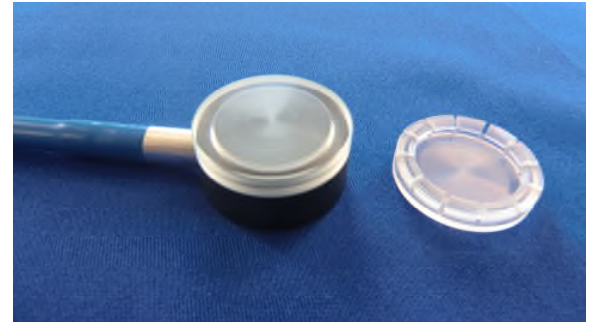


# Technical Data Sheet

## EPC300 Plane Parallel Chamber 0.046 cc



- Description:

The ionization chamber EPC300 is a waterproof therapy ionization chamber for absolute dosimetry in high-energy electron beams. The measuring volume of 0.046 cc and mechanical design is close to the recommendations by Prof. Markus. The entrance window is made of 1mm Shonka, which gives the chamber extra rigidity. The chamber volume is vented through the cable connector. EPC300 is delivered with a protection cap and calibration certificate.

- Intended use:

- Absolute Dosimetry in high energy electron beams
- For use in water, and solid plastic phantoms

- Specifications:

- Air ionization chamber, plane parallel design, water proof, vented
- Fully guarded design
- Supplied with calibration certificate for  $^{60}\text{Co}$  calibration
- Measuring quantity: Absorbed dose to water
- Nominal energy range for photons and electrons: 2 – 35MeV
- Useful field size: 3x3 to 40x40 cm<sup>2</sup>
- Typical response: 1,7 nC/Gy
- Chamber voltage: 100V – 300V max.
- Temperature range 10 – 40°C
- Humidity range 10 – 80 %
- Connector type BNC / TNC triaxial
- Length of connection cable 200 cm

- Material:

- Outer electrode Shonka C552 (1.76 g / cm<sup>3</sup>)
- Inner electrode PEEK graphitized (1.32 g / cm<sup>3</sup>)
- Build-up cap PMMA (1.19 g / cm<sup>3</sup>)

- Dimensions

- Active volume 0.046 cm<sup>3</sup>
- Cylinder height 0.6 mm
- Wall thickness 1.0 mm
- Diameter of inner electrode 9.9 mm
- Effective measure point in water 1.0 mm below the chamber surface
- Effective measure point in air 1.3 mm below the chamber surface