

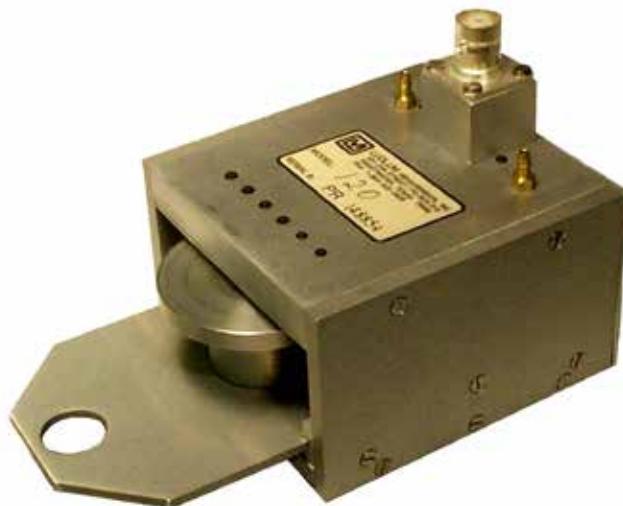
Model 120

Gas Proportional Detector

Radiation Detection for a Safer World



Ludlum Measurements, Inc.



Part Number: 47-1625

Introduction

The Ludlum Model 120 consists of a sample holder and a proportional detector. The sample holder will accommodate a 5.1 cm (2 in.) diameter sample. It is mounted on a turntable-type mechanism that is adjustable in height from 0 to 0.9 cm (0 to 0.35 in.). This detector is compatible with any Ludlum scaler or equivalent instrument connected via the standard "C" type connection located on the top of the device.

Specifications

INDICATED USE: alpha, beta, gamma sample counting

WINDOW: 0.4 mg/cm² metalized polyester

WINDOW AREA: active and open 32 cm² (5 in²)

SAMPLE SIZE: maximum 5.1 cm (2 in.) diameter

SAMPLE TRAY: adjustable height from 0–0.9 cm (0–0.35 in.)

CONNECTOR: series "C"

EFFICIENCY (4π): 10%–¹⁴C; 42%–⁹⁰Sr/⁹⁰Y; 35%–²³⁰Th; less than 1%–gamma

RECOMMENDED COUNTING GAS: P-10 Mixture (10% methane, 90% argon)

SUGGESTED INSTRUMENTS: Models 12, 2200, 2221, 2241, 2241-2, 2350-1, 3030E, and others

OPERATING VOLTAGE:

alpha: 900–1300 volts

beta gamma: 1300–1700 volts

COUNTER THRESHOLD SETTING: typically 2–5 mV

SIZE: 11.4 x 10.2 x 13.9 cm (4.5 x 4 x 5.5 in.) (H x W x L)

WEIGHT: 0.9 kg (2 lb)