3.3 Dye circulators

The features of our dye circulators are not only their silent operation and possible 24-hour performance, but they are also easy to handle and very reliable. All systems are completely grounded.

All dye circulators can be equipped with different dye cells.

Dye circulators up to 50 Hz

**RD 250 FC 20**
Dye circulator RD 250 consisting of a centrifugal pump, 220 V (110 V for the U.S.), 250 ml dye reservoir, 0.2 µm filter, stainless steel filter housing, 20 mm dye flow cell flow rate approx. 2 l/min, completely grounded. (≅ FL 402), option: water cooling.

**RD 1000 FC 40**
Dye circulator RD 1000, as described above, however with 1000 ml dye reservoir, 40 mm dye flow cell, flow rate approx. 4 l/min (≅ FL 444) option: water cooling.

The dye circulator systems RD 250 FC 20 and RD 1000 FC 40 correspond to FL 45.

Dye circulators up to 100 Hz

**RD 1000 FC 20**
Dye circulator RD 1000, with 20 mm dye flow cell, flow rate 4 l/min, water cooling incl.

**RD 2000 FC 40**
Dye circulator RD 2000, with 40 mm dye flow cell, flow rate 6 l/min, water cooling incl.

Dye circulators up to 250 Hz

**RD 2000 FC 20**
Dye circulator RD 2000, with 20 mm dye flow cell, flow rate 7 l/min, water cooling incl.

**RD 5000 FC 40**
High power centrifugal pump RD 5000, 40 mm dye flow cell, flow rate 7 l/min, water cooling incl.

Dye circulators up to 500 Hz

on request!
Dye circulator with Bethune-cell

RDG 1000 FC Bethune
Geared pump, 12-V-motor, 1 l dye reservoir, Bethune-cell unit, continuously adjustable DC-power supply (max. 2 l/min, option: water cooling). A geared pump is necessary as the flow rate through the narrow capillary has to be adjustable.

When ordering, please mention the dye laser brand you are using! (especially the LP SCANMATE needs different holders)

Dye circulator systems for custom-made lasers, Quanta Ray lasers and Quantel Dye lasers

RD 250 consisting of: centrifugal pump with 220-V-motor, 250 ml dye reservoir, flow rate approx. 4 l/min, 0.2 µm Filter, stainless steel filter housing, completely grounded, option: water cooling.

RD 1000 as before, however with 1000 ml dye reservoir, flow rate 7 l/min, option: water cooling.

RD 2000 as before, however with 2000 ml dye reservoir, flow rate 15 l/min, Water cooling incl.

RD 5000 high performance centrifugal pump with 220 V motor, 5000 ml dye reservoir, flow rate 30 l/min, Water cooling incl.

Dye circulators with geared pumps

Beside our centrifugal pumps, there are applications (e.g. Bethune cells) where pressure is needed due to our narrow capillary tubes or where the flow rate has to be adjustable. Here geared pumps are indispensable. We paid attention to relatively low r.p.m. and high output of the pumps. so that the laser dyes are not influenced thermally or mechanically. Another advantage is the low noise level.

We also manufacture dye circulators according to customer specifications with a maximum flow rate of 100 l/min; a temperature stabilization is also possible.

RDG 250 Geared pump, 12 V-motor, 0 - 5 l flow rate/min,

RDG 1000/2000 as before, however with 1 l or 2 l dye reservoir, option: water cooling

Continuousy adjustable DC-power supply
Voltage 0-30 V; current 0-3 A (max. 5 A) with ground wiring for the RDG dye circulators

RDG 5000 380-Volt-motor, 5000 ml dye reservoir, flow rate approx. 12 l/min, max. pressure approx. 5 bar, incl. water cooling incl.