

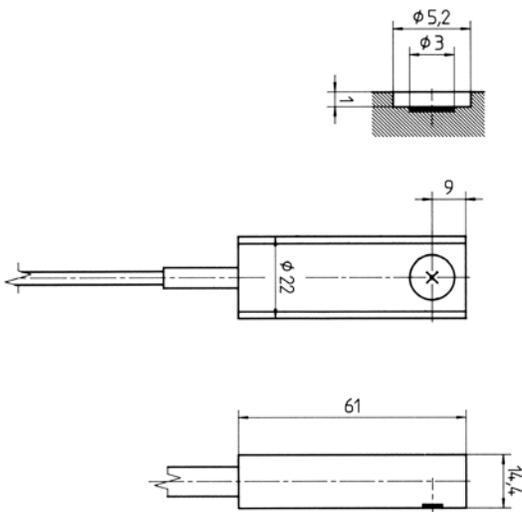
Model N23342 Superficial/Stereotactic Ion Chamber

Designed primarily for calibrating the x-ray output of therapy superficial machines and stereotactic dosimetry, this chamber is also suitable for measuring buildup in solid phantoms. The acrylic chamber body has backscatter properties similar to skin, and the thin window permits accurate measurements of soft x-ray radiation. The energy response is exceptionally flat over the 10 kV to 100 kV range.

Depth dose may be obtained by using a specially-machined phantom section which positions the chamber at the beam central axis with its window level with the surface. This then becomes part of a phantom assembly and the desired buildup thickness may be added. Depth buildup may also be accomplished by placing a special cylindrical water phantom over the chamber and adding water as necessary.

Features:

- ▶ Fully guarded design
- ▶ Vented to the atmosphere
- ▶ Collecting electrode only 3 mm in diameter



Specifications

Sensitive volume:	0.02 cc, nominal, vented
Sensitivity:	0.0033 nC/cGy, nominal
Leakage current:	$\pm 1 \times 10^{-14}$ A
Body material:	acrylic
Entrance window:	0.03 mm thick polyethylene
Window density:	2.5 mg/cm ²
Ion collector:	3 mm diameter, coated with graphite
Electrode separation:	1 mm
Guard ring:	0.1 mm wide
Bias voltage:	± 300 V maximum
External dimensions:	61 mm x 22 mm x 14.4 mm
Cable:	low-noise triaxial, BNC male triaxial connector, 1 m length (TNC optional)

Accessories

3BM-F10	Low-noise triaxial extension cable, 10 meters male/female triaxial BNC (TNC is available)
636-916	Acrylic phantom section, 25 cm x 25 cm, 1 in thick, custom drilled to accept N23342 ion chamber
SWP-1527	Stereotactic water phantom, 15 cm x 15 cm, 5 mm thick, water-equivalent plastic base, acrylic cylinder, 13 cm diameter x 27 cm high