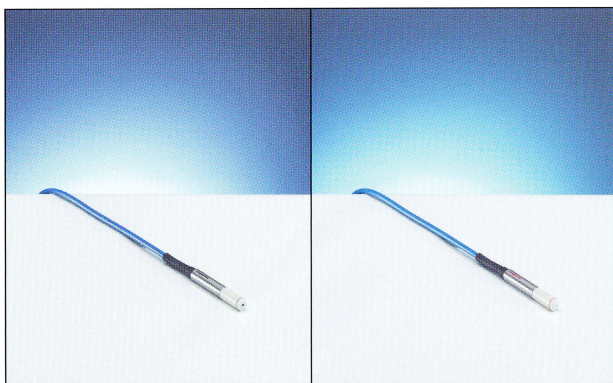


# Dosimetry Diodes



*Waterproof p-type Si diode detectors for dose distribution measurements in high-energy photon and electron beams*

## Features

- ▶ Dosimetry Diode P type 60016:  
 $^{60}\text{Co}$  ... 25 MV photons, field size  $1 \times 1 \text{ cm}^2$  ...  $40 \times 40 \text{ cm}^2$
- ▶ Dosimetry Diode E type 60017:  
(3 ... 25) MeV electrons, field size  $1 \times 1 \text{ cm}^2$  ...  $40 \times 40 \text{ cm}^2$   
 $^{60}\text{Co}$  ... 25 MV photons, field size  $1 \times 1 \text{ cm}^2$  ...  $10 \times 10 \text{ cm}^2$
- ▶ Extremely small sensitive volume of  $1 \text{ mm}^2 \times 30 \mu\text{m}$
- ▶ Suitable for dose scanning in stereotactic and IMRT fields because of the superior spatial resolution
- ▶ Suitable for use in a remote controlled water phantom

The Dosimetry Diodes are p-type Si diode detectors designed for dose distribution measurements in high-energy photon and electron beams. Applications are IMRT, stereotactic beams, brachytherapy and water phantom scanning. The Dosimetry Diodes feature an extremely small sensitive volume shaped as a disk with an area of  $1 \text{ mm}^2$  and a thickness of only  $30 \mu\text{m}$ . This makes it possible to use the Dosimetry Diodes in small beams and to perform data acquisition with a very good spatial resolution. Because of the favorable signal-to-noise ratio, the Dosimetry Diodes are suitable for high precision dose distribution measurements. Since the Dosimetry Diodes are waterproof, they can be used in water phantoms without additional protective sleeves. After calibration by the user in comparison with a calibrated therapy chamber, the Dosimetry Diodes can be used for absolute dosimetry. They have a short stem for mounting to a water phantom mechanism and a flexible connection cable of 1.5 m in length to be connected to a dosimeter. The cable can be supplied with different connector types. The Dosimetry Diodes are usually irradiated in axial direction.

## Ordering Information

*Dosimetry Diodes, connecting system BNT, TNC or M:*

60016 Dosimetry Diode P for photons

60017 Dosimetry Diode E for electrons and photons

- ▶ TANDEM Dual Channel Electrometer *page 14*
- ▶ Detector Extension Cables *page 28*
- ▶ TBA Detector Holding Devices *page 46*