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Your Alternative
To The Obvious

Model 44-116 Beta Scintillation Detector



Specifications

Part Number: 47-2696

INDICATED USE: beta survey

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

SCINTILLATOR: 0.03 cm (0.01 in.) thick rectangular plastic scintillator

EFFICIENCY (4π): 15% for 99Tc, 4% for 14C, 30% for 90Sr90Y

WINDOW: 1.2 mg/cm² aluminized polyester

WINDOW AREA:

Open: approximately 100 cm² (15.5 in²) open

Active: approximately 125 cm² (19.4 in²) 100 cm² (15.5 in²) open

PROTECTOR SCREEN: 22 ga (0.076 cm [0.030 in.]) stainless steel hex (0.64 cm [0.25 in.]), 79% open

RESPONSE UNIFORMITY: $\pm 10\%$ from average reading

GAMMA SENSITIVITY: approximately 20 cpm per $\mu\text{R/hr}$

BACKGROUND: beta 300 cpm or less

PHOTOMULTIPLIER TUBE: 3.8 cm (1.5 in.) diameter

OPERATING VOLTAGE: typically 500–1000 volts (1500 volts maximum)

CONSTRUCTION: aluminum with beige powder coating

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

CONNECTOR: series "C", unless specified otherwise

WINDOW FRAME SIZE: 190.3 x 100.2 mm (7.5 x 3.9 in.) (L x W)

OVERALL SIZE: 33 x 10 x 10 cm (12.25 x 4 x 4 in.) (L x W x H)

WEIGHT: 0.68 kg (1.5 lb)

