



ELECTRONIC TUBE REFERENCE

IOG12

Specialized - Gauge Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
GAUGE

Bayard-Alpert ultra-high-vacuum ionization gauge head designed for pressure measurement into the extreme-high-vacuum region, with published nitrogen sensitivity.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	8 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Gauge

No fixed ratings recorded.

Published ratings/characteristics are also preserved as parameter rows.

Bayard-Alpert ultra-high-vacuum ionization gauge head. Electrical ratings, heater data, operating limits, and published characteristics are captured from the supplied datasheet.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1999 PHILIPS E-Z

Section 1 · Gauge

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
range	1077 torr	range 1077 torr to 10-10 torr; sensitivity approx. 12 per torr.
range	-10 torr	range 1077 torr to 10-10 torr; sensitivity approx. 12 per torr.
range	12 per torr	range 1077 torr to 10-10 torr; sensitivity approx. 12 per torr.
Pressure range	-10 torr	Pressure range 10-3 to 10-10 torr
Sensitivity (for nitrogen) approx	12 per torr	Sensitivity (for nitrogen) approx. 12 per torr
Emission current range	1 uA	Emission current range 1uA to 75 mA
Emission current range	75 mA	Emission current range 1uA to 75 mA
28V +	28 V	28V +
+145V	145 V	+145V. 550V
+145V	550 V	+145V. 550V
measurement	100 uA	measurement 100 uA, 1 mA or 10 mA
measurement	1 mA	measurement 100 uA, 1 mA or 10 mA
measurement	10 mA	measurement 100 uA, 1 mA or 10 mA
outgassing	75 mA	outgassing 75 mA
Pressure (filament litt) max	1073 torr	Pressure (filament litt) max. 1073 torr
Filament voltage max	8 V	Filament voltage max. 8 V
Emission current max	75 mA	Emission current max. 75 mA
Grid input power max	40 W	Grid input power max. 40 W
Bulb temperature during operation max	100 °C	Bulb temperature during operation max. 100 °C
I _x =75mA at V _g =550V]	75 mA	I _x =75mA at V _g =550V]

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
$I_x=75\text{mA}$ at $V_g=550\text{V}$]	550 V	$I_x=75\text{mA}$ at $V_g=550\text{V}$]
$k=10\text{mA}$ at $V_g=145\text{V}$	10 mA	$k=10\text{mA}$ at $V_g=145\text{V}$
$k=10\text{mA}$ at $V_g=145\text{V}$	145 V	$k=10\text{mA}$ at $V_g=145\text{V}$
$6 V_i$ (V)	6 V	$6 V_i$ (V) 8