

Model 44-38

Beta & Low Energy Gamma Detector



Ludlum Measurements, Inc.



Part Number: 47-1588
(window closed)

Specifications

INDICATED USE: beta gamma survey

SUGGESTED INSTRUMENTS: general purpose survey meters, ratemeters, and scalers

CONNECTOR: series "C" (others available)

DETECTOR: 30–45 mg/cm² stainless steel wall halogen quenched GM

DETECTION RANGE: ± 10% up to 50 mR/hr without DTC, and up to 500 mR/hr with DTC

SENSITIVITY: 1200 cpm per mR/hr (¹³⁷Cs gamma) with window closed

BACKGROUND: 20 cpm closed; 25 cpm open

GAMMA ENERGY RESPONSE (window closed): within 20% of ¹³⁷Cs (662 keV) from 60 keV to 1.3 MeV

DEAD TIME: typically 95 microseconds

OPERATING VOLTAGE: typically 900 volts

CONSTRUCTION: anodized aluminum housing with rotary beta window

WINDOW CONSTRUCTION: tin shields mounted on aluminum with a solid aluminum gap in the middle

- Low Energy Blocking Window: tin and aluminum segments are 1353 mg/cm²
- Low Energy Pass Through Window: the middle aluminum segment is 610 mg/cm²

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F); may be certified to operate at -40 to 65 °C (-40 to 150 °F)

SIZE: 3.3 x 16.5 cm (1.3 x 6.5 in.) (Dia x L)

WEIGHT: 0.5 kg (1.0 lb)