



# HIL Multi Filter Housings

- Industrial liquid

- Flow efficient range of multi element industrial liquid housings
- Designed specifically for prefiltration and clarification duties
- A number of inlet/outlet port connections
- Standard and electropolished surface finishes
- Suitable for cartridge types:
  - DOE or 222 (10" to 40")
- Option for ATEX compliance directive 94/9/EC



## Specification

### Materials of Construction

- Housing: 316L Stainless Steel
- Seals: EPDM FDA  
Silicone FDA  
Viton FDA
- Clamps: 304 Stainless Steel

### Two Finishes Available

- Standard Finish 'I'
  - Internal: As Welded  
Pickled & Passivated
  - External: Polished 0.8 µm Ra [32 µIn Ra]
- Electropolished Finish 'E'
  - Internal: As Welded  
Electropolished
  - External: Electropolished 0.8 µm Ra  
[32 µIn Ra]

### Welding

All assembly welds are full penetration.  
All welds are crevice and undercut free.  
*Weld finish & detail drawings available upon request.*

### Certification

Supplied as standard with vessel inspection certificate and EC Declaration of conformity.

### Material Test Certification

EN10204 3.1/2.2 supplied upon request.

### Design Code

Housings designed in accordance with the European Council Pressure Equipment Directive (PED) 97/23/EC and the UK statutory Pressure Equipment Regulations (PER) 1999 N° 2001.

PED / PER conformity assessments based on Fluid Group 2 (harmless) liquids and gases.

### Design Basis

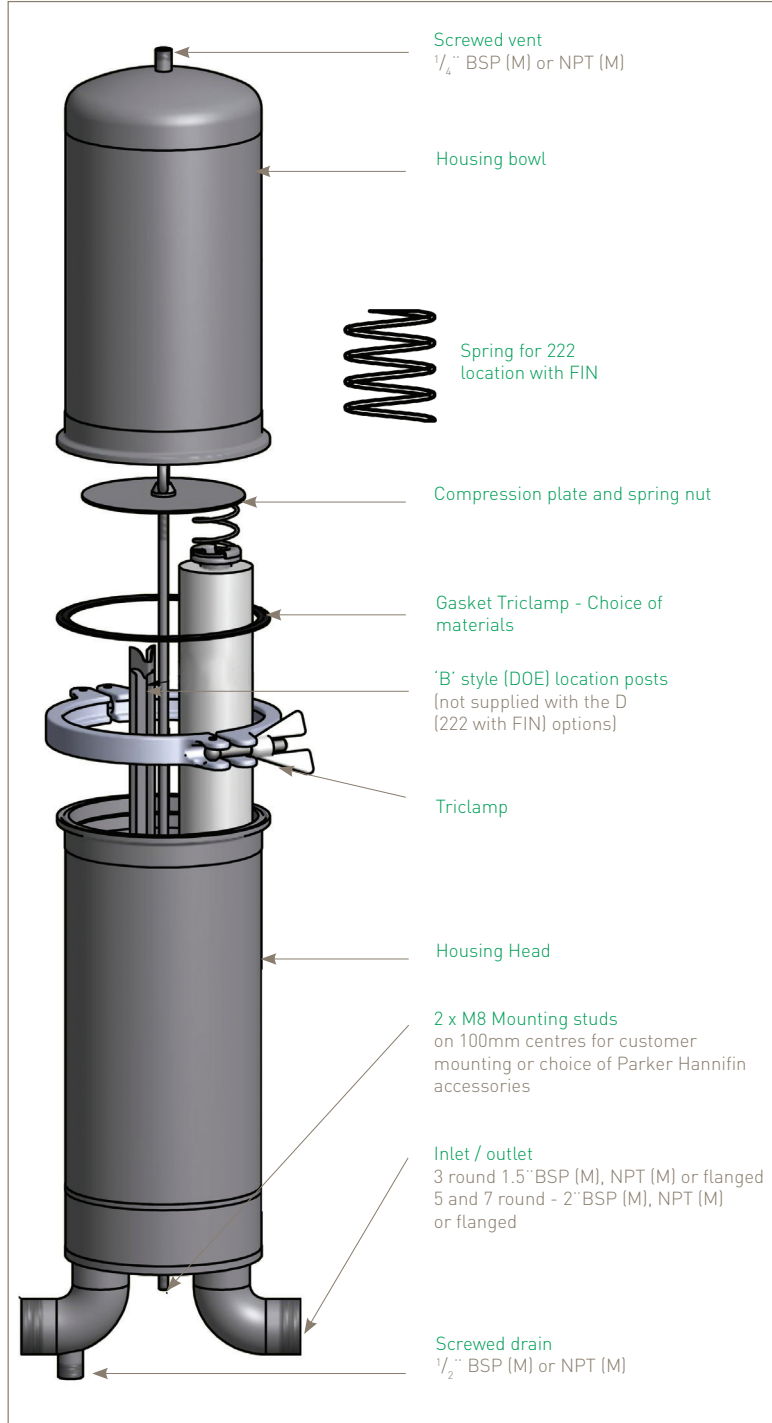
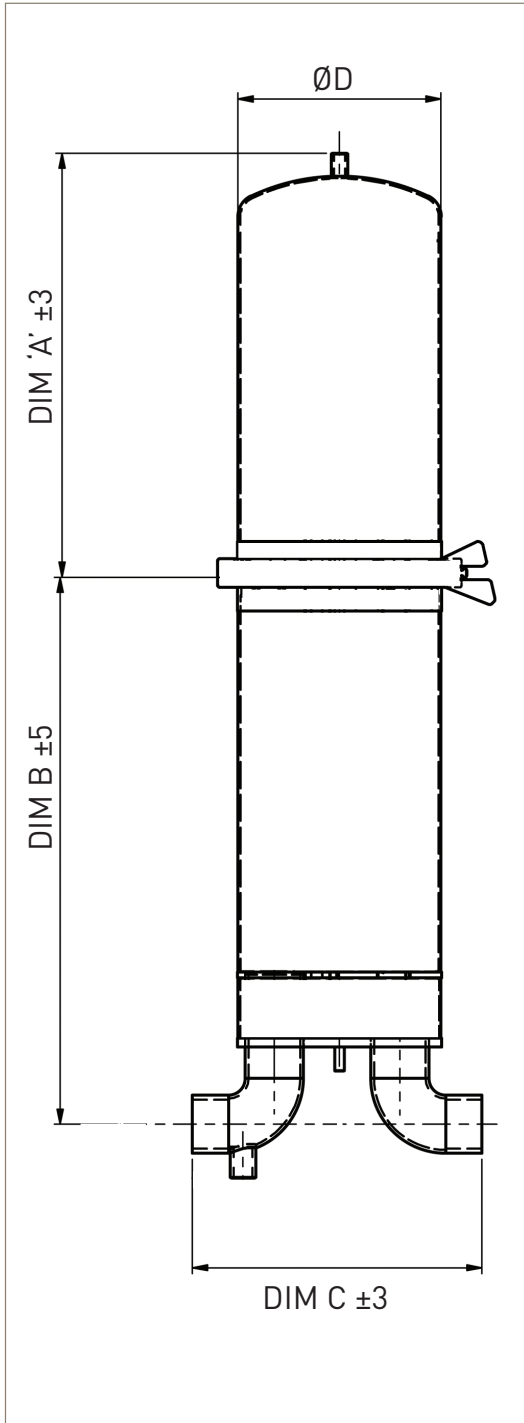
ASME VIII Division 1.

CE Working Condition PED 97/23/EC			Maximum Pressure +FV		
Fluid Group	State	Temperature	3 Round	5/7 Round	8/10 Round
Non Dangerous	Liquid	-10 °C [14 °F] to 150 °C [302 °F]	10 barg [145 psig]	10 barg [145 psig]	10 barg [145 psig]
	Gas		7.5 barg [108 psig]	4.0 barg [58 psig]	2.5 barg [36 psig]
PED Conformity Assessment Category			CAT I	CAT I	CAT I

ATEX Working Condition PED 97/23/EC			Maximum Pressure +FV		
Fluid Group	State	Temperature	3 Round	5/7 Round	8/10 Round
Non Dangerous	Liquid	-10 °C [14 °F] to 135 °C [275 °F]	10 barg [145 psig]	10 barg [145 psig]	10 barg [145 psig]
	Gas		7.5 barg [108 psig]	4.0 barg [58 psig]	2.5 barg [36 psig]
PED Conformity Assessment Category			CAT I	CAT I	CAT I

*Note: All housings are full vacuum rated.*

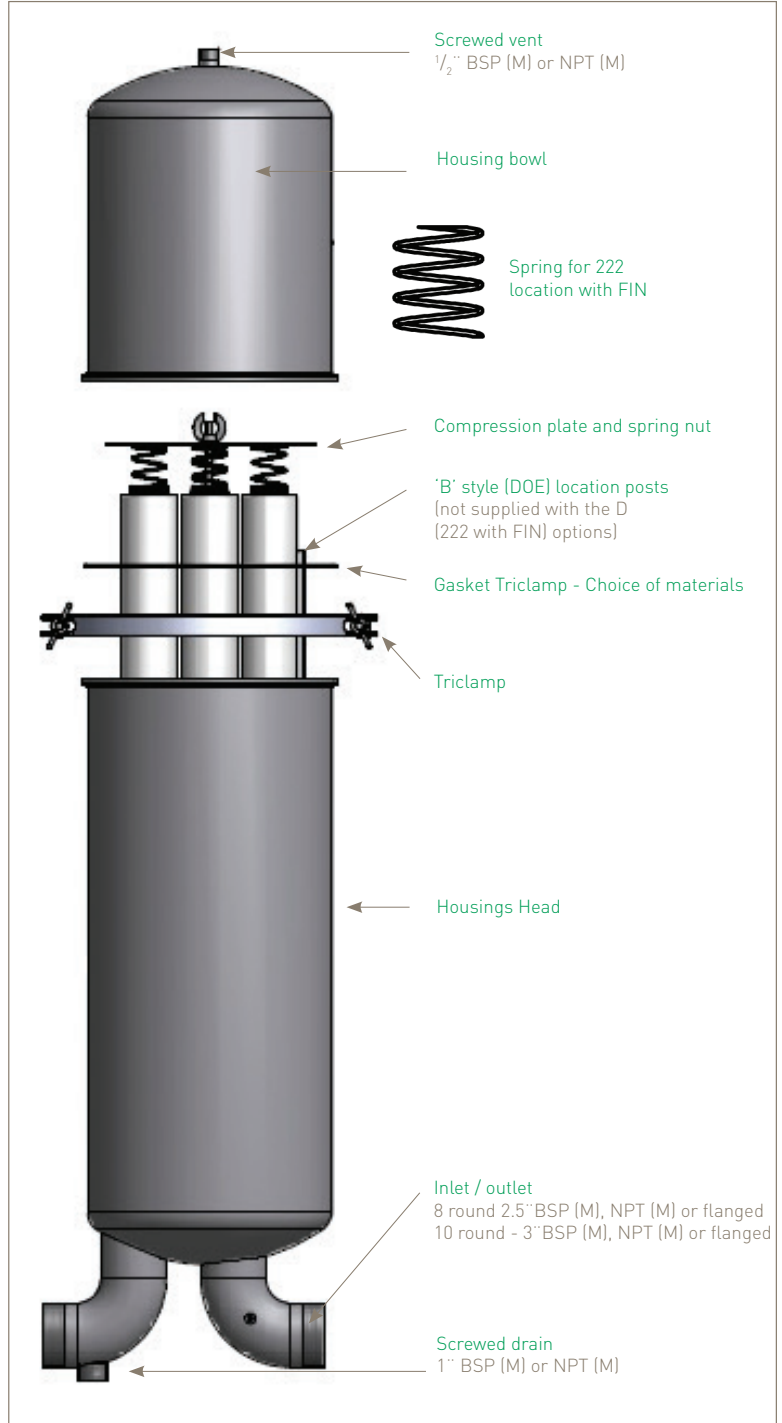
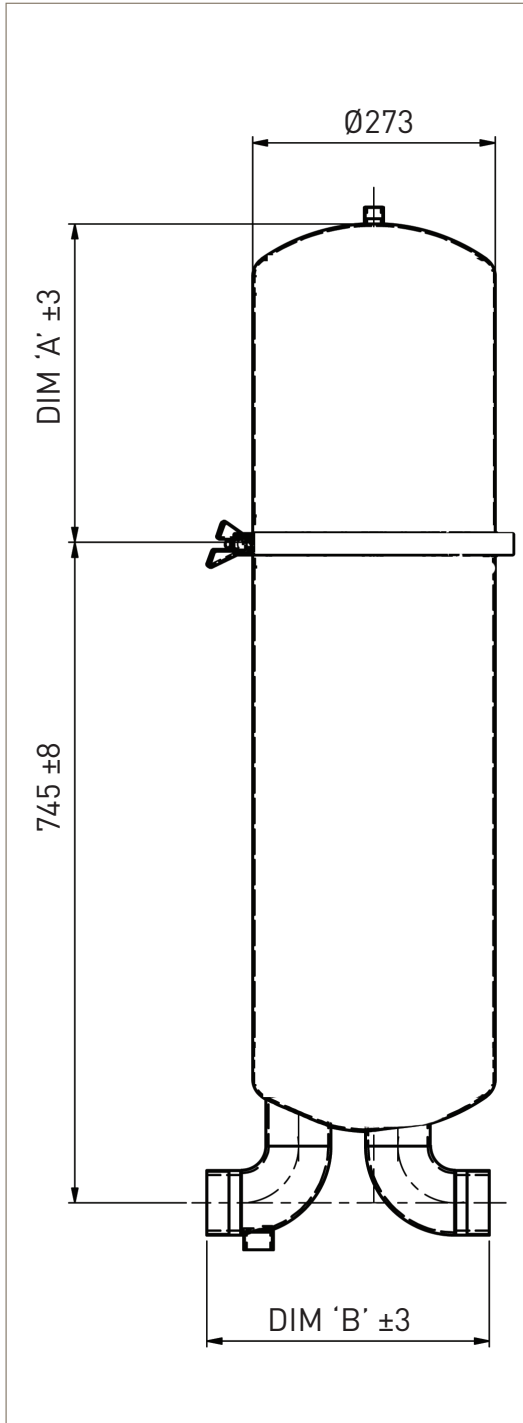
# HIL Multi 3, 5 and 7 Round Filter Housings



	Dimensions					Approximate weight and volume				
	A'	B'	C'			'D'	BOWL	TOTAL (Threaded version only)	VOLUME	
			BSP (M)	NPT (M)	FLANGED					
3 ROUND	10"	101 mm (4.0 in)	455 mm (17.9 in)	230 mm (9 in)	230 mm (9 in)	294 mm (11.6 in)	168 mm (6.6 in)	2.0 kg (4.4 lbs)	8.9 kg (21.0 lbs)	10.4 L (2.75 USg)
	20"	348 mm (13.7 in)						4.0 kg (8.8 lbs)	11.0 kg (24.0 lbs)	15.7 L (4.15 USg)
	30"	598 mm (23.5 in)						6.0 kg (13.2 lbs)	13.1 kg (29.9 lbs)	21.0 L (5.5 USg)
	40"	848 mm (33.4 in)						8.0 kg (17.6 lbs)	15.2 kg (33.5 lbs)	26.3 L (6.8 USg)
5 & 7 ROUND	10"	109 mm (4.3 in)	468 mm (17.7 in)	296 mm (11.7 in)	296 mm (11.7 in)	347 mm (13.7 in)	219 mm (8.6 in)	1.6 kg (3.5 lbs)	12.9 kg (28.0 lbs)	18.0 L (4.6 USg)
	20"	360 mm (14.2 in)						4.4 kg (9.7 lbs)	15.7 kg (35.0 lbs)	27.0 L (7.0 USg)
	30"	610 mm (24.0 in)						7.1 kg (15.6 lbs)	18.4 kg (41.0 lbs)	36.0 L (9.3 USg)
	40"	860 mm (33.9 in)						9.8 kg (21.6 lbs)	21.1 kg (46.5 lbs)	45.0 L (11.7 USg)

Refer to coding structure for configuration options.

# HIL Multi 8 and 10 Round Filter Housings



		Dimensions				Approximate weight and volume		
		A'	B'			BOWL	TOTAL (Threaded version only)	VOLUME
		BSP (M)	NPT (M)	FLANGED				
8 ROUND	20"	107 mm (4.2 in)	316 mm (12.4 in)	332 mm (13.1 in)	356 mm (14 in)	2.2 kg (5.0 lbs)	20.0 kg (44.0 lbs)	42.0 L (11.1 USg)
	30"	357 mm (14 in)				5.7 kg (12.5 lbs)	23.5 kg (52.0 lbs)	56.0 L (14.8 USg)
	40"	607 mm (24 in)				9.0 kg (20 lbs)	27.0 kg (60.0 lbs)	69.0 L (18.2 USg)
10 ROUND	20"	107 mm (4.2 in)	410 mm (16.1 in)	410 mm (16.1 in)	382 mm (15 in)	2.2 kg (5.0 lbs)	22.2 kg (49.0 lbs)	45.0 L (11.9 USg)
	30"	357 mm (14 in)				5.6 kg (12.3 lbs)	25.6 kg (56.4 lbs)	59.3 L (15.7 USg)
	40"	607 mm (24.0 in)				9.0 kg (20 lbs)	29.0 kg (63.9 lbs)	73.5 L (19.4 USg)

Refer to coding structure for configuration options.

## Product coding

	Connection	Code	Max Flow	
<b>HIL **03</b>	1.5" Connections	Y	175 L/min	45 USg/min
<b>HIL **05 /07</b>	2" Connections	C	280 L/min	72 USg/min
<b>HIL **08</b>	2.5" Connections	X	420 L/min	109 USg/min
<b>HIL **10</b>	3" Connections	D	650 L/min	168 USg/min

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Code   Vessel Class	Code   Round	Code   Length (Nominal)	Code   Nozzle	Code   Connection Type	Code   Cartridge	Code   Seal	Code   Vent	Code   Drain	Code   Surface Finish
CE PED 97/23/EC AT PED 97/23/EC +ATEX 94/9/EC	03 3 05 5 08 8	1 10" (250 mm) 2 20" (500 mm) 3 30" (750 mm) 4 40" (1000 mm)	Y 1.5" C 2.0" X 2.5"	B <sup>1</sup> BSP Male N <sup>2</sup> NPT Male F ANSI RF150 L <sup>1</sup> ISO PN16	B DOE D 222	E EPDM S Silicone V Viton	B BSP (M) N NPT (M)	B BSP (M) N NPT (M)	I Pickled and passivated E Electropolished

**Connection Type**  
1 - Only available with BSP(M) drain  
2 - Only available with NPT(M) drain

**Vent and Drain Sizes**  
3 and 5 round: 1/4" vent, 1/2" drain  
8 round 1/2" vent, 1" drain

**Code | Tagged**  
X Not tagged  
T Tagged

**Code | Packing**  
C Carton  
E Wood Crate

Only 62 and 64 mm diameter cartridges can be used in the 7 and 10 round housings.

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Code   Vessel Class	Code   Round	Code   Length (Nominal)	Code   Nozzle	Code   Connection Type	Code   Cartridge	Code   Seal	Code   Vent	Code   Drain	Code   Surface Finish
CE PED 97/23/EC AT PED 97/23/EC +ATEX 94/9/EC	07 7 10 10	1 10" (250 mm) 2 20" (500 mm) 3 30" (750 mm) 4 40" (1000 mm)	C 2.0" D 3.0"	B <sup>1</sup> BSP Male N <sup>2</sup> NPT Male F ANSI RF150 L <sup>1</sup> ISO PN16	B DOE D 222	E EPDM S Silicone V Viton	B BSP (M) N NPT (M)	B BSP (M) N NPT (M)	I Pickled and passivated E Electropolished

**Connection Type**  
1 - Only available with BSP(M) drain  
2 - Only available with NPT(M) drain

**Vent and Drain Sizes**  
7 round: 1/4" vent, 1/2" drain  
10 round 1/2" vent, 1" drain

**Code | Tagged**  
X Not tagged  
T Tagged

**Code | Packing**  
C Carton  
E Wood Crate

**Notes:**  
3, 5 & 7 Round housings available for use with 10" to 40" cartridges  
8 & 10 Round housings available for use with 20" to 40" cartridges

Delivery schedules (excluding shipping)

Blue Options - 2-3 working weeks  
Orange Options - 4-5 working weeks

## Accessories

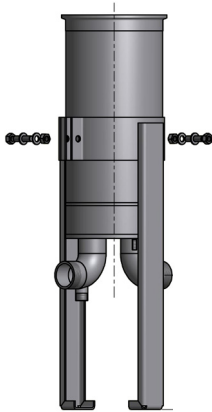
### Adjustable legs. Accessory Kit

3 round  
639504203 (XLGSS12IL1)

5 & 7 round  
639504204 (XLGSS12IL2)

8 & 10 round  
639504205 (XLGSS13IL1)

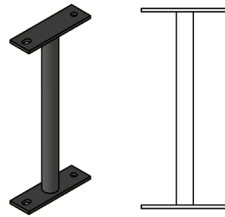
Adjustable legs giving centre to floor height adjustment between 50 and 375 mm for 3,5 and 7 round and 50-30 mm for 8 and 10 round. (clearance required for drain)



### Fixed legs.

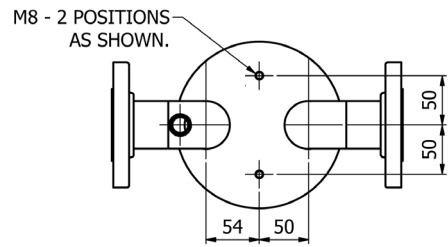
Accessory Kit  
3, 5 and 7 round only  
639504206 (XLGSS12IL3)

Fixed base support for M8 mounting studs giving centre to floor height of 230 mm. Vessel to be properly supported on the pipework as close as possible to the inlet/outlet.



### Customer mounting, 3, 5 & 7 round only.

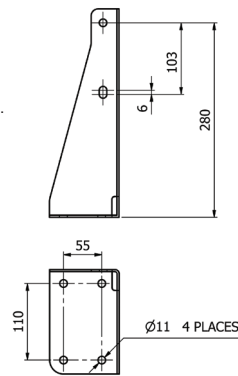
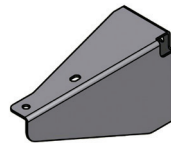
Two M8 mounting studs are provided as shown to allow the customer to custom mount the housing as they require, alternatively we provide accessories shown.



Note A  
Gap available for 50 mm (2 in) wide support.

### Wall mounting, 3, 5 & 7 round only.

Accessory Kit - 639504207 (XMBSS12IL1)  
Wall mounting bracket. Customer to ensure wall strength and if necessary provide a backing plate.



HIL Pressure Gauge			
Type	Connection	Pressure	Ordering Code
All stainless steel wetted parts with glycerine fill fluid (includes adaptor for assembly to housing. Also includes adaptor for connecting vent valve (1/4" BSP(F) / 1/4" NPT (F))	1/4" / 1/2" BSP	0 - 10 barg	639504201 (XPGSS03BS01)
	1/4" / 1/2" NPT	0 - 10 barg	639504202 (XPGSS03NP01)



Industrial 1 Piece Ball Valve		
Type	Connection	Ordering Code
316 stainless steel 1 piece ball valve with PTFE ball. Male / female.	1/4" BSP	639500261 (XVASS03BS)
	1/4" NPT	639500260 (XVASS03NP)
	1/2" BSP	639500271 (XVASS04BS)
	1/2" NPT	639500270 (XVASS04NP)
	1" BSP	639500272 (XVASS05BS)
	1" NPT	639500248 (XVASS05NP)

