

Shaft Ionization Chamber

Type 70 129

Order No. 129 00 01

Application

The shaft ionization chamber 70 129 is a radiation detector designed for activity measuring devices (radionuclide calibrators) according to the standard IEC 61303 and DIN 6855-11.

The wide energy range of 25 keV up to 40 MeV enables measurements of all usual radiopharmaceuticals. The chamber is perfectly suitable for activity measurements of nuclides which are used in Positron-Emission-Tomography (PET).

Technical Data

| | |
|---|-----------------------------------|
| Energy range | 25 keV ... 40 MeV |
| Sensitivity (^{60}Co) | 30 pA/MBq |
| Alteration of sensitivity depending on | |
| Leakage | 2 %/year |
| Temperature | $\leq 5 \cdot 10^{-4} / \text{K}$ |
| Position with deviation in axial direction (see fig. 1) | |
| Section 1 | $\leq 3 \%$ |
| Section 2 | $\leq 15 \%$ |
| Leakage current | $< 1 \cdot 10^{-13} \text{ A}$ |
| Insulation resistance (Temperature $\leq 26 \text{ }^\circ\text{C}$ and relative humidity $\leq 80 \%$) | $> 10^{14} \Omega$ |
| Filling gas | Xenon, Argon |
| Filling pressure (absolute) | 11 bar |
| Operating voltage | |
| Polarity | Negative or positive |
| Recommended | 500 V |
| Maximum | 1000 V |
| Operating and storage conditions | |
| Operating temperature range | +5 °C ... +40 °C |
| Storage temperature range | -25 °C ... +55 °C |
| Relative humidity | $\leq 80 \%$ |
| Weight | 1.6 kg |

Notes

The insulators have to be protected against mechanical stress and damage. Insulators should be cleaned with alcohol and dried in clean warm air if required.

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Mechanical Data

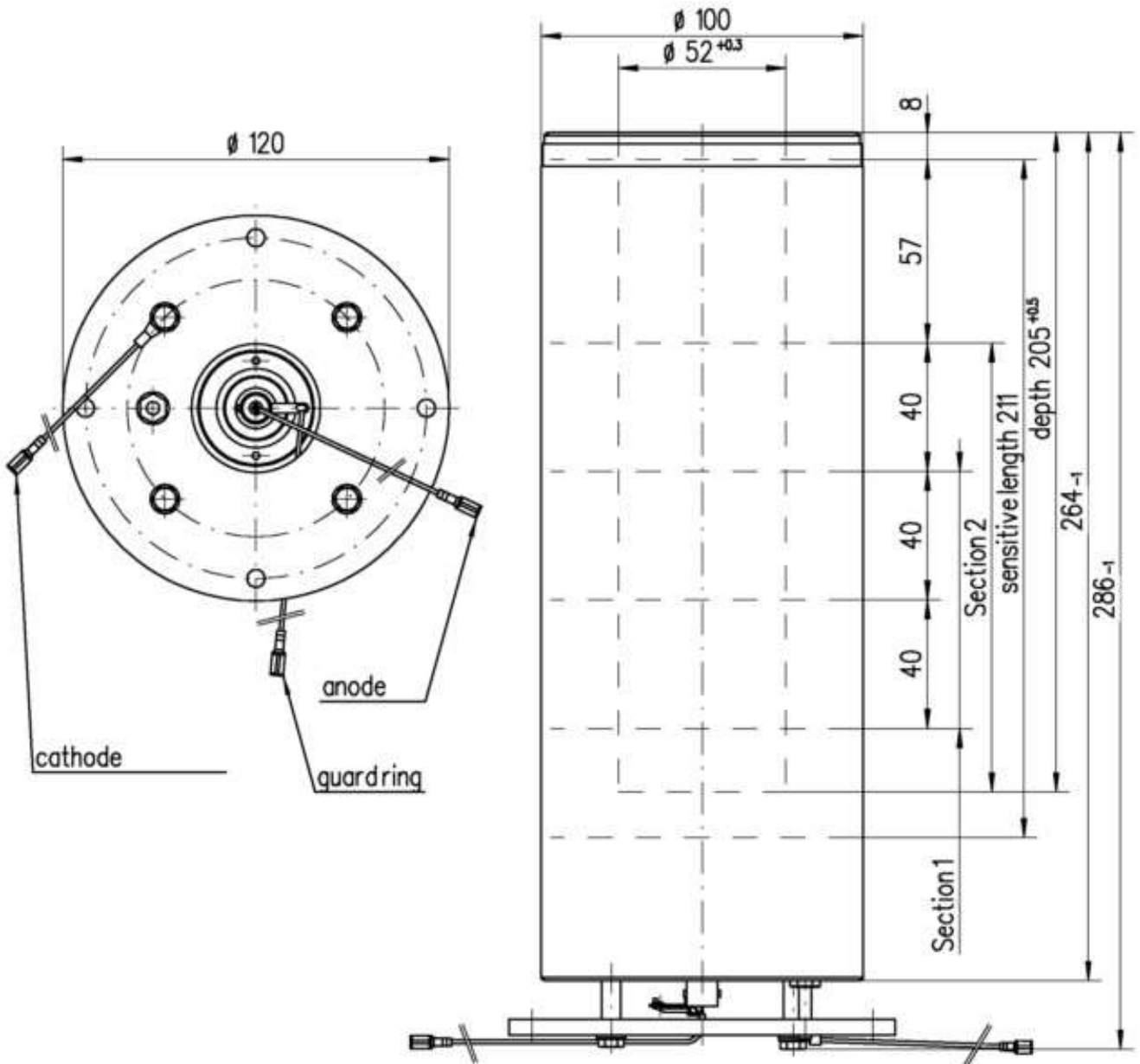


Figure 1