Convection-Enhanced Pirani Gauge

PG105U — UHV Pirani gauge

- 1000 Torr to 10⁻⁴ Torr range
- UHV compatible
- Bakeable to 250 °C
- Fast response time
- Compatible with IGC100 controller



PG105U Specifications

Туре	Convection-enhanced Pirani gauge
Measurement range	1.0×10^{-4} to 1000 Torr
Materials exposed	Stainless steel, nickel "52" alloy,
to vacuum	glass-alumina, ceramic, gold, copper
Sensor	Gold-plated tungsten
Sensor temperature	120 °C (nominal)
Reproducibility	5 % (at constant temp.)
Bakeout temperature	250 °C
(non-operating)	Disconnect electronic housing
	during bakeout
Operating temperature	0 °C to 50 °C
Temp. compensation	10 °C to 40 °C range
Installation orientation	Gauge tube axis must be horizontal
	for pressure measurements
	above 1 Torr.
Connection	Standard: 0.5 inch dia. side tube
	terminated in 1/8NPT thread
	Options: NW16KF, NW25KF,
	1.33" CF, 2.75" CF, 1/4" VCR
Gas compatibility	1) Not intended for use in
	explosive atmospheres
	2) Do not use in the presence of
	fluorine or mercury containing vapors.
Calibration gas	N_2/air
Internal volume	28 cm ³
Dimensions	$1.3" \times 2.7" \times 4.2"$ (WHL)
Weight	0.5 lbs.
Electrical connector	RJ-45

The PG105U is an all-metal, convection-enhanced Piani gauge, featuring a knife-edge copper gasket seal. The gauge has a bakeout range from 110 $^{\circ}$ C to 250 $^{\circ}$ C allowing complete compatibility with UHV environments.

Ordering	Information
PG105U	Pirani gauge (250 °C, 1/8" NPT)
Option 01	1.33" CF flange
Option 02	2.75" CF flange
Option 03	NW16KF flange
Option 04	NW25KF flange
Option 05	VCR 1/4" fitting
O105C4	10' cable (dual-gauge cable)
O105C4/1	25' cable (dual-gauge cable)
O105CA1	Adapter for Convectron [®] gauge
O105CA2	Adapter for HPS [®] series 317



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