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RPD is an authorized distributor

RPD Product Information

Item Number Description

300-745 Scanditronix / Wellhofer NACP Parallel Plate Chamber



Technical description

Parallel Plate Chamber NACP



Applications

- absolute dosimetry of electron beams 2-50 MeV
- measurements in air, in solid or in water phantoms
- designed according to recommendations of the Nordic Association of Clinical Physicists (NACP)
 Acta Radiologica Oncology 19, 55

Features

- thin front wall minimizes contamination of the beam and allows measurements at shallow depth
- high accuracy even at low electron energies (perturbation factor very close to unity due to large guard ring)
- □ waterproof
- air-vented
- low polarity effect
- supplied with an individual factory calibration certificate and scientific papers

Material

- chamber encapsulation
 Polystyrene (1.05 g/cm³)
- collecting electrode
 Polystyrene graphitized
- front window
 Graphite/Mylar foile (1.8 g/cm³)

Active Dimensions

- volume (nominal)
- cylinder height 2.0 mm
- front window thickness

Graphite 0.5 mm Mylar foil 0.1 mm

0.16 cm³

- diameter of inner electrode 1
- inner electrode 10.0 mm
 ☐ guard ring width 3.0 mm
 ☐ polarity effect 0.5 %
 - (for all depths over the specified energy range)

Cable & Connector

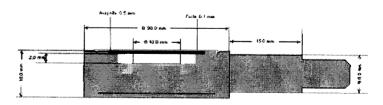
☐ connector type BNC coaxial or triaxial

+ Banana or TNC triaxial

☐ cable length 2.0 m

Operational Data

- leakage current < ± 1 x 10⁻¹⁴ A sensitivity 6 x 10⁻⁹ C/Gy
- radiation quality (e) 2 50 MeV
- polarizing voltage
 - recommended ± 200 V - maximum ± 400 V
- reference point
- in water 0.6 mm below the outer surface
- perturbation factor 1.000 ± 0.005
- ☐ long term stability ± 0.5% for one year



* add 0.2 mm for tolerance if you intend to make adapters dimensions in mm

Technical data subject to change without prior notice.