



LR 1000 control Package

The LR 1000 control is a cost efficient, modular laboratory reactor designed for optimizing chemical reaction processes as well as for mixing, dispersing and homogenization applications at the laboratory scale. The system can be adapted quickly and easily for a wide range of applications and specific requirements. The reactor is especially designed for the unique applications requirements that define the cosmetic and pharmaceutical industries. The temperature of the medium can be as high as 120 °C. The temperature of the heating source, which is located at the bottom of the vessel, is controlled accordingly to reach the set temperature inside the medium. A PT 100.30 temperature sensor and the corresponding receptacle LR 1000.61 for the lid are included with this package. Prominent features of the LR 1000 control system are the integrated pH sensor connection and the display interface. The latter allows for the display of all process-relevant data onto a PC, save data storage and control of the reactor. The software (accessory) allows for further adaptation of the overall system and processes.

Metals in contact with medium: stainless steel (ALSI 316 L), FFKM, PTFE, PEEK, borosilicate glass 3.3

- Large easy to read TFT display for better image quality and easy navigation
- Integrated weighing function
- Torque trend measurement indicates changes in product viscosity
- Integrated pH sensor connection
- RS 232 and USB interface to operate the unit with the laboratory software labworldsoft
- Standard joint fittings on the lid: 2 x NS 29, 2x NS 14, 2 x GL 14 for flexible adaptation of further equipment
- Expandable for use with the ULTRA- TURRAX® T 25 digital (Accessory)
- Vacuum valve included with delivery
- Anchor stirrer with PTFE-scrapers
- Connections to attach a cooling source to the back of the unit
- Manual adjustable safety circuit
- Integrated safety shutdown when vessel or lid is removed from the base

Accessories: LR 1000.1 Laboratory reactor vessel, LR 1000.3 Laboratory reactor vessel, LR 1000.11 Anchor stirrer, LR 1000.10 Anchor stirrer with PEEK scrapers, LR 1000.20 Flow breaker, T 25 digital ULTRA-TURRAX®, LR 1000.41 Shaft receptacle, S 25 KV - 25 F Dispersing element, S 25 KV - 25 G Dispersing element, S 25 KV - 18 G Dispersing element, PT 100.30 Temperature sensor, LR 1000.61 Sensor receptacle, LR 1000.64 pH Electrode, LR 1000.65 pH Electrode receptacle, LR 1000.70 Lid Holder, RC 2 basic, RC 2 control, MVP 10 basic vacuum pump, SC 920 Vacuum pump, labworldsoft®, USB

Technical Data	
Usable volume max. [ml]	1000
Usable volume with disperser tool min. [ml]	300
Usable volume without disperser tool min. [ml]	500
Working temperature max. [°C]	120
Attainable vacuum [mbar]	25
Viscosity max. [mPas]	100000
Speed range [rpm]	10 - 150
Support rod diameter (with integrated fastening on stand) [mm]	16
Material in contact with medium	AISI 316L, 1.4571, borosilicate glass 3.3, PTFE, PEEK, FFKM
Reactor vessel openings (units/standard)	2x NS 29/32, 2x NS 14/23
Ident. No.	0010001035