

3.4 Quartz glass cells



In the field of laser accessories, Radiant Dyes is in the position to supply quartz glass cells for all dye lasers. The following cells are the most common ones for commercial and custom made dye circulator systems. Other cells made of quartz glass or other optical materials and dye flow cell units not mentioned below can be supplied according to your specifications.

Dye cells for *Radiant Dyes*, *Lambda Physik* and *LAS* dye laser

RDDC 20

20 mm quartz glass cell (\cong FL 462)

RDDC 40

40 mm quartz glass cell (\cong FL 464)

Dye cells for *Quanta Ray* dye laser

RDQR 2

Quanta Ray No. 5-0023-1, 10 x 10 x 16 mm

RDQR 3

Quanta Ray No. 5-0023-2, 10 x 16 x 17,5 mm

RDQR 4

Quanta Ray No. 5-0079, 10 x 10 x 17,5 mm, partly unpolished

RDQR 5

Quanta Ray No. 2-0210, 21 x 17 x 50,8 mm

RDQR 6

Quanta Ray No. 5-0084, 21 x 17 x 50,8 mm, partly unpolished

RDQR 7

Quanta Ray No. 5-0078, 10 x 16 x 17,5 mm, partly unpolished

Dye flow cell units

Our dye flow cell units for *Radiant Dyes*, *LAS* and *Lambda Physik* dye lasers can be used for applications up to several kHz (depending on the pump energy of the pump laser and the flow rate of the dye circulator). It is also possible to use these units in custom made systems. We are also in the position, to offer parts for mounting and adjustment of the dye flow cell units for custom-made systems



RDFC 20

20 mm dye flow cell unit

Mounted and adjusted dye flow cell unit consisting of flow body, frame and 20 mm quartz glass cell, for repetition rates up to 500 Hz, replaces RDVC 20

RDFC 40

40 mm dye flow cell unit

Mounted and adjusted dye flow cell unit consisting of flow body, frame and 40 mm quartz glass cell, for repetition rates up to 500 Hz, replaces RDVC 40

Modification of dye flow cell units With flow units made of chromium plated brass on new plastic cell units.

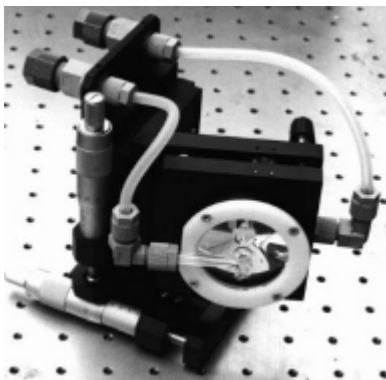
Amplifier dye cells with holder

For improving the beam quality of the dye lasers we offer Axicon and Bethune amplifier cells. These cells have a circular capillary tube through which the laser dye flows. The Bethune cell can be used for Excimer- and Nd:YAG pump lasers. For the Axicon cell a Nd:YAG pump laser is necessary. The bore diameter of the 25 mm long capillary can vary between 2.5 and 4.0 mm, depending on the energy of the pump laser.



RDB Bethune-dye cell incl. holder

Fits into the *Lambda Physik*, *LAS* and *Radiant Dyes* main amplifier cell holder.



RDA Axicon-dye cell incl. holder

It is used to achieve a beam profile closely to *Gauß*.

Quartz glass cells for custom made dye laser systems

RD 5

5 mm cell (int. 5 x 10 mm, 45 mm high)

RDC 4

4 mm dye flow cell made of quartz glass

RD 10

10 mm cell (int. 10 x 10 mm, 45 mm high)

RDC 10

10 mm dye flow cell made of quartz glass

RDAZ AXICON

Axicon-amplifier cell

RDBZ BETHUNE

Bethune-cell with various bore diameters (1,6; 2,0; 2,5; 3; 4 or 6 mm)

