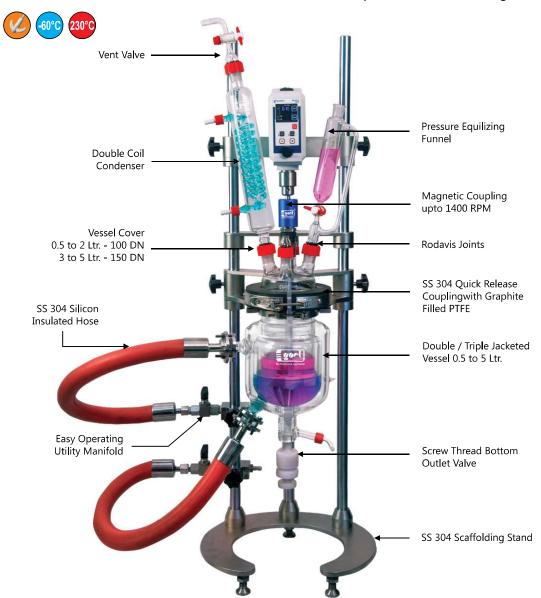


# **Lab Glass Reactor**

## Spare & Accessories on Page no. 26-27



One of the prime endeavor and proud moment for "GOEL Scientific Glass Works Ltd." to have designed lab glass reactor for the convenience of chemical scientists, R&D and Lab fraternity, who make wonderful use of standard glass equipment to accomplish desired results and innovations.

"Lab Glass Reactor" has become very convenient, essential, and integral part of chemical processing units to accomplish desired results which is a standard equipment Make in India.



# **Technical Specifications & Components of Lab Glass Reactor**

0.5 Ltr to 5 Ltr Double / Triple Wall Jacketed reactor with 100 DN /
150 DN Duran glass flange with groove - Made from Schott Duran Glass tubing

Primary Reactor - For Reaction

Double Wall Reactor - for Utility Circulation (-60°C to 200°C)

Tripple Wall Reactor - for Full Vacuum sealed Jacket to prevent energy loss  $\&\,$ 

to maintain transparency during condensation at -20°C.



2. Fused type bottom outlet valve with Screw thread operating



100 DN/150 DN Duran Glass Flange cover with DURAN®
RODAVISS® Joints - Made from Schott Duran Glass tubing



- 4. 100 DN/150 DN "O" Ring Viton / PTFE/FFKM (Perfluoro elastomer)
- SS304 Quick release heavy duty coupling with Graphite Filled Teflon material



6. SS Magnetic Drive for Glass reactor



- 8. Pressure Equalizing funnel with DURAN® RODAVISS® Joints
- High Efficiency 250 mm Long Double coil Condenser with DURAN® RODAVISS® Joints



10. Unique Support system SS304 Scaffolding stand with Bakelite Knob with SS304 screw



- 11. Over Head Stirrer Drive
- 12. Digital Temperature Indicator PT100 PTFE Coated sensor (-60 to 300°C)



13. SS304 Insulated hose with Manifold Connection System with flexible movement





In addition to range of glassware, we also supply Benchtop Lab Glass Reactors. This includes small vessels (Double or Triple walled) from 0.5 L to 5 L. In addition we have all the glass components you are likely to need such as condensers, receivers, addition funnels, reflux dividers etc.

Our Benchtop Lab Glass Reactors include easy accessibility through open support frame, manufactured from German made Borosilicate glass and a minimal dead space with many other standard and optional features.

# **Key Specifications**

- ✓ Reactor Volume: 0.5 L to 5 L
- ✓ Reactor Type: Double Walled & Triple Walled
- ✓ Operating Pressure: Full Vacuum to 0.5 bar (g)
- ✓ Gear Motor with Inbuilt Digital Indicator Speed Range 50 to 1000 RPM
- ✓ Thermal Shock Resistance: (Dt): 60°C for Triple Walled and 110°C for Double Walled Reactors.
- ✓ Standard GL Threads for Inlet and Outlet. (Inlet and Outlet can be supplied with beaded process pipe.)

| Sr<br>No | Item  | Additional<br>Funnel(mL) | Condenser<br>Length(mm) |         | Double Wall<br>Jacketed<br>Rate/Unit<br>(INR) | Triple Wall<br>Jacketed<br>Unit Code | Triple Wall<br>Jacketed<br>Rate/Unit<br>(INR) | LxBXH            |
|----------|---|--------------------------|-------------------------|---------|---|--------------------------------------|---|------------------|
| 1        | 0.5 Ltr Lab Glass Reactor Assembly (100 DN) | 100                      | 180                     | DBLR0.5 | 355000  | TBLR0.5                              | 409640  | 400 x 350 x 1100 |
| 2        | 1 Ltr Lab Glass Reactor Assembly (100 DN)   | 100                      | 180                     | DBLR1   | 366000  | TBLR1                                | 428340  | 400 x 350 x 1100 |
| 3        | 2 Ltr Lab Glass Reactor Assembly (100 DN)   | 100                      | 180                     | DBLR2   | 373000  | TBLR2                                | 448040  | 400 x 350 x 1100 |
| 4        | 3 Ltr Lab Glass Reactor Assembly (150 DN)   | 250                      | 300                     | DBLR3   | 393000  | TBLR3                                | 474100  | 550 x 500 x 1400 |
| 5        | 5 Ltr Lab Glass Reactor Assembly (150 DN)   | 250                      | 300                     | DBLR5   | 415000  | TBLR5                                | 491040  | 550 x 500 x 1400 |

#### **SALIENT FEATURES:**

- ✓ Reactors equipped with the flush bottom valve of the special type to ensure leak-free sealing over entire temperature range.
- ✓ All reactors are designed to keep L/ID Ratio within 1.5(max) for performance and easy scale up. L/ID ratio may be changed on request.
- ✓ All These Reactors are designed GMP.
- ✓ Manufacture from German Raw Material.
- ✓ Ideal for benchtop fume hoods.(SS/MS)
- ✓ Stirrer with suitable seal (Mechanical, Stuffing Box, Magnetic Seal, High Vacuum Stuffing Box).
- ✓ Skid mounted and quick release coupling for ease of installation and dismantling.
- ✓ Overhead stirrer motor with built-in speed controller and display.
- ✓ Interchangeable Stirrer (Anchor/Propeller/Turbine) as per your suitability.

## **OPTIONAL**

❖ Vacuum Pump ❖ Digital Temp Indicator ❖ Chiller ❖ Heating/Cooling System ❖ Mobility Support

Email: labreactor@goelscientific.com