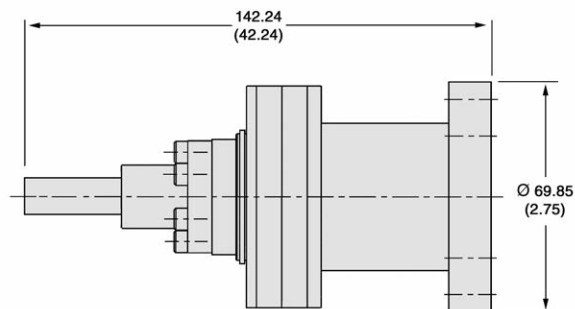
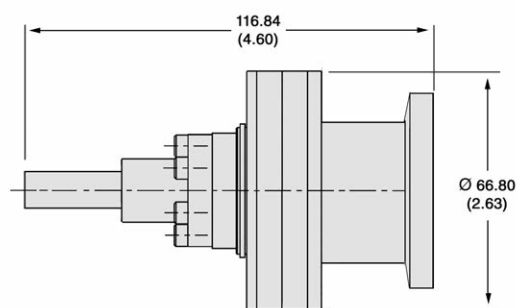


Agilent Gauges – Ultra-High Vacuum

Agilent IMG-300 UHV Inverted Magnetron Gauge



w/[2.75 CFF



w/NW40 Flange

Dimensions: millimeters (inches)

The IMG-300 inverted magnetron gauge combines excellent ultra-high vacuum measurement capability with fast pressure response. This sensor is optimized for UHV applications such as particle accelerators, synchrotron light beam lines and energy research applications, where stable UHV pressure measurement and fast pressure response are equally critical. Inverted magnetron gauges have no x-ray limit, so the ability to read extremely low pressure is limited only by the number of gas molecules present.

The magnetic design provides superior sensitivity at UHV pressures and ensures starting within 30 seconds at 1×10^{-10} Torr (millibar). With no hot filament, there is minimal outgassing from within the gauge that would degrade absolute accuracy of pressure response, and there is no electron or photon emission to disrupt an experimental process. The all-metal gauge design is radiation-resistant and bakeable

to 250 °C during operation, while the locking SHV high-voltage connector ensures safety and positive electrical contact. Radiation-resistant, bakeable cables are also available. The IMG-300 is easily interfaced with Agilent's XGS-600 gauge controller for integration into a variety of vacuum systems, or for use as a stand-alone pressure measurement tool.

Technical Specifications

Measurement range

1×10^{-3} Torr to 1×10^{-11} Torr, 1×10^{-1} Torr to 1×10^{-9} Pascal

Measurement precision

+ 50 % within a pressure decade standard,
 + 20 % with STARRS Calibration

Temperature limits

Operating: 0 °C to 250 °C; storage: -15 to 80 °C

Bake out temperature

250 °C maximum with cable and magnet attached

Pressure response time

< 50 milliseconds @ UHV pressures

Ignition response (starting time)

< 30 seconds @ 1×10^{-10} Torr

Operating voltage

3 kilovolts

Materials exposed to vacuum

Stainless steel, nickel, glass, nickel alloy 52

Sensitivity

2 A / Torr + 20% at 5×10^{-6} Torr

Ordering Information

NOTE For information on compatible gauge controllers and cabling, please refer to Multi-Gauge sections of catalog.

Description	Part Number	Fitting	Shipping Weight kg (lbs.)
IMG-300	R0343301	2.75 inch CFF	1.0 (2.0)
IMG-300 Maintenance Kit	R0040301		