

12-2024

Subject to change

Fig.: X5C plus

GRAETZ Probes

for dose rate meters of the X5C series

Product features

- Gamma probes for the measurand $\dot{H}^*(10)$ (ambient dose equivalent rate) and pulse probes for extending the measuring range of the basic unit
- For measurements at "hard-to-get-to" places
- Telescope Probe DE for measurements from a safe distance at high dose rates (see separate documentation)
- Automatic probe identification by the basic unit
- Connectable to the basic unit either directly or by using a probe cable up to a length of 100 m (standard length: 1.25 m)
- Basic unit automatically displays the detectable kind of radiation of the connected probe

Gamma probes

18550 CE

The basic unit automatically takes over the probe specific calibration factor

Underwater measurements up to a depth of 30 m by using the optional pressurised water protective case

Temperature range: -30°C up to +60°C

Measuring size: H*(10)							
Type Energy range		Measuring range	Dimensions, Weight				
18509 CE	55 keV – 1.3 MeV	50 μSv/h – 1 Sv/h	length 126 mm, Ø 40 mm, 115 g				
18529 C	70 keV – 3 MeV	200 mSv/h – 5 Sv/h	length 126 mm, Ø 40 mm, 110 g				
18545 CE	40 keV – 1.3 MeV	150 nSv/h – 200 μSv/h	length 360 mm, Ø 25/40 mm, 350 g				
10550 CE	40 koV 1.2 MoV	10 uSv/h 20 mSv/h	length 126 mm,				

 $10 \mu Sv/h - 20 mSv/h$



Pulse probes (also connectable to GammaTwin S)

Probes for the detection of α -, β - and y-contaminations

Highly sensitive scintillation probe for the detection of β -/y-radiation

Glass immersion counter tube for measurements in liquids

Indication range on the basic unit 0 – 20 kcps

40 keV - 1.3 MeV

Difference between gamma and pulse probes: basic unit effects a pulse rate measurement instead of dose rate measurement and a summation of triggered counts instead of dose measurement

Ø 40 mm, 130 g

Instead of the four dose and dose rate alarm thresholds, one pulse or pulse rate alarm threshold can be set on the basic unit

Туре	Type of radiation	Detector	Background ²⁾ (counts/min)	Temperature range	Dimensions, Weight			
18526 D	α, β, γ	GM tube; effective surface 6,1 cm²	approx. 25	-30°C up to +60°C	length 126 mm, Ø 40 mm, 150 g			
Immersion counter tube	β, γ	GM tube; effective length 150 mm	approx. 27	-30°C up to +60°C	length 290 mm, Ø 50 mm, 240 g (with beaker 275 g)			
ABG170	α, β, γ	plastic scintillator; effective surface 170 cm²	approx. 900 – 1800	-10°C up to +55°C	390x125x75 mm with handle 790 g			
Nal scintillation probe 2002	β, γ	NaI(TI) scintillator; effective volume 70x70x13 mm	approx. 135	-20°C up to +50°C ³⁾	80x85x35 mm with 200 mm handle, 530 g			

 $^{^{\}rm 2)}$ at ambient radiation from approx. 60 nSv/h to 100 nSv/h







³⁾ max. temperature change 10°C/h