RC-21BRFS Series 20 chambers

Chamber with Slotted Bath for Field Stimulation

Imaging chamber designed for field stimulation studies



- Designed for field stimulation studies involving cardiac myocytes
- Closed bath design
- Small volume with slotted bath
- Ideal for fluorescent, calcium, and time-lapse imaging studies

The RC-21BRFS is a small volume, closed bath imaging chamber designed for field stimulation studies. It uses a pair of 25 mm round coverslips to form the top and bottom of the chamber, and the total bath volume is 263 μ l. Separation between top and bottom coverslips is 2.3 mm. Two platinum wire electrodes are attached to the parallel sides of the ovalshaped bath. The connecting wires are 15 cm long and are terminated in 1 mm pins.

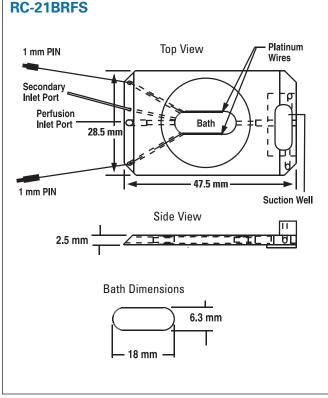
An additional stainless steel port at the bath input fits a standard Hamilton microliter syringe.* This port may be used to inject substances into the flow path or to remove air bubbles from the sealed chamber. At the bath output, a length of tubing is used as a back pressure control to insure smooth flow.

The RC-21BRFS chamber requires a platform (P-2, PH-2, or PM-2) and stage adapter to complete the assembly for mounting onto a microscope.

Each RC-21BRFS chamber is supplied with a package of CS-25R glass coverslips (#1 thickness, 25 mm diameter, 100/pkg) and 10 feet of PE-160 polyethylene tubing.

* 25 gauge (0.45 mm OD) needle

The SIU-102 is a bipolar stimulator designed for use with field stimulation chambers. This instrument features constant current and constant voltage modes, as well as bipolar, pulse, and DC modes. Optical coupling is used to electronically isolate the stimulator from the pulse source. Currents up to 100 mA and voltages up to 100 V are also supported. See page 247 for details.



Specifications

Material	Polycarbonate or polysulfone
Bath dimensions (L x W x H)	18.0 x 6.3 x 2.3 mm
Volume	263 µl
Electrodes	Platinum wire, 15 cm leads with 1 mm pins
Top coverglass	25 mm round
Bottom coverglass	25 mm round
Injection port (ID x OD)	0.56 x 0.91 mm, stainless steel
Input tubing (ID x OD)	1.14 x 1.57 mm (PE-160)
Output tubing (ID x OD)	1.14 x 1.57 mm (PE-160)

Order #	Model	Product
W4 64-0226	RC-21BRFS	Imaging Chamber with Field Stimulation
W4 64-0278	P-2	Platform, non-heated
W4 64-0285	PH-2	Platform, heated
W4 64-1561	PM-2	Platform, heated magnetic
Accessories and Replacement Parts		
W4 64-0755	PE-160/10	Polyethylene Tubing
W4 64-0705	CS-25R	Coverslips, 25 mm round #1 thick, Box of 100