

EXCEL Series Effusion Cells

Description

SVT Associates EXCEL Series is designed to work in a High Vacuum (HV) or Ultra High Vacuum (UHV) deposition system. It is the perfect choice for use in deposition of organic compounds or very high vapor pressure materials. All sources are rated for a maximum operating temperature of 600 °C. Each source comes standard with a "Hot Lip" style filament to prevent material build-up at the lip of the crucible during evaporation. All sources use a type K thermocouple. Integral shutters and a cooling shroud are available for 4.5" CF or larger flanges.

Features

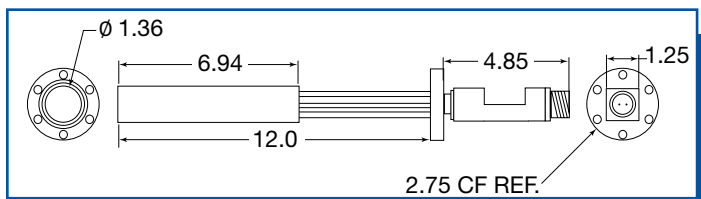
- Designed for Organic Compounds or Very High Vapor Pressure Materials
- "Hot-Lip" Style Filament Design
- A Variety of Flange Sizes Available

Specifications

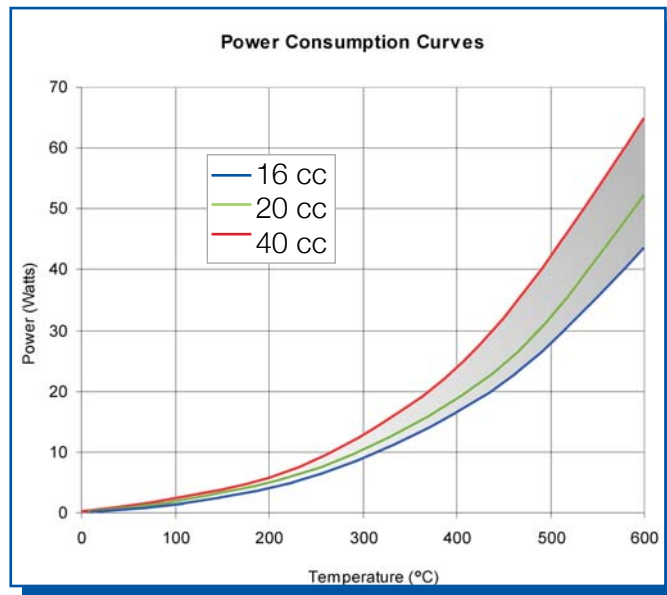
| | |
|-----------------------------|--|
| Temperature Range | 0 °C – 1,400 °C |
| Power Requirement | 600 W or 1kW |
| Temperature Stability | +/- 0.1 °C |
| Temperature Reproducibility | +/- 0.1 °C |
| Thermocouple Type | Type K |
| Filament Style | Tantalum "Bird Cage" w/Non-Conductive Guides |
| Crucible Size | 16cc, 20cc, 22cc, 40cc, 50cc, 60cc, 150cc Tapered wall for best uniformity (PBN or Other Materials) |
| Standard Length | *12.0" |
| Mounting Flange | 2.75" or 4.50" OD – CF |
| Electrical Connectors | Filament: Amphenol Circular Thermocouples: Omega-Sub-Miniature |

*Contact SVT Associates for custom in-vacuum lengths.

*Other crucible materials are available.



Schematic drawing of EXCEL source for a 2.75" CF mounting. Dimensions are given in Inches.



Typical power consumption of 16 cc – 40 cc EXCEL Cells.

| Models | Flange Size (CF) | Crucible (cc) |
|--------------------|------------------|---------------|
| SVTA-EXCEL-16-275 | 2.75" | 16 |
| SVTA-EXCEL-16-450 | 4.50" | 16 |
| SVTA-EXCEL-20-275 | 2.75" | 20 |
| SVTA-EXCEL-20-450 | 4.50" | 20 |
| SVTA-EXCEL-22-275 | 2.75" | 22 |
| SVTA-EXCEL-22-450 | 4.50" | 22 |
| SVTA-EXCEL-40-275 | 2.75" | 40 |
| SVTA-EXCEL-40-450 | 4.50" | 40 |
| SVTA-EXCEL-50-450 | 4.50" | 50 |
| SVTA-EXCEL-60-450 | 4.50" | 60 |
| SVTA-EXCEL-150-600 | 6.00" | 150 |

