

NUCLEAR CORPORATION OF AMERICA

central electronic mfr's division

DENVILLE, NEW JERSEY

IONIZATION
GAUGE TUBE
TYPE
CEM-75

IONIZATION GAUGE TUBE

DESCRIPTION

The CEM-75 is a burn out proof version of the Bayard-Alpert design. It is capable of vacuum measurement in the range of 10^{-4} to 10^{-10} millimeters of mercury. The burn out proof filament, incorporated in the CEM-75, makes it desirable for use in systems that are repeatedly opened to air.

SPECIFICATIONS

PHYSICAL:

LENGTH (Max.) $6\frac{3}{4}$
BULB DIAMETER (Max.) $2\frac{3}{8}$
TUBULATION O.D. $\frac{3}{4}$
FILAMENT..... thorium oxide coated iridium ribbon

ELECTRICAL:

FILAMENT VOLTAGE..... 3-5 VOLTS AC
FILAMENT CURRENT..... 4-6 AMPS AC
GRID VOLTAGE..... +150 VOLTS
COLLECTOR VOLTAGE..... -30 VOLTS

GRID DEGASSING:

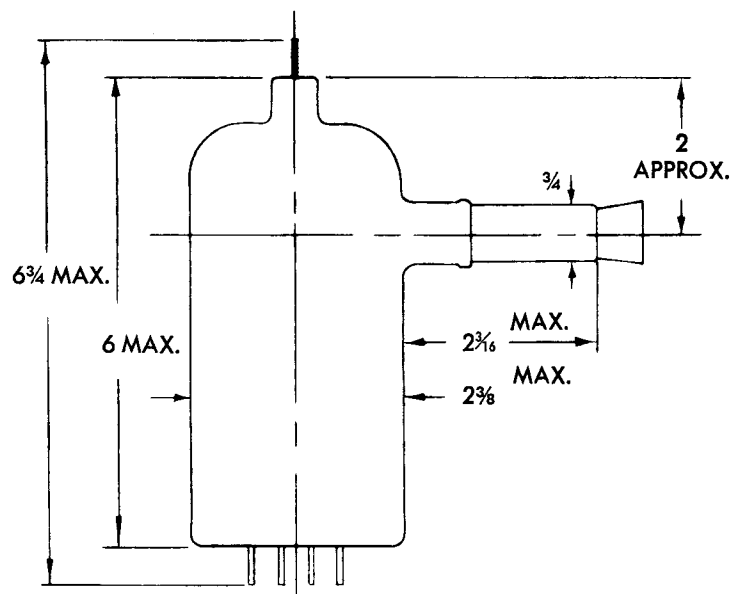
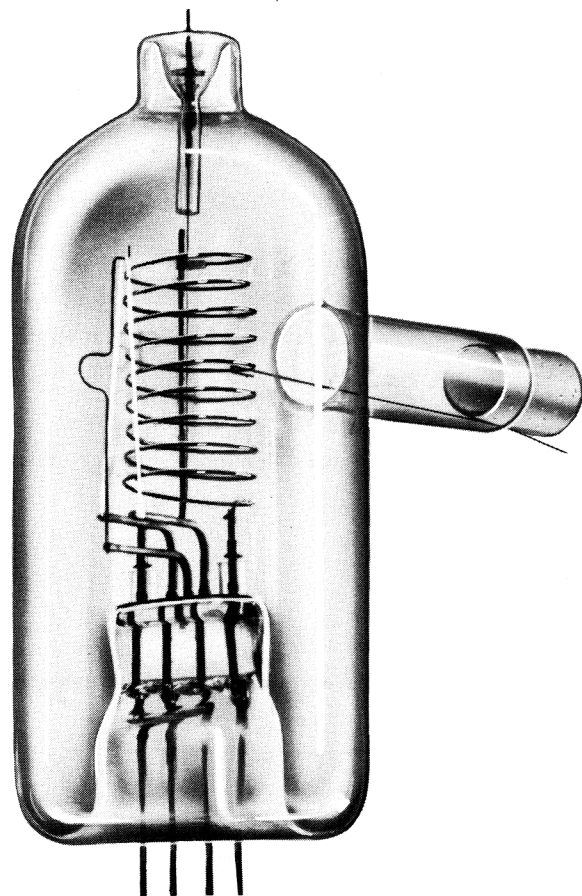
VOLTAGE..... 7.5-8 VOLTS AC
CURRENT..... 10-11 AMPS AC

SENSITIVITY (NITROGEN)

100 microamps per micron @ 10ma grid current or
10 microamps per micron per ma grid current

SPECIAL GAUGES

Our engineering staff is available to design and custom-produce specialized ionization gauges to meet your particular operating requirements.



CENTRAL ELECTRONIC MFR'S DIVISION



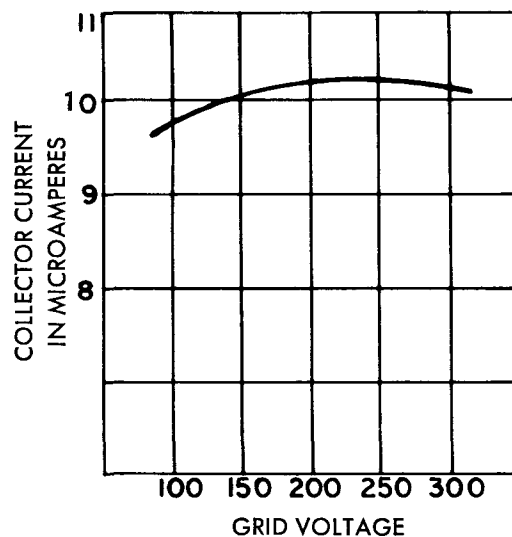


CEM-75

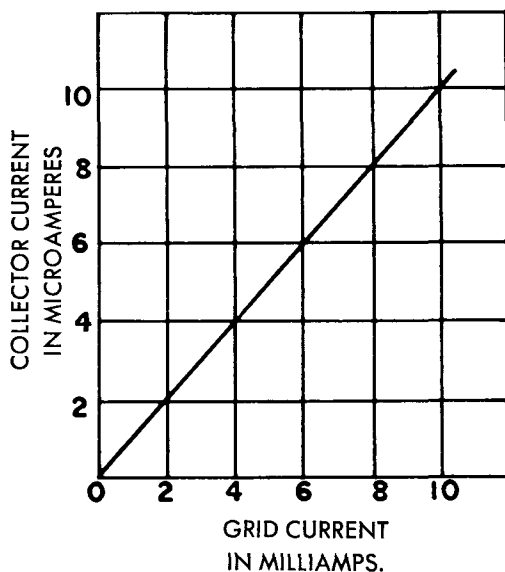
The ~~CEM-75~~ is available with three different types of tubulation that are designated by the letter following the gauge type.

CEM-75N (NONEX GLASS)
CEM-75P (PYREX GLASS)
CEM-75K (KOVAR TUBING)

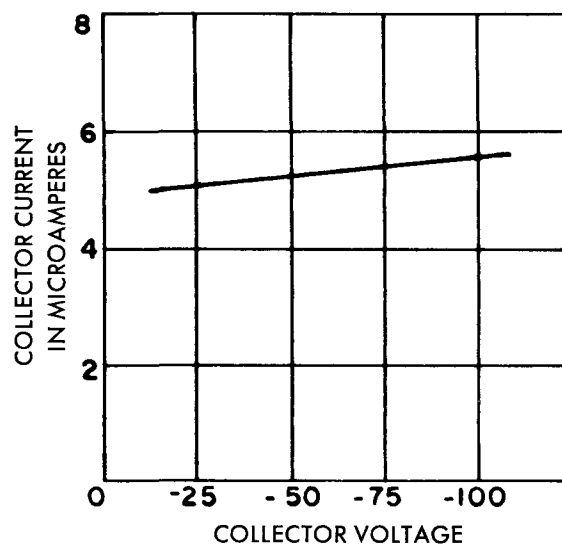
The standard tubulation size is $\frac{3}{4}$ inches in diameter but price and delivery on special sizes will be quoted on request.



PRESSURE = 1×10^{-4} mm Hg
COLLECTOR VOLTAGE = -30 V.
GRID CURRENT = 10 ma



PRESSURE = 1×10^{-4} mm Hg
COLLECTOR VOLTAGE = -30 V.
GRID VOLTAGE = +150 V.



PRESSURE = 5×10^{-5} mm Hg
GRID VOLTAGE = 150 V.
GRID CURRENT = 10 ma

