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authorized distributor**

RPD Product Information

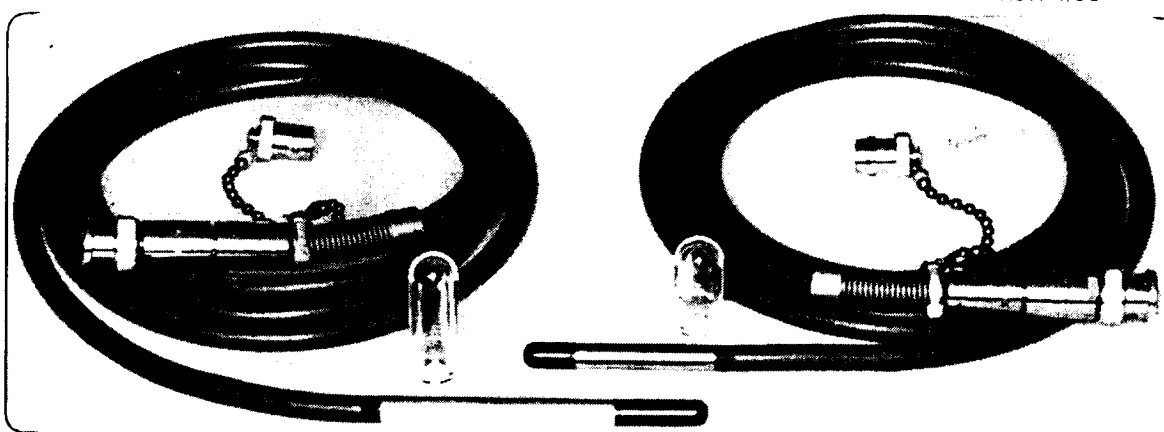
Item Number Description

300-662-BNC-M * PTW Model 31003 / 31013 - 0.3cc Flex Tube Chamber

PTW N31003, N31005 Beam Plotting Ionization Chambers

Rev. 4/98

- Waterproof
- Vented
- Fully guarded
- Rigid stem



These precision ion chambers from PTW have been designed specifically for beam scanning applications of photon and electron beams in water phantoms.

The Model N31003 (formerly N233641) has a nominal volume of 0.3cc for improved signal-to-noise and leakage current ratio.

The Model N31005 (formerly N233643) has a nominal volume of 0.125cc for increased spatial resolution along the axis which allows scanning in all directions without repositioning the chamber. The internal dimensions of 5.5mm diameter and 6.5mm length makes the sensitive volume almost spherical.

Both chambers have a rigid stem with a nominal outside diameter of 7mm that allows convenient mounting in most water phantom chamber holders. The Model N31005 however, features a significantly shorter stem that avoids excessive bending of the cable in certain water phantoms.

Although these ion chambers can be safely inserted and used in water, it is a matter of good practice to limit the immersion time to the actual duration of measurements. The chambers should be removed from the water, dried and stored shortly after completion of scanning studies.

Both chambers are supplied with an acrylic Co-60 buildup cap, 1 meter of cable terminated with triax BNC with cap & chain, in a foam lined case.

Specifications:

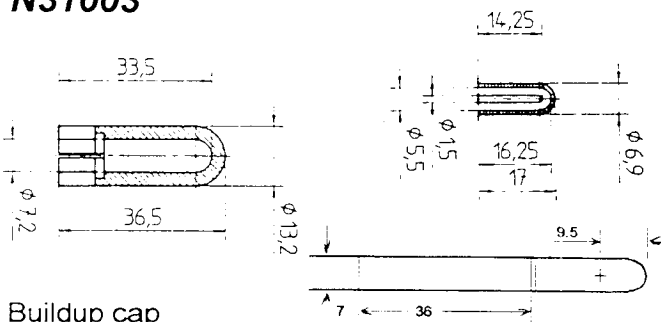
	N31003	N31005
Volume, nominal:	0.3cc	0.125cc
Sensitivity, nominal:	0.1nC/R	0.04nC/R
Sensitive length:	16.25mm	6.5mm
Sensitive diameter:	5.5mm	5.5mm
Electrode dimensions:	1.5mm \times 14.25mm	1mm \times 5mm
Aluminum stem length:	36mm	19mm

Electrode material:	Aluminum, graphite coated
Outside dia.:	6.9mm thimble, 7mm stem
Wall thickness:	0.7mm, 82.6mg/cm ² , acrylic/graphite
Leakage:	4x10 ⁻¹⁵ A
Polarizing voltage:	\pm 500V maximum
Buildup cap:	Acrylic, 3mm thick, 360mg/cm ²
Cable type/length:	New radiation resistant, 150cm (5ft)
Cable sheath:	Blue, radiation and light resistant
Cable connector:	Triaxial BNC standard, TNC optional

Options:

- 3BM-F12 Triax extension cable, BNC, 12 meters long
3RBM-F12 Triax extension cable, BNC, 12 meters, on a reel

N31003



N31005

