mm , TC = 50.5 mm		H1RT1G01PN	RECESSED	PLUNGER VALVE	NO DRAIN
		H1RT1G01PP	RECESSED	PLUNGER VALVE	PLUNGER VALVE
		H1RT1G01PPL	RECESSED	PLUNGER VALVE	PLUNGER VALVE
	20"	H1RT2G01NN	RECESSED	NO VENT	NO DRAIN
		H1RT2G01PN	RECESSED	PLUNGER VALVE	NO DRAIN
		H1WT2G01PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
	30"	H1WT3G01CC	WIRE FORM	FERRULE TC OD <sup>1</sup> / <sub>2</sub>	FERRULE TC OD $^{1}/_{2}$
		H1WT3G01PC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD 1/2
		H1WT3G01PN	WIRE FORM	PLUNGER VALVE	NO DRAIN
		H1WT3G01PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
		H1RT3G01PN	RECESSED	PLUNGER VALVE	NO DRAIN
Inlet/outlet TC DIN DN 25 Tube = 29 mm, TC = 50.5 mm	10"	H1WT1F25PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE

Note: the catalogue number H1RT1G01PPL is available with legs

## **In-Line Ordering Information**

Housing S4000™ Single Round In-Line	Height	Cat. No.	Code 7	Vent	Drain
		H1WS5G1HCC	WIRE FORM	FERRULE TC OD $^{1}/_{2}$	FERRULE TC OD $^{1}/_{2}$
		H1WS5G1HNC	WIRE FORM	NO VENT	FERRULE TC OD $^{1}/_{2}$
		H1WS5G1HNN	WIRE FORM	NO VENT	NO DRAIN
	5"	H1WS5G1HNP	WIRE FORM	NO VENT	PLUNGER VALVE
	5	H1WS5G1HPC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD $^{1}/_{2}$
		H1WS5G1HPP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
		H1RS5G1HNC	RECESSED	NO VENT	FERRULE TC OD $^{1}/_{2}$
		H1RS5G1HPP	RECESSED	PLUNGER VALVE	PLUNGER VALVE
		H1WS1G1HCC	WIRE FORM	FERRULE TC OD <sup>1</sup> / <sub>2</sub>	FERRULE TC OD 1/2
		H1WS1G1HNC	WIRE FORM	NO VENT	FERRULE TC OD $^{1}/_{2}$
		H1WS1G1HNN	WIRE FORM	NO VENT	NO DRAIN
		H1WS1G1HNP	WIRE FORM	NO VENT	PLUNGER VALVE
Inlet/outlet TC OD 1.5 inch Tube = $38.1 \text{ mm}$ , TC = $50.5 \text{ mm}$	10"	H1WS1G1HPC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD $^{1}/_{2}$
		H1WS1G1HPP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
		H1RS1G1HCC	RECESSED	FERRULE TC OD $^{1}/_{2}$	FERRULE TC OD 1/2
		H1RS1G1HNN	RECESSED	NO VENT	NO DRAIN
		H1RS1G1HPP	RECESSED	PLUNGER VALVE	PLUNGER VALVE
		H1WS2G1HCC	WIRE FORM	FERRULE TC OD $^{1}/_{2}$	FERRULE TC OD $^{1}/_{2}$
		H1WS2G1HNC	WIRE FORM	NO VENT	FERRULE TC OD $^{1}/_{2}$
		H1WS2G1HNN	WIRE FORM	NO VENT	NO DRAIN
	20"	H1WS2G1HNP	WIRE FORM	NO VENT	PLUNGER VALVE
	20	H1WS2G1HPC	WIRE FORM	PLUNGER VALVE	FERRULE TC OD 1/2
		H1WS2G1HPP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE
		H1RS2G1HNC	RECESSED	NO VENT	FERRULE TC OD 1/2
		H1RS2G1HPP	RECESSED	PLUNGER VALVE	PLUNGER VALVE
Inlet/outlet TC 1 inch Tube = 25.4 mm , TC = 50.5 mm	10"	H1WS1G01PP	WIRE FORM	PLUNGER VALVE	PLUNGER VALVE

## **Ordering Information**

## **Recommended Spare Parts**

Category	Description	Quantity	Cat. No.
	<sup>1</sup> / <sub>2</sub> " TC gasket, Silicone	10/pk	HGTC050SP
	<sup>1</sup> / <sub>2</sub> " TC gasket, EPDM	10/pk	HGTC050EP
	1/2'' TC gasket, PTFE encapsulated fluoroelastomer	10/pk	HGTC050T0
	1" TC gasket, Silicone	10/pk	HGTC100SP
	1" TC gasket, EPDM	10/pk	HGTC100EP
	1" TC gasket, PTFE encapsulated fluoroelastomer	10/pk	HGTC100T0
Gaskets (kits)	1 <sup>1</sup> / <sub>2</sub> " TC gasket, Silicone	10/pk	HGTC150SP
	1 <sup>1</sup> / <sub>2</sub> " TC gasket, EPDM	10/pk	HGTC150EP
	1 $1/2''$ TC gasket, PTFE encapsulated fluoroelastomer	10/pk	HGTC150T0
	4" TC gasket, Silicone	10/pk	HGTC400SP
	4" TC gasket, EPDM	10/pk	HGTC400EP
	4" TC gasket, PTFE encapsulated fluoroelastomer	10/pk	HGTC400T0
	Seal kit, Silicone o-ring and PTFE tip	10/pk	HGPVS0KIT
Vent valve seal kits	Seal kit, EPDM o-ring and PTFE tip	10/pk	HGPVEPKIT
	Seal kit, fluoroelastomer o-ring and PTFE tip	10/pk	HGPVV0KIT

## **Optional Spare Parts & Accessories**

Category	Description	Quantity	Cat. No.
	TC $3/4''$ ( = TC $1/2''$ )	2/pk	HCLMP0075IN2
	TC 1 <sup>1</sup> / <sub>2</sub> "( = TC 1")	2/pk	HCLMP0150IN2
Tri-clamps	TC 4" (3 pieces clamp)	1/pk	P34303
	TC 4" (2 pieces, Bolted clamp to be used with PTFE encapsulated gasket)	1/pk	P35015
Valve accessories	Plunger valve stem (made of 316 L)	2/pk	H1PVSTEM2
Cana	316 L Cap, 1/2" TC or 3/4" TC	2/pk	HPLG00075IN2
Caps	316 L Cap, 1" TC or 1 1/2" TC	2/pk	HPLG00150IN2
Duese and an an	Pressure gauge, psi + bar type (0-160 psi, 0-11 bar)	1/pk	P90001
Pressure gauge	Pressure gauge, Kpa + bar type [0-1,100 Kpa, 0-11 bar]	1/pk	P90005
Cartridge adaptor	Code 7 to code 0 adaptor kit	1/pk	HGADAPT0RC7/0
Vent valve seal kits	Diaphragm for diaphragm valve, EPDM	2/pk	H1DVDEP02
Diaphragm valves	HOUSING,ACC,MAN.DIAPH.VALVE,TYPE 601,I/O TC-TC 25MM,ISO DN08,HAND WHEEL MATERIAL PLASTIC,EPDM MEMBRANE	1/pk	YFS7ETC34
	HOUSING,ACC,MAN.DIAPH.VALVE,TYPE 602,I/O TC-TC 25MM,ISO DN08,HAND WHEEL MATERIAL SST,EPDM MEMBRANE	1/pk	YFS7ATC34
	HOUSING,ACC,MAN.DIAPH.VALVE,TYPE 601,I/O TC-TC 25MM,ISO DN08,HAND WHEEL MATERIAL PLASTIC,PTFE MEMBRANE	1/pk	YFS7TTC34
	HOUSING,ACC,MAN.DIAPH.VALVE,TYPE 601,I/O TC-HOSE 25MM,ISO DN08,HAND WHEEL MATERIAL PLASTIC,EPDM MEMBRANE	1/pk	YFS7E0B34
	HOUSING,ACC,MAN.DIAPH.VALVE,TYPE 602,I/O TC-HOSE 25MM,ISO DN08,HAND WHEEL MATERIAL SST,EPDM MEMBRANE	1/pk	YFS7A0B34

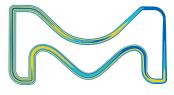
MilliporeSigma 400 Summit Drive Burlington, MA 01803

For additional information, please visit **EMDMillipore.com/S4000** 

To place an order or receive technical assistance, please visit **EMDMillipore.com/contactPS** 

EMDMillipore.com

© 2020 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved. MilliporeSigma, the vibrant M, and Series 4000 are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.



Lit. No. MS\_DS4973EN Ver. 2.0 30700 04/2020