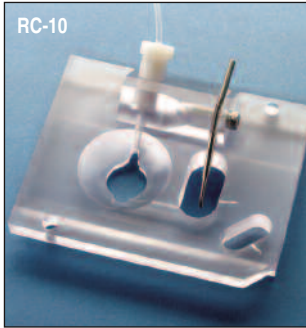


RC series-legacy design

RC-10, RC-11, RC-13 and RC-16

RC Series Recording Chambers

Legacy, large bath chambers suitable for oocyte studies



These chambers are open bath chambers suitable for physiological experiments performed with inverted or dissecting microscopes, including patch and oocyte recording, isolated perfused tubule, and cell impalement studies. RC chambers have also been used with fluorescence microscopy.

RC Series chambers are made from polycarbonate. A #2 thickness coverslip (24 x 60 mm, user attached) becomes the floor of the bath. The coverslip can be attached with vacuum grease or more permanently with Sylgard or RTV cement. Models vary in bath diameter.

Solution can be introduced via gravity-feed and removed via suction, or alternatively, input and output can be pump-controlled. Flow rates can exceed 10 ml/min with gravity feed. The perfusion input accepts standard 1.57 mm OD polyethylene tubing (PE-160). Solutions are removed from a separate suction reservoir to minimize noise in the recording chamber. The suction tube height is adjustable to control the bath solution level.

Multiple perfusion lines can be connected using an MP series manifold, see page 90, in place of the single-line connector supplied with the chamber. An isolated reservoir is provided for an agar bridge in the recording ground circuit.

RC-10

This small chamber with 10 mm diameter bath is recommended where small volumes and fast solution exchange is important. Bath volume is 160 μ l at 2 mm solution height. A single agar bridge well is supplied.

RC-11, RC-13 and RC-16

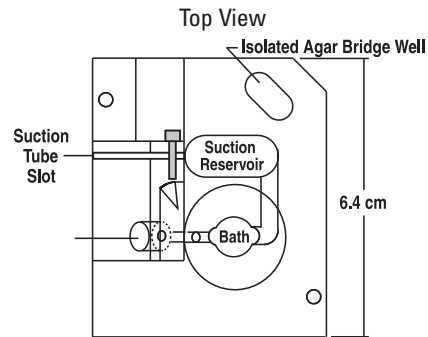
These larger bath chambers are used for studies of slices, oocytes, or other large preparations. Models RC-13 and RC-16 may also be used in patch clamp experiments where cultured coverslips are placed in the chamber.* The RC-13 accepts 12 mm diameter coverslips and the RC-16 accepts 15 mm diameter coverslips. A groove is milled in the chamber underside to hold the coverslip in place.

* Note: The double thickness of glass (bottom + sample coverslips) may not be compatible with some short working distance microscope objectives.

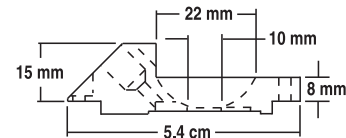
Mounting the Chamber

RC Series chambers are mounted onto a microscope using one of the stage adapters on the following page. Each chamber is supplied with one single input perfusion connector, one suction tube and one package of #2 coverslips (24 x 60 mm). See page 66 for additional coverslips.

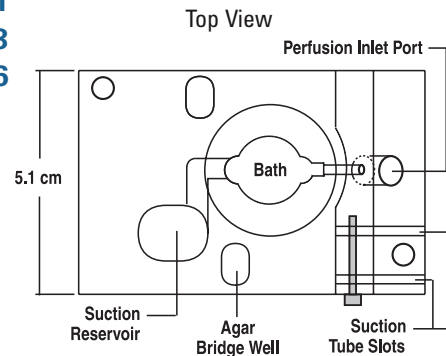
RC-10



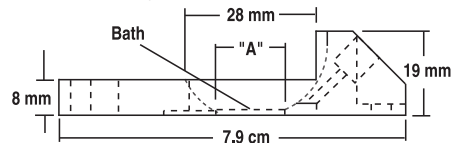
Side View



RC-11 RC-13 RC-16



Side View



RC-11: A=11 mm, Vol.= 190 μ l
RC-13: A=13 mm, Vol.= 260 μ l
RC-16: A=16 mm, Vol.= 400 μ l

Order #	Model	Product
W3 64-0306	RC-10	Open Bath Chamber/10 mm Bath
W3 64-0307	RC-11	Open Bath Chamber/11 mm Bath
W3 64-0308	RC-13	Open Bath Chamber/13 mm Bath
W3 64-0309	RC-16	Open Bath Chamber/16 mm Bath