



**RC6M
LOW ENERGY X-RAY MEASUREMENTS**

The RC6M is an unsealed parallel plate 6 cm³ ion chamber specifically designed for low-energy x-ray measurements. It has a thin entrance window and is suitable for x-ray energies in the range of 10 to 40 keV.

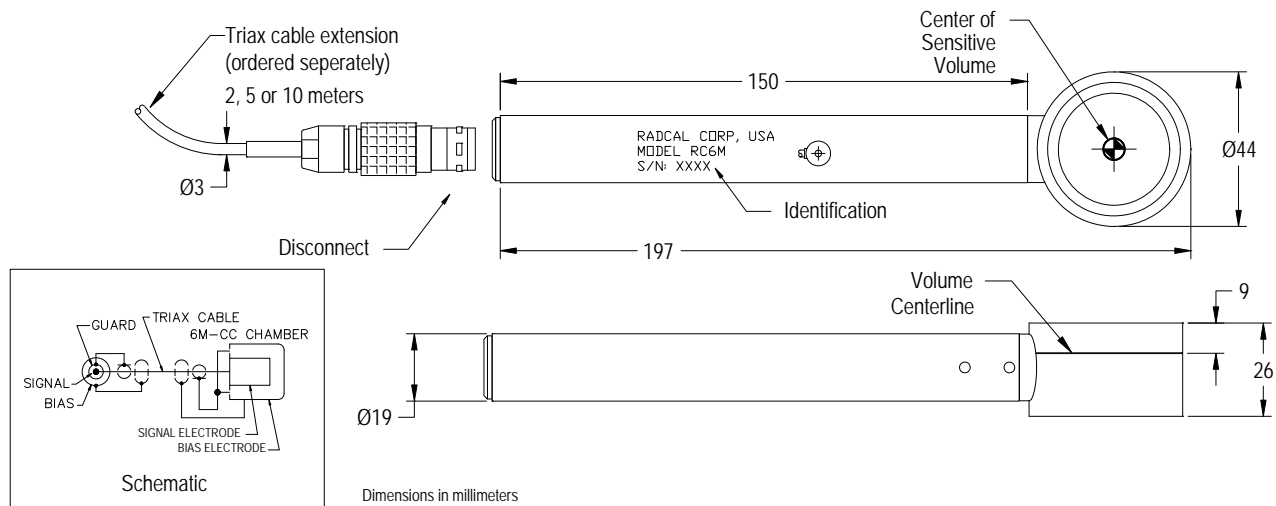
- EXPOSURE RATE DEPENDENCE: <5% to 90 mGy/s
- ENERGY DEPENDENCE: ±5%, 10 keV to 40 keV
- BIAS: Nominal +300 VDC (max +600 VDC)
- ELECTRICAL LEAKAGE:* <5e-15A with +300 VDC bias, using 2m triax cable extension
- CONSTRUCTION: Guarded (3-terminal) parallel plate, with 0.7 mg/cm² metalized polyester window; polyacetal exterior; nominal 6 cm³ active volume; 0.08 kg

*cable length dependent

Note: Remove red protective cap prior to exposure.

Nominal Chamber Volume and Sensitivity (±10%)

| Chamber Model | Volume cm ³ | C/mGy 20 °C | C/mGy 22 °C | C/R 20 °C | C/R 22 °C |
|---------------|------------------------|-------------|-------------|-----------|-----------|
| RC6M | 6 | 2.1E-10 | 2.1E-10 | 1.9E-09 | 1.9E-09 |



**RC6M Ion Chamber
Energy Dependence
(TYPICAL)**

