

# **616** Rotating Electrode System

#### The Systems Approach to Rotating Electrodes

The Princeton Applied Research Model 616 Electrode Rotator is a high precision, low mass rotator that performs well with virtually any potentiostat. When connected to Princeton Applied Research electrochemical instrumentation, it uses control lines to give you remote start/stop and speed control. Using the convenient control panel and input jacks you can operate the model 616 easily for either manual or automated experiments.

Standard Features include:

- Front panel speed controls
- Remote analog speed control (input is summed with front panel settings)
- Front-panel and remote (TTL) on-off switching (using Princeton Applied Research stir-control signals)
- Remote analog output for speed verification
- Integral ring-stand for convenient cell mounting

For versatility, a variety of electrode assemblies are available to perform a wide range of experiments, including:

- High precision corrosion measurements
- Ultra-trace analytical determinations
- Automated Levich Plots
- Hydrodynamically-modulated voltammetry
- Cyclic stripping voltammetry





### Accessories

#### Accessory Information

Because of its wide range of applications, the Model 616 is supplied without electrodes or accessories. Since these must be ordered seperately, the ordering information is supplied below.

### **Quick Change Disk Electrodes**

Disk electrodes 11.3 mm diameter, 1 cm<sup>2</sup> surface area. The material adjacent to the electrode surface is teflon. The electrode body is Kel-F 17mm O.D. shroud.

Model	Description
RDE0001	Disk Electrode Assembly
	(Includes 430 SS Disk)
RDE0002	Disk Installation Tool

#### **Quick Change Cylinder Electrodes**

Cylinder electrodes 12mm diameter, 12.4 mm height, 3 cm<sup>2</sup> surface area. The material adjacent to the electrode surface is Teflon. The electrode body is Kel-F 12 mm O.D. shroud.

Model	Description
RDE0011	Cylinder Electrode Assembly
	(Includes 430 SS Cylinder)

#### Permanent Disk Electrodes

Disk electrode 5 mm diameter permanently sealed in Teflon, 12 mm outside diameter shroud.

Description
Platinum Electrode
Gold Electrode
Glassy Carbon Electrode

#### Cell Top

ModelDescriptionRDE0018Analytical Cell Kit

#### **Polishing Kit**

Model	Description
K0015	For polishing electrodes

## Specifications

Power	115 V ac or 230 V ac, 50/60 Hz, factory
	connected
Weight	14 lbs
Operating Temperature	10 to 40°C
Control Unit Dimensions	11 3/8" W x 10 1/8" D x 5 3/4" H
Base Dimensions	11" W x 15" D x 5 3/4" H
Motor	Permanent magnet dc, ironless rotor
Motor Power Supply	+24 V dc Nominal
Speed Control	Closed loop servo-system. Temperature
	compensated tach generator mounted on
	motorshaft, providing rotational speed
	information
Speed Range	100 RPM to 8,000 RPM
Precision	Better than ±1%
Accuracy	Better than ±3%
Controls	On/Off switch, push button potentiometer
	control speed
Motor Stop	TTL level of user-selected polarity



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