High Pressure Equipment Company

Confined Gasket Closure Reactors

Assembly Instructions

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Confined Gasket Closure Reactors

Description:

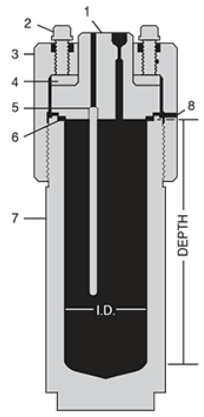
The Confined Gasket Closure reactors listed below are ideally suited for use at elevated temperatures and pressures as shown in the chart. Thrust bolts with a hardened thrust ring are supplied to insure positive seating of the gasket. Torque required on thrust bolts will range from 70 to 125 foot pounds, depending upon size of reactor, pressure, temperature and media being pressurized. Torquing of bolts should be done in a crisscross staggered pattern to insure uniform seating. A commercial high temperature lubricant should always be applied to the bolt threads and outside cap threads to facilitate removal of the closure.

Standard material for the body, cover and gasket is Type 316 stainless steel. These reactors are suitable for either gas or liquid service and capacities range from 125mL to 6,750 mL.

Standard connections supplied are for 1/4" O.D. high pressure (coned and threaded) tubing (HF4). Models GC-1 and GC-3 have one connection in the cover. All other models have two connections in the cover and a thermowell that extends two-thirds of the inside depth.

Included with each reactor are eye bolts for lifting and necessary collars and glands for the connections. Vise flats are machined on to the bottom of the body for securing while assembling or disassembling closure.

Catalog No.	I.D.	O.D.	Inside Depth	Capacity	Material	Working Pressure (psi) 100°F	650°F	800°F
GC-1	1″	2½″	10″	125 mL	316 S.S.	13,800	12,500	12,000
GC-3	1½″	2½″	10″	280 mL	316 S.S.	7,750	7,000	6,900
GC-5	1½″	4⅜″	10″	280 mL	316 S.S.	16,000	14,500	14,000
GC-7	1½″	4⅜″	21″	600 mL	316 S.S.	16,000	14,500	14,000
GC-9	2″	4⅜″	10″	500 mL	316 S.S.	12,500	11,400	11,000
GC-11	2″	4⅜″	21″	1,040 mL	316 S.S.	12,500	11,400	11,000
GC-13	2½″	4⅜″	10″	800 mL	316 S.S.	9,200	8,400	8,200
GC-15	2½″	4⅜″	21″	1,160 mL	316 S.S.	9,200	8,400	8,200
GC-17	3″	6⅞″	10″	1,150 mL	316 S.S.	13,000	11,000	10,000
GC-19	3″	6⅞″	21″	2,430 mL	316 S.S.	13,000	11,000	10,000
GC-21	3½″	6⅞″	10″	1,575 mL	316 S.S.	10,500	9,000	8,000
GC-23	3½″	6⅞″	21″	3,300 mL	316 S.S.	10,500	9,000	8,000
GC-25	4″	6⅞″	10″	2,060 mL	316 S.S.	8,500	7,300	6,500
GC-27	4″	6⅞″	21″	4,325 mL	316 S.S.	8,500	7,300	6,500
GC-29	4½″	6⅞″	10″	2,600 mL	316 S.S.	6,500	5,500	5,000
GC-31	4½″	6⅞″	21″	5,475 mL	316 S.S.	6,500	5,500	5,000
GC-33	5″	6⅞″	10″	3,200 mL	316 S.S.	5,000	4,300	4,000
GC-35	5″	6⅞″	21″	6,750 mL	316 S.S.	5,000	4,300	4,000



1. COVER	316 S.S.
2. SET SCREW	COMM. ALLOY ST'L
3. CAP	TOOL ST'L
4. THRUST RING	COPPER
5. GASKET	316 S.S.
6. GASKET	316 S.S.
7. BODY	
8. WEEP HOLE	

Confined Gasket Closure Assembly Instructions:

Caution: In order to guard against thread galling:

The weight of the cap may be significant and must be offset (neutralized) prior to assembly or disassembly. Thread lubricant must be applied to the body threads prior to each reassembly.

Assembly Instructions:

1. Coat the gasket with a small amount of process-compatible grease.
2. Insert the gasket into the groove in the cover. A small amount of force might be required to seat the gasket in the groove.
3. Invert the cover and place it onto the body.
4. Screw the cap onto the body. Assemble only until the cap is seated with minimal force. Do not over tighten.
5. Torque the set screws to the required torque using an alternating start or cross pattern to evenly torque the screws.