

Pressure Vessels

- **Stainless Steel Type 304 or 316L**
- **1 gallon to 10 gallon sizes** (3.8 to 38 liters)
- **Standard or Wide Mouth openings** available for ease of cleaning
- **ASME certified:** a certificate of analysis is available upon request

SPECIFICATIONS

Materials:	
Vessel	Type 304 or type 316L stainless steel
Skirt: 1 – 5 gallon	Molded neoprene rubber
Skirt: 8 – 10 gallon	Stainless steel
Connections:	
Inlet/outlet	1/4" NPTF
Standard closure	3 7/8" x 3 1/4"
Wide mouth closure	5 7/8" x 4 7/8"
Pressure:	
Max. operating	See table below
Optional relief valve	0.69 MPa (100 psi)
Max. negative	95 kPa (29" Hg)
Temperature:	
Max. operating	See table below

- **Electropolished finish** provides a smooth, releasable, cleanable surface
- **Disassemble completely** for thorough cleaning
- **Molded rubber base** protects the vessel against rough handling (available with steel base for continuous operation at high temperatures)
- **Use under positive or negative pressure**
- **Optional vacuum closure available** when working with negative pressure or when operating at low pressures (<30 psi/2.1 bar) or with stiffer O-rings (FPM)
- **Special orders available** (coatings, additional sizes)

APPLICATIONS

- Contain process fluids for filtration through pressure type membrane filter holders
- Type 316/316L stainless complies with current good manufacturing practices and are recommended for low pH and high salt applications

Volume:					
U.S. gallons	1 gal	3 gal	5 gal	8 gal	10 gal
Liters	3.78 L	11.3 L	18.9 L	30.2 L	37.8 L
Dimensions:					
Overall height	21.6 cm	38.7 cm	57.2 cm	52.9 cm	63.4 cm
	8.5"	15.25"	22.5"	20.8"	24.9"
Inside diameter	22.9 cm (9")			30.5 cm (12")	
Weight:	3.6 kg	5 kg	6.8 kg	11.1 kg	12.5 kg
	8 lb	11 lb	15 lb	24.5 lb	27.5 lb
Recommended for use with:					
Pressure Filter Holders	KS 90	KS 142		KS 293	
	KS 90 ST	KS 142 ST		KS 293 ST	
	KS 90 UH	KS 142 UH		KS 293 UH	

MAXIMUM OPERATING TEMPERATURE AND PRESSURE

Type of Stainless Steel	Maximum Operating Temperature		1, 3, 5 gallon models				8 and 10 gallon models			
			Standard Opening		Wide Mouth		Standard Opening		Wide Mouth	
	°F	°C	psi	MPa	psi	MPa	psi	MPa	psi	MPa
Type 304	100	38	175	1.21	140	0.97	130	0.90	129	0.89
	150	66	170	1.17	135	0.93	130	0.90	125	0.86
	200	93	165	1.14	130	0.90	120	0.83	120	0.83
	250	121	160	1.10	130	0.90	120	0.83	115	0.79
	300	149	155	1.07	125	0.86	115	0.79	110	0.76
Type 316L	100	38	155	1.07	130	0.90	115	0.79	115	0.79
	150	66	155	1.07	130	0.90	115	0.79	115	0.79
	200	93	155	1.07	130	0.90	115	0.79	115	0.79
	250	121	155	1.07	130	0.90	115	0.79	110	0.76
	300	149	150	1.03	125	0.86	110	0.76	110	0.76

Note: O-rings containing silicone rubber should not be operated extensively at temperatures over 250°F (121°C).



Pressure Vessels



With an opening 2¼ times larger, the Wide Mouth vessel is easy to clean and inspect.

ORDERING INFORMATION

Complete Assemblies

	Standard opening		Wide Mouth opening	
Type Stainless Steel (SS)	304 SS	316L SS	304 SS	316L SS
Capacity:				
1 gallon	720140	720160	740140	740160
3 gallon	720340	720360	740340	740360
5 gallon	720540	720560	740540	740560
8 gallon	730840	730860	740840	740860
10 gallon	731040	731060	741040	741060

1. Pressure vessels are available in other sizes by special order.

Replacement Parts

		316L SS
Dip tube assembly:	1 gallon	720161
	3 gallon	720361
	5 gallon	720561
	8 gallon	730861
	10 gallon	731061
Closure:	Standard	720162
	Wide mouth	740162
Plastic feet for closure assembly:		720022

Optional Parts and O-rings

	Standard opening	Wide Mouth opening
Standard closure (316 SS)	720162	740162
Vacuum closure (316 SS)	720152	740152
O-ring (EPR) ²	720001	720019
O-ring (FPM)	720015	720021
O-ring (PTFE encapsulated silicone rubber)	720020	720018

2. EPR (ethylene propylene rubber) O-rings are manufactured from E300-70 EPDM and meet FDA CFR177, 2600 and ASTM D2000 specifications.

Accessories

	¼" NPT	Type of stainless ³	Catalog No.
Vent/relief valve: 7 kg/cm ² , 100 psi	Male	304 SS	301825
Pressure gauge ⁴ : 0 – 160 psi	Male	- ⁵	720002
Hose barb (11 mm)	Male	304 SS	304507
Hose barb (11 mm)	Female	304 SS	304508
Pipe plug	Male	304 SS	313012
Elbow fitting	Male/Female	316 SS	720003
Ball valve	Male/Female	316 SS	720004
Close nipple	Male/Male	316 SS	720005
Quick-connect body	Male	316 SS	720006
Quick-connect stem (hose barb)	-	316 SS	720007

3. All parts are available in (hose barb) type 316 stainless steel by special order.

4. Caution: pressure gauges should not be autoclaved.

5. All wetted parts consist of a copper alloy, and the threaded connector is made of brass.

