VACUUM GAUGE HEAD, PENNING TYPE

Glass envelope, high vacuum gauge head of the Penning type (cold-cathode, ionisation type). Pressure range 2×10^{-3} torr to 10^{-5} torr.

CHARACTERISTICS

Pressure range	2×10^{-3} to 10^{-5} torr
Sensitivity	see page 3

Notes:

1. The graph on page 3 is correct within a factor two for air, hydrogen, argon and carbon dioxide. The inaccuracy can be reduced to plus or minus 5% by calibrating for the gas composition in question.
2. Water vapour contamination of the gauge head may cause misreadings; in this case it is advisable to take readings some minutes after application of the anode supply voltage.

TYPICAL OPERATING CONDITIONS

CIG-22 combined with magnet type 95380

Anode supply voltage	V_{ba}	2000	V d.c.
Anode resistor	R_a	1	MΩ

LIMITING VALUES

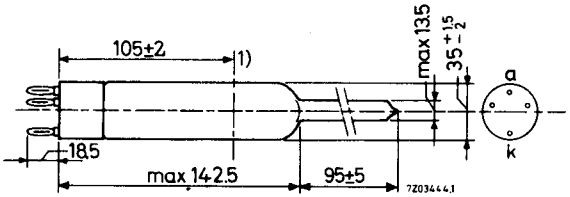
CIG-22 combined with magnet type 95380

Anode voltage	max.	2500	V
Anode current	max.	2	mA

MECHANICAL DATA

Dimensions in mm

Material of tubulation: 01 soft glass



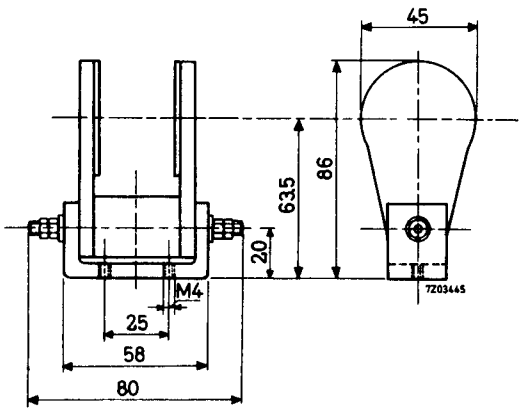
1) Line through the centres of the cathode plates and axis of the magnetic flux lines.

Mounting position: any

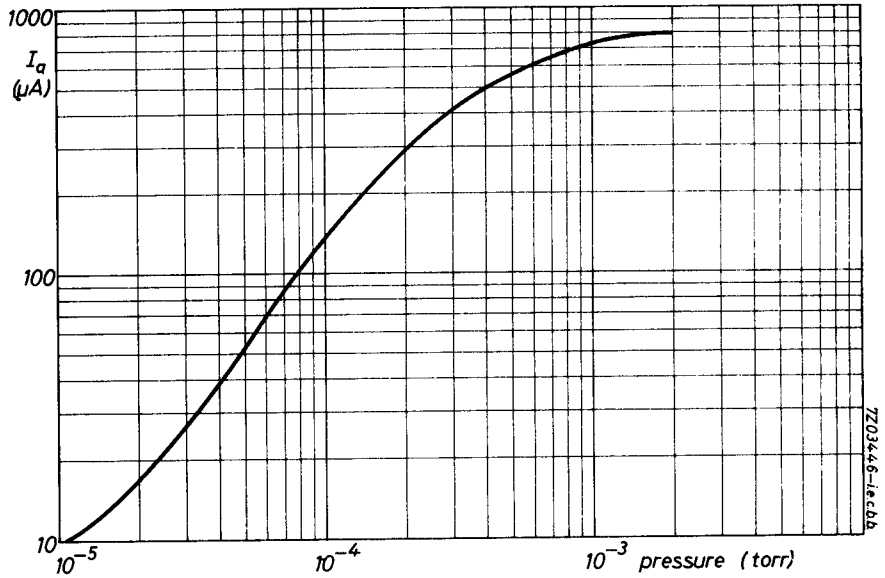
Note: When in operation the gauge has a pumping effect; to prevent misreadings due to pressure losses in the connecting tubulation, the connection to the vacuum chamber should be wide and short. Recommended dimensions are: diameter min. 10 mm and length max. 100 mm.

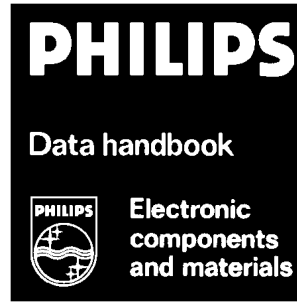
ASSOCIATED COMPONENTS

Magnet 95380



Magnet type 95380


1000
I_a
(μA)
100
10
10^{-5}
10^{-4}
10^{-3}
pressure (torr)
7Z03446-ieebb



CIG22

page	sheet	date
1	1	1968.02
2	2	1968.02
3	3	1968.02
4	FP	2001.05.17