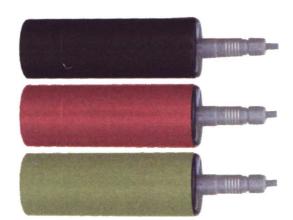
Accessories

Currently available accessories:

- Additional probes:
 - Dose rate probes
 - γ-low dose rate probe NaI25D38 1"x 1.5"
 - γ-low dose rate probe NaI38D50 1.5"x 2"
 - γ-low dose rate probe
 18 550 DE / CE
 - γ-dose rate probe
 18 509 DE / CE
 - γ-high dose rate probe
 18 529 DE / CE



- Geiger-Müller contamination / smear test probes
 - universal probe
 18504 D
 - o low dose probe 18526 D
 - smear test probe18536 D



γ- Dose rate probe 18 509 DE



Type of radiation: for gamma and x-ray measurement (DC-installations)

Calibration: using gamma radiation, Cs 137

Measuring size: photon-equivalent dose rate

* Nominal working range

of the photon energy: 48 keV-1.3 MeV, max. measuring error = 30 %

Optimum direction: radial radiation onto the probe body.

Detector: ZP 1310

Detector dimensions: internal diameter: 4.8 mm

effective length: 16 mm

housing thickness: 80-100 mg/cm²

size: 26 x 6.2 mm Ø

Position of detector in device: The detector is positioned axially in

the centre of the probe.

Position of reference point: The reference point is identified by a ring-

like marking on the probe housing.

*Nominal working range

of the temperature: operation: - 30 °C till + 60 °C

storage: - 40 °C till + 70 °C

γ- Dose rate probe 18 529 DE



Type of radiation: for gamma and x-ray measurement (DC-installations)

Calibration: using gamma radiation, Cs 137

Measuring size: photon-equivalent dose rate

* Nominal working range

of the photon energy: 80 keV-2.0 MeV, max. measuring error = 30 %

Optimum direction: radial radiation onto the probe body.

Detector dimensions: internal diameter: 4.8 mm

effective length: 8 mm

housing thickness: 80-100 mg/cm²

size: 16 x 6.2 mm Ø

Position of detector in device: The detector is positioned axially in

the centre of the probe.

Position of reference point: The

The reference point is identified by a ring-

like marking on the probe housing.

*Nominal working range

of the temperature: operation: - 30 °C till + 60 °C

storage: - 40 °C till + 70 °C

γ- Low dose probe 18 550 DE



Type of radiation: for gamma and x-ray measurement (DC-installations)

Calibration: using gamma radiation, Cs 137

Measuring size: photon-equivalent dose rate

* Nominal working range of the photon energy: 48 keV-1.3 MeV, max. measuring error = 30 %

Optimum direction: radial radiation onto the probe body.

Detector: ZP 1200

Detector dimensions: internal diameter: 15 mm effective length: 40 mm

housing thickness: 250 mg/cm²

size: 54 x 17 mm Ø

Position of detector in device: The detector is positioned axially in

the centre of the probe.

Position of reference point: The reference point is identified by a ring-

like marking on the probe housing.

* Nominal working range

of atmospheric humidity: 0 - 95 %, no influence, the device is dust- and

waterproof according to DIN 40050 (IP 67)

* Nominal working range

for outside air pressure: 100-1300 hPa, influence negligible.

* Nominal working range: operation: - 30 °C till + 60 °C

storage: - 40 °C till + 70 °C

Universal probe 18504 D



Detector:

ZP 1401, window counter tube

window:

mica

thickness:

1.5 - 2 mg/cm²

effective diameter:

9 mm

effective surface:

0.635 cm²

shielding by protection grid: 20 %

Background:

approx. 10 cpm

Counts in case of radial

incident radiation (Cs 137) approx. 2 cps / µSv/h

Axial incident radiation:

with cap: only γ -radiation

without cap: α -, β - and γ -radiation

Temperature range:

operation: - 30 °C till + 60 °C

storage: -40 °C till + 70 °C

Nominal working range

for outside air pressure:

500-1300 hPa, influence cannot be de-

termined in practical use. Transport in planes up to 3000 m hight: Changes in

air pressure have to be performed

slowly.

Housing:

aluminium housing, black anodised

Dimensions:

40 mm Ø x 126 mm

Weight:

approx. 130 g

Low dose probe 18526 D



Detector:

ZP 1431, window counter tube

window:

mica

thickness:

2 - 3 mg/cm²

effective diameter:

27.8 mm

effective surface:

6.1 cm²

shielding by protection grid: 20 %

Background:

approx. 9 cpm

Counts in case of radial

incident radiation (Cs 137) approx. 4 cps / µSv/h

Axial incident radiation:

with cap: only γ -radiation

without cap: α -, β - and γ -radiation

Temperature range:

operation: - 30 °C till + 60 °C

storage: - 40 °C till + 70 °C

Nominal working range

for outside air pressure:

500-1300 hPa, influence cannot be de-

termined in practical use. Transport in planes up to 3000 m hight: Changes in air pressure have to be performed

slowly.

Housing:

aluminium housing, red anodised

Dimensions:

40 mm Ø x 126 mm

Weight:

approx. 160 g

Smear test probe 18536 D



Detector:

ZP 1441, window counter tube

window:

mica

thickness:

1.5 - 2 mg/cm²

effective diameter:

27.8 mm

effective surface:

6.1 cm²

shielding by protection grid: 20 %

Background:

approx. 5 cpm

Counts in case of radial

incident radiation (Cs 137) approx. 2 cps / µSv/h

Axial incident radiation:

with cap: only γ -radiation

without cap: α -, β - and γ -radiation

Temperature range:

operation: - 30 °C till + 60 °C

storage: -40 °C till + 70 °C

Nominal working range

for outside air pressure:

500-1300 hPa, influence cannot be de-

termined in practical use. Transport in planes up to 3000 m hight: Changes in air pressure have to be performed

slowly.

Housing:

aluminium housing, gold anodised

Dimensions:

40 mm Ø x 126 mm

Weight:

approx. 140 g

Special count probes

o 3" x 3" x 0.5" Nal planar probe



o 4" x 4" plastic scintillator



 $\circ \quad \mbox{25mm } \varnothing \\ \alpha, \ \beta/\gamma \ \mbox{end window probe}$



 $\begin{array}{ccc} \circ & \text{50mm } \varnothing \\ & \alpha, \, \beta/\gamma \text{ end window probe} \end{array}$



o 43mm Ø x 150 mm, α , β/γ pipe detector



o 32mm Ø x 200 mm, α , β/γ pipe detector



 \circ 170 cm², α, β/γ flat probe

