



**High Pressure
Equipment
Company**

Bolted Closure Reactor Assembly Instructions



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Bolted Closure Reactor

Description:

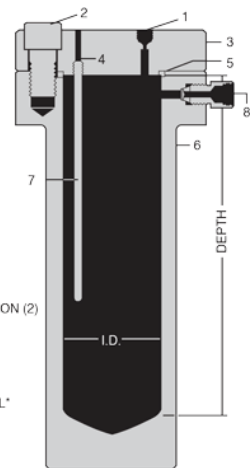
The Bolted Closure Reactors are designed for use up to 650°F (343°C) at the working pressures indicated. Standard material for the body, cover and gasket is Type 316 stainless steel. Standard O-rings may be used in place of the metal gasket when temperatures permit.

Standard connections include two high pressure (coned and threaded) tubing connections for 1/4" O.D. tubing (HF4) located in the cover. Contact factory if other connections and/or locations are preferred.

Other items available include:

- Heating mantle. Removable quartz fabric cylinder column type. 110 volt, single phase. Bolted closure reactors are supplied with mounting bolt holes on the bottom surface.
- Thermowell for use with 1/16" thermocouple.
- Safety head located in side flange with rupture disc.

Catalog No.	Capacity	Working Pressure psi	Temperature Rating °F	Inside Diameter	Inside Depth	Approx. Weight (pounds)	Approx. Torque (ft-lb) per Bolt	Material
BC-1	300 mL	5,000	650	2"	6"	21	40	316 S.S.
BC-2	1 liter	5,000	650	3"	9"	50	75	316 S.S.
BC-3	2 liter	5,000	650	3 1/2"	12 1/2"	68	105	316 S.S.
BC-4	1 gallon	3,000	650	5"	12"	97	105	316 S.S.
BC-5	1 gallon	5,000	650	5"	12"	152	175	316 S.S.
BC-6	2 gallon	3,000	650	6 1/2"	14"	245	140	316 S.S.



1. PRESSURE CONNECTION (2)
 2. SOCKET CAP SCREW
 3. COVER
 4. GASKET
 5. MAIN SEAL
 6. BODY
 7. THERMOCOUPLE WELL*
 8. SAFETY HEAD*
- * SUPPLIED AS EXTRA WHEN SPECIFIED

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Bolted Closure Reactor Operating Instructions:

General Information:

The simple closure design consists of either a metal or an elastomer seal ring located in a groove in the body. The sealing is achieved by clamping the cover in place by means of cap screws.

Assembly Instructions:

1. Lubricate cap screws with process compatible lubricant, such as SS Jet Lube or Molylite Paste.
2. Install gasket into machined groove in body, a thin film of Krytox grease can be applied to the gasket.
3. Carefully place the cover on top of the gasket, making sure that the holes on the cover align with the hole on the body.
4. Place cap screws into the holes of the cover and thread into body until hand tight.
5. Snug up bolts.
6. Tighten to 20% of target torque using cross pattern.
7. Tighten to 50% to 75% of target torque cross pattern.
8. Tighten 100% of target torque using cross pattern.
9. Continue tightening to 100% of target torque using rotational pattern until no movement.