

# CONTAMINATION PROBE

## ABG170

### Product features

- ▲ Thin-layer plastic scintillation detector with ZnS coating, integrated photomultiplier and detector electronics
- ▲ High sensitivity
- ▲ Detection of  $\alpha$ ,  $\beta$  and  $\gamma$  contaminations
- ▲ Detector surface 170 cm<sup>2</sup>
- ▲ By using a probe cable connectible as pulse probe to the GRAETZ dose rate meter **X5C plus** or **GammaTwin S**
- ▲ Display: cps or pulse summation with integration time
- ▲ Power supply from the basic unit **X5C plus** or **GammaTwin S**
- ▲ Acoustic single-pulse indication at the **X5C plus** or **GammaTwin S**
- ▲ Option for use with **GammaTwin S**:  
universal holder for one-hand operation

| Technical Data     |   |
|--------------------|---|
| Type of radiation: | $\alpha$ , $\beta$ and $\gamma$             |
| Indication range:  | 0 - 20 kcps                                 |
| Background counts: | 15 - 25 cps                                 |
| Active surface:    | 170 cm <sup>2</sup>                         |
| Alarm threshold:   | Cps and pulse summation                     |
| Dimensions:        | Approx. 390 x 125 x 75 mm (handle included) |
| Weight:            | Approx. 790 g                               |

### Efficiencies for various radionuclides

Average values of measurements with 100 cm<sup>2</sup> substances

|                                  |          |
|----------------------------------|----------|
| C-14                             | Ca. 14 % |
| F-18                             | Ca. 18 % |
| P-32                             | Ca. 25 % |
| S-35                             | Ca. 5 %  |
| Cl-36                            | Ca. 42 % |
| K-40                             | Ca. 30 % |
| Co-57                            | Ca. 7 %  |
| Co-60                            | Ca. 27 % |
| Sr-89                            | Ca. 27 % |
| Sr-90 / Y-90 (referred to Sr-90) | Ca. 42 % |
| Tc-99m                           | Ca. 3 %  |
| In-111                           | Ca. 8 %  |
| I-123                            | Ca. 7 %  |
| I-125                            | Ca. 12 % |
| I-131                            | Ca. 21 % |
| Cs-137                           | Ca. 35 % |
| Au-198                           | Ca. 23 % |
| Tl-204                           | Ca. 43 % |
| Am-241 $\alpha$                  | Ca. 22 % |
| P-238 $\alpha$                   | Ca. 12 % |
| U-238 $\alpha$                   | Ca. 26 % |



Fig.: ABG170 (view from above and from below)



Fig.: ABG170 with holder and GammaTwin S