

Data Sheet

Laboratory reactors / Laboratory Reactors



LR-2.ST

The IKA® LR-2.ST system is a modular designed miniplant reactor system, planned and designed to simulate and optimize chemical reaction processes as well as mixing, dispersion and homogenization processes at a model scale with a maximum volume of 2000 ml. Depending on the seal (FFPM), the medium in the reactor vessel can be heated up to 230 °C. Vacuum operation is possible up to 25 mbar. The IKA® laboratory software labworldsoft® is providing convenient solutions for measuring, control, regulating tasks and documentation purposes.

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Volume max.: 2000 ml

Volume min. (stirring): 500 ml

Volume min. (dispersing): 800 ml

Some applications are:

- Manufacturing cremes, lotions, emulsions
- Liposome preparations in the pharmaceutical and cosmetic sector
- Mixing solids such as calcium carbonate, talc, titanium oxide, etc. into liquid polymers
- Mixing additives and solid polymer compounds into mineral oils
- Grinding and disintegrating solids and fibres in liquids and polymers

LR-2.ST laboratory system consisting of:

- LR-2 Stand system
- EUROSTAR power control-visc P7: Laboratory stirrer with a high torque (380 Ncm), constant speed, digital display of rated - and actual speed, infinitely adjustable speed range 8 ÷ 290 min-1, integrated

Technical Data

Usable volume min. [ml]	500
Usable volume max. [ml]	2000
Working temperature min. [°C]	room temp.
Working temperature max. [°C]	230
Attainable vacuum [mbar]	25
Viscosity max. [mPas]	150000
Speed range [rpm]	8 - 290
Telescope stand stroke [mm]	390
Material in contact with medium	borosilicate glass, FFPM, PTFE, steel 1.4571
Reactor vessel openings (units/standard)	3/NS 29/32 2/NS 14/23
Dimensions (W x H x D) [mm]	460 x 1240 x 430
Weight [kg]	25
Permissible ambient temperature [°C]	5 - 40
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 42
RS 232 interface	yes
Analog output	yes
Voltage [V]	230 / 115
Frequency [Hz]	50/60
Power input [W]	130

Ident. No.

0008016500

torque trend display for viscosity control, RS 232 / analog interface
- LR 2000.11 Anchor stirrer with flow borings, without scraper

Please order reactor vessel separately.

Accessories: LR 2000.1 Reactor vessel, LR 2000.2 Reactor vessel, LR 2.1 Reactor vessel, LR 2000.10 Anchor stirrer, LR 2000.11 Anchor stirrer, LR 2000.20 Flow breaker, HBR 4 digital Heating bath, CC3-308B vpc, LVS 105 T-ef, PT 100.25 Temperature sensor, LT 5.24 Hose adapter, PC 1.2 Adapter, LR 2000.60 Sensor receptacle, LR 2000.40 Shaft receptacle, PC 1.5 Cable, PC 2.2 Adapter, S 25 KV - 25 G Dispersing element, PCI 8.2 Plug-in card, LT 5.20 Hose, labworldsoft®, PC 2.3 Cable, S 25 KV - 18 G Dispersing element, S 25 KV - 25 F Dispersing element