

High pressure reactor RVD-3-5000



The standard equipment of the reactor RVD-3-5000:

- Reactor vessel – 1 ea.
- Reactor lid – 1 ea.
- PTFE lid lining – 1ea.
- PTFE sealing – 1 ea.
- PTFE insert – 1ea.
- Pressure measurement gauge (250 bar) – 1 ea.
- Rupture disc with holder – 1ea.
- Needle valve – 2 ea.
- Deep tube for temperature probe – 1 ea.
- Clamp – 1 ea.
- Sealing O-ring – 1 ea.
- Two-bladed stirrer -1 ea.

High-pressure reactor RVD-3-5000 is designed for carrying out chemical reactions and synthesis at high pressure and temperature conditions. Permitted operating pressure is 200 bar at 250°C. Stirring of the reaction mixture is carried out with a propeller or an anchor stirrer through the magnetic coupling with overhead stirrer. Special electric heating unit with programmable controller is designed for controlled and uniform heating of the reaction mixture. Heating unit is also has a cooling circuit. The reactor is equipped with all necessary fittings. To protect the reactor vessel and lid from the effects of corrosive environment reactor vessel insert and lid cover are made of PTFE. The reactor design allows to change functionality according to the required task. For safe operation reactor is fitted with a rupture disc.

RVD-3-5000	Specifications
Volume	5000 ml
Insert volume	4100 ml
Operating pressure	200 bar
Max. temperature	250 °C
Vessel and lid material	SS AISI 316 L
Number of connections	7
Heating	Heating and cooling unit (electric).
Stirring	Overhead stirrer
Cooling	Natural
Dimensions (h × w)	588 x 330 mm
Internal vessel diameter	145 mm
Vessel depth	305 mm
Internal insert diameter	129 mm
Insert depth	295 mm
Weight	92,89 kg

Accessories and options:

- Sampling vessel.
- Heating and cooling unit (electric).
- Magnetic clutch (60 or 100 Nm).
- Overhead stirrer.
- Heating and cooling unit (liquid heat exchanger).