



UV Laboratory Reactor System 2

The standard Laboratory Reactor System 2 is a simple immersion-type photochemical reactor for basic experiments. The irradiation is effected by means of a medium pressure UV lamp (150 Watt), operated by utilizing a vertically arranged immersion tube as well as a separate cooling tube, immersed into the reaction liquid.

Specific characteristics

- Optical path: < 2cm
- 150 W of electrical power
- Generally adapted for liquid phase photolyses
- Flux domain (liquid reaction systems): mL ⁻¹ up to a few L h⁻¹
- Efficient for photolyses, sensitized and photochemically initiated reactions
- Sources of irradiation: VUV, UV, VIS
- Efficient thermoregulation possible

Advantageous applications

- One of the most frequently used reactor configuration at laboratory scale
- Very useful for product analyses, kinetic investigations and quantum yield determinations as well as for chemical process development
- Photolyses and homogeneous sensitized and photochemically initiated reactions

Technical data	
Lamp type	TQ 150
Lamp power	150 W
Doping (optional)	Z1, Z2, Z3
Total immersion length	384 mm
Immersion length - center of concentration of rays	303 mm
Effective arc length (electrode gap)	44 mm
Average lamp lifetime	approx. 2.000 hours (doped lamps approx. 1.000 hours)
Lamp lifetime warranty	1.000 hours, < 25% intensity drop down in the UVC range (doped lamps 500 hours)
Working volume	700 ml with inserted cooling tube
Connections	1 x NS 45/40, 2 x NS 14,5/23, 1 x GL 25
Pump flow rate	n.a.
Material of immersion tube	Quartz glass
Material of cooling tube	Quartz glass, optional borosilicate glass 3.3
Connection cooling water circuit	Hose olives Ø 10
Power supply	VG TQ 150
Mains voltage / Frequency	230 V / 50 Hz
Pre-fuse	max. 16 A



- Equipment for disinfection of
 - Air
 - Water
 - Surfaces
 - Packaging materials
- Immersion lamps for industrial photochemistry
 - Laboratory
 - R&D
 - Production
- Engineering and consultancy services

- UV curing and drying
- UV measurement technology
- UV radiation sources
- Power supply units
- Analysis lamps and luminescence excitors
- Quartz glass products
- Components
- Special equipment
- Training and workshops

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