



buildup cap (acrylic)
all dimensions in mm

Features:

- ▶ Waterproof
- ▶ Fully guarded
- ▶ Redesigned for long term stability
- ▶ Characterized for TG-51

Specifications

$N_{gas}/(N_x A_{ion})$ (cGy/R):	..... 0.849
K_{ecal}:	..... 0.897
Volume:	..... 0.6 cc (nominal)
Sensitivity:	..... 0.2 nC/cGy (nominal)
Wall material:	..... acrylic (PMMA) + graphite C
Wall thickness:	..... 0.425 mm, (0.335 mm PMMA, 0.09 mm C)
Wall density:	..... 56 mg/cm ²
Sensitive volume:	..... 6.1 mm diameter, 23.6 mm long
Electrode:	..... aluminum, 1.1 mm diameter, 21.2 mm long
Thimble O.D.:	..... 6.95 mm
Leakage:	..... $\pm 4 \times 10^{-15}$ A
Bias voltage:	..... 500 V maximum
Rate limit for 99.5% ion collection efficiency:	..... 300 V; 280 R/s, 500 V; 780 R/s
Rate limit for 99.5% ion collection efficiency, pulsed:	..... 100 V; 34 mR/pulse, 400 V; 57 mR/pulse
Buildup cap:	..... acrylic, 4.55 mm wall, 16.4 mm o.d.
Cap machine thread:	..... M 11 x 1
Cable:	..... low-noise triaxial, 1 m
Connector:	..... triaxial BNC with cap and chain (TNC optional)

Accessories

3BM-F10	..... 10 m extension cable, triax BNC, male/female with caps and chains (also available in custom lengths and/or mounted in a reel)
3BF-3TMF	..... Triaxial BNC to TNC adapter

Model N30013 Waterproof PTW Farmer® Ionization Chamber

The Model N30013 (formerly N30006) is an ionization chamber of the classic Farmer design, intended for absolute dosimetry, but featuring waterproof construction. Similarities to the PTW N30010 include a sensitive volume of 0.6 cc, guarding up to the measuring volume, atmospheric communication and a thimble with internal 0.09 mm thick graphite layer protected by a 0.335 mm acrylic exterior wall. This thimble material combination makes the N30013 essentially air-equivalent with all the ruggedness of an acrylic thimble.

As with all PTW Farmer® ionization chambers, the N30013 conforms to external physical dimensions and meets or exceeds performance standards of the original Farmer design. It features a low-noise triaxial cable with radiation-resistant insulation. Each chamber is supplied with an integral 1 meter cable, male triax BNC connector with dust cap and chain, an acrylic ⁶⁰Co buildup cap, a foam-lined case and QA checkout at CNMC.