



APG100 Series Active Pirani Vacuum Gauges

VACUUM SYSTEMS PRODUCT DATA

BOC Edwards APG100 series Active Pirani vacuum gauges are available in 2 models. The APG100-XM is the standard model and measures to 10^{-3} mbar. The APG100-XLC is a corrosion resistant version with measurement to 10^{-4} mbar.

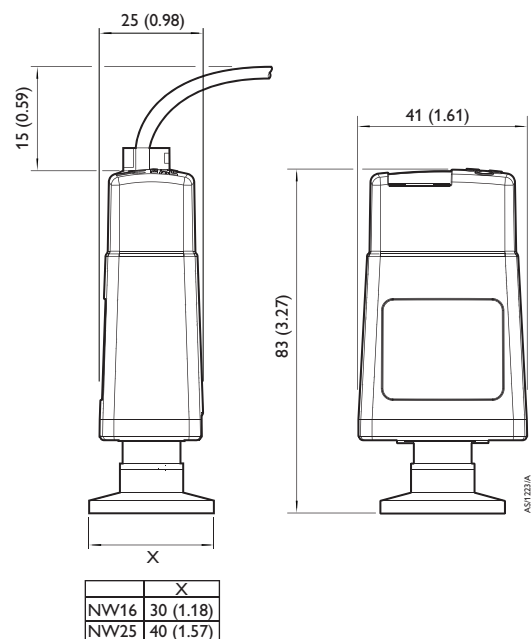


Both gauges feature compact size for easy installation, a linear output, and a replaceable sensor tube. The new gauges are compatible with all BOC Edwards TIC instrument controllers and other active gauge controllers and displays. They are also CSA, C/US approved as well as fully RoHS compliant due to their lead-free construction

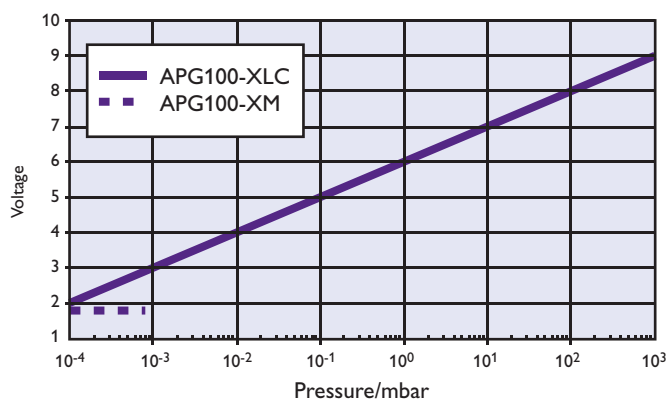
Features and Benefits

- ▶ Cable connections and gauge adjustment conveniently located, thereby minimizing the space envelope required for access
- ▶ Sensor tube can be baked to 150 °C
- ▶ Adjustable set-point for simple process control and interlocking
- ▶ Remote calibration possible
- ▶ Linear output - 1 volt per decade for easy interface with vacuum control systems
- ▶ NW16 and NW25 flange options for easy connection to vacuum systems – other flange options on request
- ▶ LED status indicator shows normal and fault conditions

DIMENSIONS - MM (INCHES)



PERFORMANCE CURVE



TECHNICAL SPECIFICATION

Mass	
NW16 version	85 g
NW25 version	100 g
Internal volume	5 cm ³
Enclosure rating	IP40

Performance, operating and storage conditions

Measurement range	
APG100-XM	Atmosphere to 10 ⁻³ mbar
APG100-XLC	Atmosphere to 10 ⁻⁴ mbar
Accuracy	
APG100-XM	Typically +/- 15% at <100 mbar
APG100-XLC	Typically +/- 15% at <10 mbar
Maximum over-pressure	10 bar absolute
Temperature range	
Operating	5° to 60° C
Storage	-30° to 70° C
Bake-out with electronics removed	150 °C
Humidity	80% RH up to 31 °C decreasing linearly to 50% RH at 40 °C and above
Maximum altitude	3000 m
Filament temperature	100 °C above ambient

Electrical data

Electrical supply voltage	15 to 30 V d.c. nominal 13.5V d.c. minimum 32V d.c. maximum
Power consumption	1 W
Output signal	0 to 10V d.c. nominal
Set-point – open collector transistor	
Rating	30V d.c. 100 mA
Range of set-point	1.8 to 9.2 V dc
Fixed hysteresis	500 mV (1/2 decade)
Level setting resolution	6 mV

ORDERING INFORMATION

Active Pirani Gauges	Part Number
APG100-XM Atmosphere to 10 ⁻³ mbar NW16 flange	D02601000
APG100-XM Atmosphere to 10 ⁻³ mbar NW25 flange	D02602000
APG100-XLC Atmosphere to 10 ⁻⁴ mbar corrosion resistant NW16 flange	D02603000
APG100-XLC Atmosphere to 10 ⁻⁴ mbar corrosion resistant NW25 flange	D02604000
Spare sensor tubes	
Spare sensor for APG100-XM NW16 flange (D02601000)	D02601801
Spare sensor for APG100-XM NW25 flange (D02602000)	D02602801
Spare sensor for APG100-XLC NW16 flange (D02603000)	D02603801
Spare sensor for APG100-XLC NW25 flange (D02604000)	D02604801
Spare electronic modules	
Spare APG100-XM electronics module	D02601800
Spare APG100-XLC electronics module	D02603800
Spare mesh filter for APG100 pack of 5	D02601805

Gauges may be supplied with a calibration certificate traceable to UK national standards. Contact BOC Edwards for details.