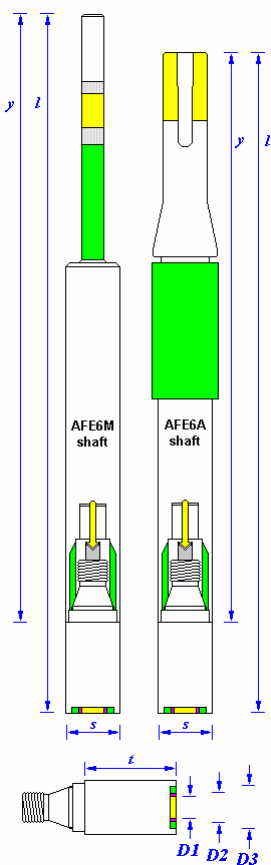


Document LMECE7

**MAXIMUM ROTATION
RATE 3,000 RPM
Use Extreme Caution at
Rotation Rates above
2,000 RPM!**



E7 Series RRDE Tip

Your rotated ring-disk electrode (RRDE) is a precision research tool that has been carefully machined and tested. It is guaranteed to be leak-free at the time of shipment. (Leak test results are attached.)

- Your electrode was leak tested at ambient temperature and should not be used at elevated temperatures. The electrode should only be used at temperatures from 10°C (50°F) to 25°C (77°F). Higher temperatures may create a leak around the disk or ring or both.
- After using the electrode, clean it and replace the protective cover to prevent the electrode surface from being scratched.
- Shafts for these RRDE tips are sold separately (see below).
- Rotating electrodes must be mounted securely in the rotator. While mounting, do not apply excessive force to the shroud as this may cause the shroud to slip along the shaft of the electrode.
- Rotating electrodes should be immersed at least 5 mm (0.2 in) below the surface of the solution.
- Rotating electrodes should be mounted in such a way that they do not rub against surfaces (such as the inner wall of the cell).
- The E7 Series RRDE tips are available in two styles (R8 or R9). Each style has slightly different ring and disk dimensions (see table below). If the ring is made from carbon, then the E7R9 dimensions apply. If the ring is made from metal then either set of dimensions can be used. Examine the part number of the electrode carefully to determine if it is an E7R8 or E7R9 electrode.

Standard E7R8 Dimensions* (when ring is made from a metal)	Alternate E7R9 Dimensions* (when ring is made from glassy carbon)
Disk OD (D1): 4.57	Disk OD (D1): 5.61
Ring ID (D2): 4.93	Ring ID (D2): 6.25
Ring OD (D3): 5.38	Ring OD (D3): 7.92
Shroud OD (s): 15.0	Shroud OD (s): 15.0
Collection Efficiency: 22%	Collection Efficiency: 37%

- The E7 RRDE tips fit the AFE6M shaft (for MSR rotators) or the AFE6A shaft (for ASR rotators). Shaft and tip dimensions are given below.

E7 Tip on an AFE6M Shaft	E7 Tip on an AFE6A Shaft
Length of Shaft with Tip (l): 196.9	Length of Shaft with Tip (l): 184.2
Length of Tip (t): 25.4	Length of Tip (t): 25.4
Shaft Length (y): 170.7	Shaft Length (y): 158.0
Lower Shaft Length (x): 100.8	

*Reference dimensions given in millimeters; however, electrodes are actually machined using the nearest English dimensions. Custom electrodes with other dimensions are available upon request.