# 50332

Gamma compensated neutron ionization chamber

## GENERAL SPECIFICATIONS

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|---|---|
| **MAXIMUM LENGTH (INCH/MM)** | 11.81/299.97 |
| **MAXIMUM DIAMETER (INCH/MM)** | 2.0/50.8 |
| **EFFECTIVE LENGTH (INCH/MM)** | 9.0/228.6 |
| **CATHODE MATERIAL (INTERNAL/EXTERNAL)** | Aluminum |
| **FILL GAS** | Xenon |
| **FILL PRESSURE (TORR)** | 2280 |
| **EFFECTIVE VOLUME ($CM^3$)** | 225.0 |
| **OUTER CASING MATERIAL** | Aluminum |
| **ANODE CONNECTOR** | MHV |
| **CATHODE CONNECTOR** | MHV |
| **GUARD CONNECTOR** | N/A |

## OPERATING CHARACTERISTICS

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|---|---|
| **RECOMMENDED OPERATING VOLTAGE (VOLTS)** | 500 |
| **OPERATING TEMPERATURE RANGE °C** | -50 to +100 |
| **NEUTRON SENSITIVITY (AMPS/NV)** | 4.0E-14 |
| **NEUTRON FLUX RANGE (NV)** | 2.5E2 to 2.5E10 |
| **MAXIMUM OPERATING VOLTAGE (VOLTS)** | 800 |
| **GAMMA SENSITIVITY (A/R/HR - CO60)** | 5.0E-11 |
| **RESISTANCE - SIGNAL ELECTRODE TO CATHODE (OHMS)** | >1.0E13 |
| **RESISTANCE - GUARD ELECTRODE TO CATHODE (OHMS)** | >1.0E10 |
| **INTERNAL TEST SOURCE CURRENT (AMPS)** | 1.5 - 4.5E-10 |

# NEUTRON SENSITIVE MATERIAL

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|---|---|
| **COATING MATERIAL** | B10 |
| **ENRICHMENT (%)** | 96 |
| **COATED THICKNESS (MG/CM²)** | 1 |
| **COATED AREA (CM²)** | 240 |