

Threadless Pin Closure

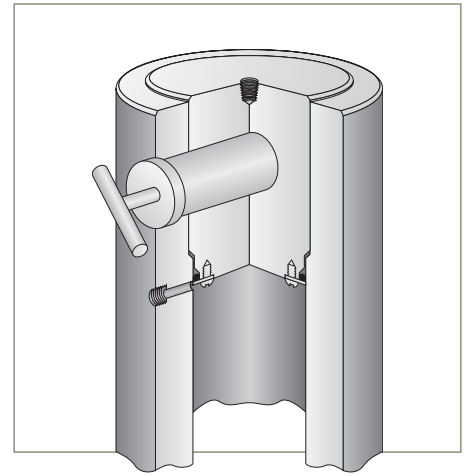
Pressure Vessel

Volume: 1.0 L to 132 L

Vessel MAWP*: 10,000 to 60,000 psi @ 100°F (689 to 4137 bar @ 38°C)

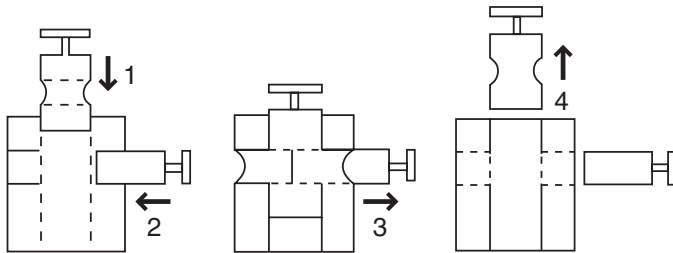
Material of Construction: Alloy Steel

* Maximum Allowable Working Pressure



Principle of Operation:

The threadless pin quick-opening pressure vessels feature rapid cyclic operation with greatly increased vessel life. The threadless pin closure replaces the bending stress that normally occurs in a threaded or breach closure pressure vessel. The pin closure provides a more uniform application of cover thrust in the vessel wall. Standard models include vessels sized for research as well as for production operation.



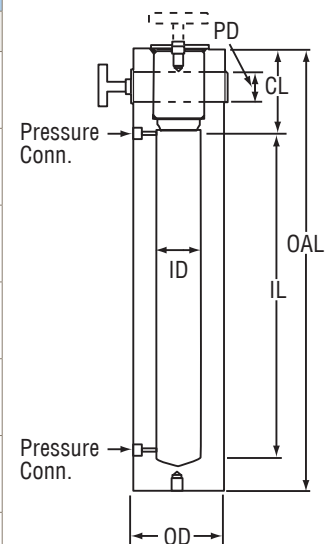
Parker Autoclave Engineers threadless pin closure pressure vessels permit fast opening and closing of vessel for increased throughput and safety.

To Close: (1) lower cover; (2) insert pin.

To Open: (3) pull pin; (4) raise cover.

Specifications and Part Numbers: Research Vessels

Model	Drawing Number	Pressure Rating @ 100°F (38°C) psi (bar)	Nominal Capacity	Dimensions: Inches (mm)					
				ID	OD	IL	OAL	CL	PD
TP0250SL15	30A-7163	15,000 (1034)	2.5 Liters	4.00 (102)	6.25 (159)	12.00 (305)	22.50 (572)	7.88 (200)	3.00 (76)
TP0250SL30	40A-9463	30,000 (2068)	2.5 Liters	3.00 (76)	6.50 (165)	23.00 (584)	31.63 (803)	5.63 (143)	2.00 (51)
TP0550SL30	30-2226	30,000 (2068)	5.5 Liters	4.50 (114)	9.00 (229)	21.70 (551)	33.50 (851)	8.00 (203)	3.00 (76)
TP1050SL30	40C-0163	30,000 (2068)	10.5 Liters	6.00 (152)	12.52 (318)	24.00 (610)	38.00 (965)	10.75 (273)	4.50 (114)
TP0100SL60	40A-9462	60,000 (4137)	1 Liter	2.00 (51)	6.00 (152)	22.00 (559)	32.06 (814)	5.63 (143)	2.00 (51)
TP0250SL60	30-2229	60,000 (4137)	2.5 Liters	3.00 (76)	9.00 (229)	22.00 (559)	33.50 (851)	8.00 (203)	3.00 (76)
TP0450SL60	30-2403	60,000 (4137)	4.5 Liters	4.00 (102)	12.00 (305)	22.00 (559)	38.00 (965)	10.75 (273)	4.00 (102)



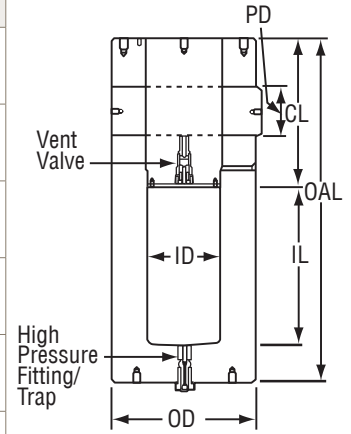
Maximum Recommended Operating Pressure (MROP) varies based on gauge, transducer, and rupture disk selection.



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Specifications: Production Vessels, 11 to 132 Liters

Model	Drawing Number	Pressure Rating @ 100°F (38°C) psi (bar)	Nominal Capacity	Dimensions: Inches (mm)					
				ID	OD	IL	OAL	CL	PD
TP132XSL10	40A-4272	10,000 (689)	132 Liters	16.00 (406)	24.00 (610)	40.38 (1026)	70.00 (1778)	22.00 (559)	8.00 (203)
TP9100SL20	40A-4273	20,000 (1379)	91 Liters	14.00 (356)	24.00 (610)	38.00 (965)	70.00 (1778)	24.00 (610)	8.00 (203)
TP2500SL30	40A-6480	30,000 (2068)	25 Liters	9.00 (229)	18.76 (476)	24.00 (610)	50.00 (1270)	18.00 (457)	6.75 (171)
TP6700SL30	40A-8981	30,000 (2068)	67 Liters	12.00 (305)	25.00 (635)	36.40 (925)	70.00 (1778)	24.00 (610)	9.24 (235)
TP1100SL60	40A-7173	60,000 (4137)	11 Liters	6.00 (152)	18.75 (476)	24.00 (610)	50.00 (1270)	18.00 (457)	6.75 (171)
TP3000SL60	40A-9447	60,000 (4137)	30 Liters	8.00 (203)	25.00 (635)	36.38 (924)	70.00 (1778)	23.00 (584)	9.25 (235)



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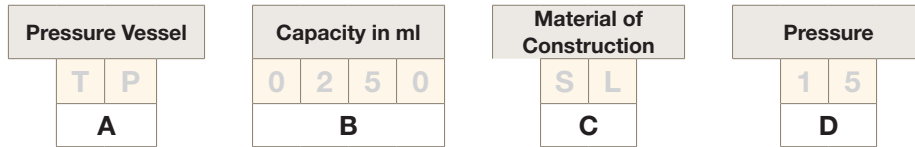
Optional O-Ring Chart:

Material	Max. Temperature	
	° F	° C
Nitrile	250°	(121°)
EPR	300°	(149°)
Silicone	400°	(204°)
FKM	450°	(232°)
PTFE Encapsulated FKM	400°	(204°)
FFKM	500°	(260°)

Features and Available Options:

- ASME Code Stamp, CRN Registration
- Multiple Connections
- Heaters
- Stands
- Electro-Hydraulic Pumps
- Control Systems
- Automatic / Manual Cover Lift
- Automatic Pin Pull
- Material handling Systems
- Consult factory to discuss your specific requirements

Ordering Guide:



Part Number Example: TP0250SL15 (example selections indicated in yellow below)

A - Pressure Vessel	
TP	Threadless Pin

B - Capacity	
0100	1.0 L
0250	2.5 L
0450	4.5 L
0550	5.5 L
1050	10.5 L
1100	11 L
2500	25 L
3000	30 L
6700	67 L
9100	91 L
132X	132 L

C - Material of Construction	
SL	Alloy Steel (SA-723)
SS	17-4 PH Stainless

D - Pressure: psi (bar)	
10	10,000 (690)
15	15,000 (1034)
20	20,000 (1379)
30	30,000 (2069)
60	60,000 (4138)

Supporting Information:

Please refer to the following sections of the catalog for complimentary products and additional technical details.

- **“Controls”** (Instrumentation Section, Bulletin IN-SG)
- **“Complete Systems”** (Stirred Reactor Section, Bulletin SR-SG)
- **“Valves, Fittings, Tubing”** (VFT Catalog, www.autoclave.com)

WARNING

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Bulletin PV-TP

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