

EVAPORATION ION PUMP

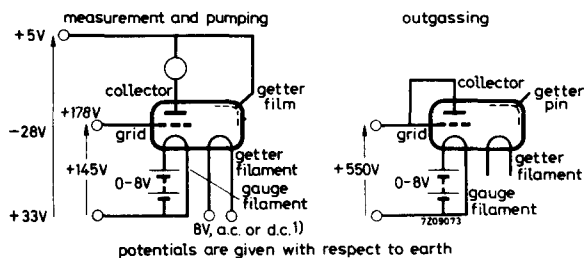
One-shot evaporation ion pump, consisting of a Bayard-Alpert gauge with the addition of a zirconium getter filament. The getter is evaporated from the getter filament, the pumping speed being enhanced by the ionising action of the gauge.

The Bayard-Alpert gauge can be used independently for measuring purposes.

CHARACTERISTICS

Pressure range, pumping measurement	10^{-3} to 10^{-11} torr 10^{-3} to 10^{-10} torr
Pumping speed average (for nitrogen) at 10 mA emission current	0.4 l/s
Gauge sensitivity (for nitrogen)	approx. 12 per torr
Gauge filament characteristics	see page 3
Gauge emission current range	1 μ A to 75 mA
Insulation resistance before pumping	
Collector to other electrodes	min. $10^{14} \Omega$
Grid to other electrodes	min. $10^{12} \Omega$

TYPICAL OPERATING CONDITIONS



Gauge emission current (see also page 2)	
measurement	100 μ A, 1 mA or 10 mA
outgassing	75 mA

¹) Getter filament current at the given supply voltage

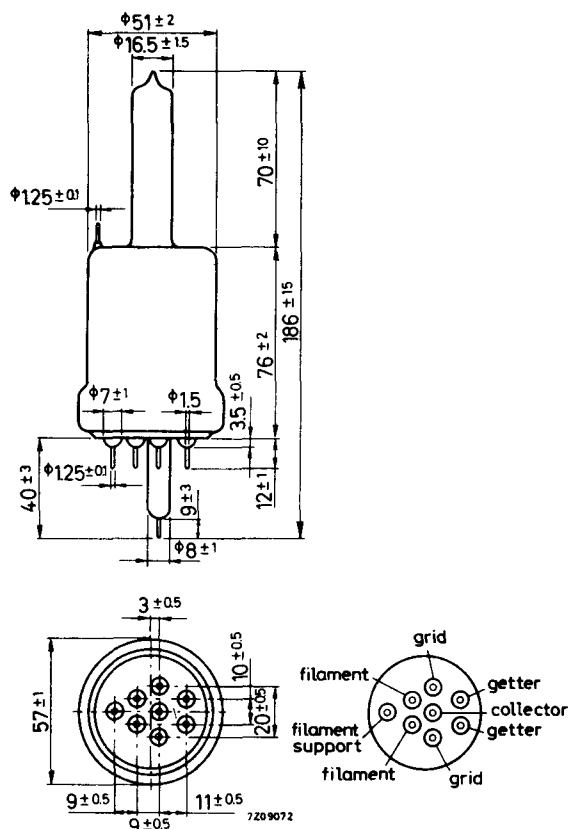
LIMITING VALUES

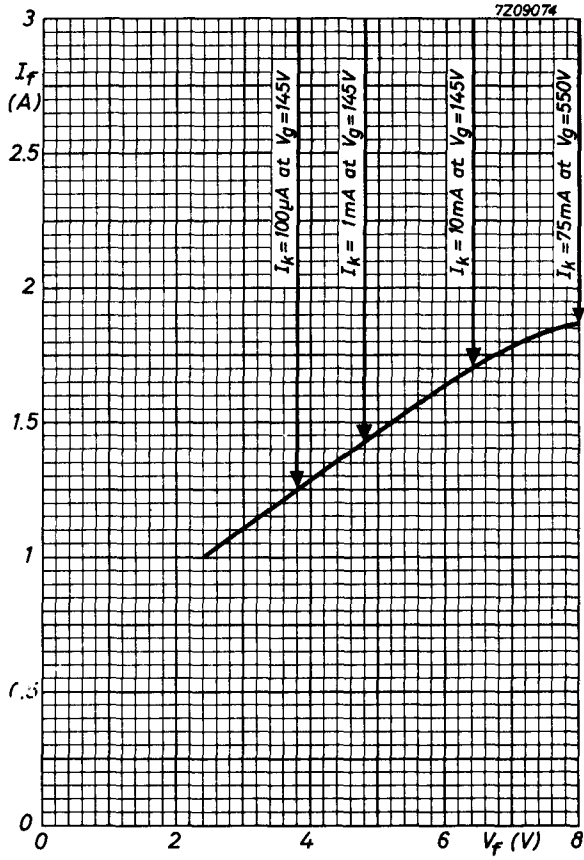
Gauge filament voltage	max. 8 V
Gauge emission current	max. 75 mA
Getter filament current	max. 10 A
Grid wattage	max. 40 W
Bulb temperature during operation	max. 100 °C
Bake-out temperature	max. 450 °C

MECHANICAL DATA

Dimensions in mm

Material W1 glass





PHILIPS

Data handbook



**Electronic
components
and materials**

EIP12

page	sheet	date
1	1	1968.03
2	2	1970.01
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4	FP	2001.05.17