

Rotating Electrodes.

BluRev RRDE with BluRev Enclosure

BluRev Ring Disk Electrode (RDE/RRDE)

The **BluRev RRDE** is a versatile and rugged rotating ring disk electrode ideal for use with any BioLogic potentiostat/galvanostat. It is available with a wide choice of quick-fit exchangeable tips.

The **BluRev RRDE** has been designed to be used with EL-ELECTRO cells series. Please note that if you already have an EL-ELECTRO cell an additional PTFE cap is needed: **094-A-CAP**. **EL-BLUREV** is the cell compatible with the **BluRev RRDE**.

A special enclosure has been designed for an easy operation and set-up of the **BluRev RRDE**: the **BluRev Enclosure**. This makes it easy to hold the RRDE body as well as the BioLogic potentiostat cables.

The **BluRev RRDE** is also available as a Rotating Disk Electrode (**RDE**) only, if you are not interested in ring-disk experiments.

The RC-10k control unit offers an accuracy of ± 1 rpm over the whole rotational range for precise and fully Reproducible experimental conditions. The speed can be set manually or remotely by using the analog output of a BioLogic instrument.

Any other device with an analog output can be used. With EC-Lab[®], you can easily program, perform and analyse ring-disk, Levich and Koutecký-Levich experiments and also use the new EIS element W_{inf} that will directly give you the diffusion coefficient.



Specifications

Rotational range/rpm	100 - 10,000 (9000 for RRDE)
Accuracy/rpm	1 typical over the whole rotational range
Precision/rpm	3 typical over the whole rotational range
Runout/mm	<0.1
Setting resolution/rpm	10 (Manual control) or 25 (Remote control)
Materials of RRDE/RDE	PEEK, Al alloy
Inert gas inlet for shaft corrosion protection/mm	Ø 2
Operating temperature/°C	10 - 40
Power	24 Vdc, 1 A max
Max consumption/W	24
Dimensions/mm	RC-10k: 95x227x178 (HxWxD), RDE/RRDE: 233.6 (length with tip)
Weight/kg	RC-10k: 1.00 RDE/RRDE: 0.36 (without tip)

BluRev RRDE and RDE	Catalog n°	094-RC/RDE	094-RC/RRDE
Content			
RC-10k Rotation controller	094-RC	1	1
Rotating ring-disk electrode (motor, shaft, electrode body with 2 pairs of Ag/C brushes)	094-RRDE	-	1
Rotating disk electrode (motor, shaft, electrode body with 1 pairs of Ag/C brushes)	094-RDE	1	-
DB9 to BNC connector for external control of RC-10k	092-22/1	1	1
1 m BNC/BNC cable	COR28100	1	1
Replacement Ag/C brush	094-RDE-BRUSH	2	4
1 transport case	-	1	1



094-RRDE with tips and 094-RC



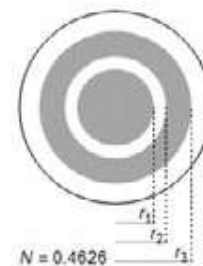
094-RDE without tip

BluRev Tips and cells



Disk electrodes	Catalog n°
3 mm diameter Glassy Carbon disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-GC/3
5 mm diameter Glassy Carbon disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-GC/5
5 mm diameter Glassy Carbon disk electrode with PTFE body (M6 thread) Ra = 50 µm	094-PTFE-GC/3
5 mm diameter Glassy Carbon disk electrode with PTFE body (M6 thread) Ra = 50 µm	094-PTFE-GC/5
3 mm diameter 999% Silver disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Ag/3
3 mm diameter 999% Aluminum disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Al/3
3 mm diameter 999% Silver disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Cu/3
3 mm diameter 999% Silver disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Ni/3
3 mm diameter 999% Silver disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-316L/3
2 mm diameter 999% Platinum disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Pt/2
2 mm diameter 999% Gold disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Au/2
3 mm diameter Boron Doped Diamond disk electrode with PEEK body (M6 thread) 500 µm diamond layer, typical Ra = 10 nm, boron doping level between 500 and 1000 ppm.	094-BDD/3

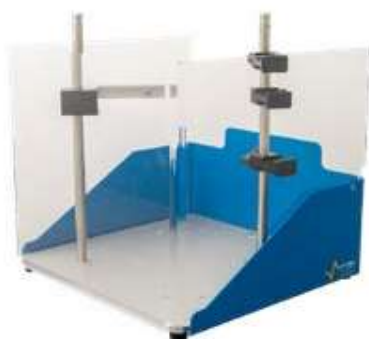
Ring-Disk electrodes	Catalog n°
Glassy Carbon ring/disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-GC-GC
999% Pt ring/Glassy Carbon disk electrode with PEEK body (M6 thread) Ra = 50 µm	094-Pt-GC



Dimensions/mm: r1=1.5 ; r2 = 2 ; r3 = 3.
 N = maximum theoretical collection factor using Albery formula [1].
 [1] W. J. Albery and S. Bruckenstein, Trans. Faraday Soc. 62 (1966) 1920.

Cells	Catalog n°
EL-ELECTRO-1A cell compatible with BluRev RDE	EL-BLUREV
PTFE 5 holes cap compatible with BluRev RDE (needed if you already have an EL-ELECTRO cell)	094-A-CAP

BluRev Enclosure



BluRev Enclosure

BluRev Enclosure	Catalog n°
Protective housing and stand kit for the BluRev	094-ENCL
Content	
1 stainless steel plate with M6 threaded holes to fix the support poles	-
2 support poles to hold the BluRev RDE and the cell	-
(The clamp and the clamping nut are not included)	-
1 clamping flange for the BluRev	-
3 half-clamps for the potentiostat cables (all BioLogic cables are supported)	-
1 plexiglas protective housing	-
Specifications	
Dimensions with protective housing (HxWxD)/mm	287x318x308
Weight (with protective housing)/kg	5.3