

ASG Active Strain Gauge



The Edwards Active Strain Gauge (ASG) is a rugged, corrosion resistant diaphragm gauge which provides accurate, gas independent measurement from 2000 mbar to 1 mbar. It can be used as a stand-alone transducer allowing OEMs and system builders to develop low cost, flexible solutions to their vacuum instrumentation needs. Alternatively, it can be connected to the TIC Instrument Controller where it can be combined with many other sensor types to provide a complete vacuum instrument solution.

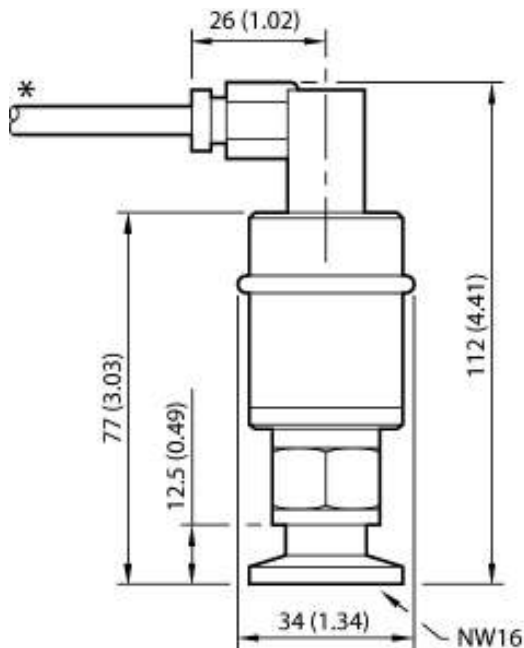
Note: ASG adaptor cable supplied separately. This cable must be used with TIC, AGC, ADC & ADD.

4 Features & Benefits

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- Drive electronics combined in the gauge head which simplifies system design and saves valuable rack space
- Wide range, regulated internal power supply which runs from standard d.c. power supplies of +13.5 to +36 V and is tolerant to voltage fluctuations
- Standard analog output of 0 to 10 V d.c. which is easy to interface with a computer or PLC
- High accuracy and stability. Accuracy of ± 0.2 full scale and stability 0.2 full scale
- Corrosion resistant, rugged design where the only material exposed to vacuum is stainless steel 316

Dimensions

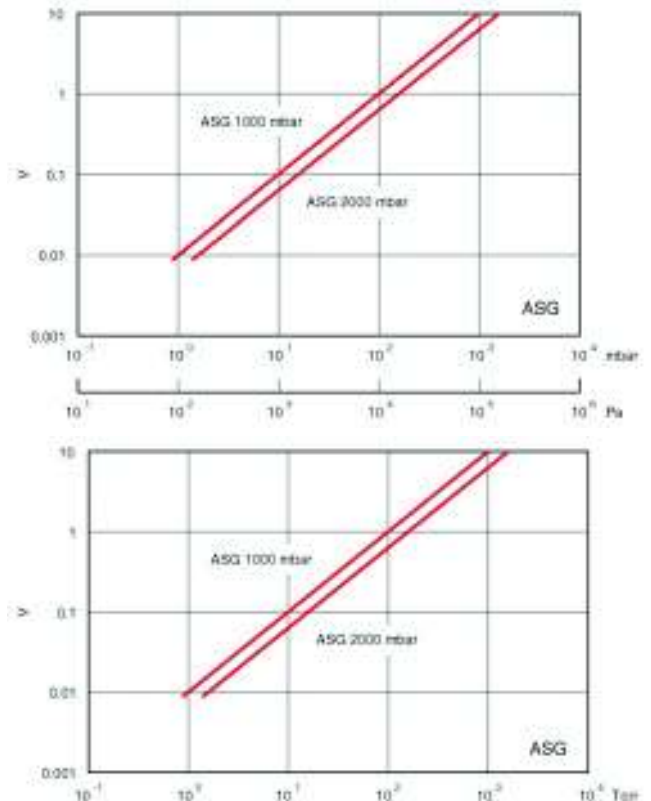


Applications

Active strain gauges are an excellent choice where accurate, gas independent, measurement of pressures around atmosphere are required, making them ideal for applications such as load locks.

It can be used as a stand-alone transducer allowing OEMs and system builders to develop low cost, flexible solutions to their vacuum instrumentation needs. Alternatively, it can be connected to the TIC Instrument Controller where it can be combined with many other sensor types to provide a complete vacuum instrument solution.

Performance Curves



Technical Data

Full scale pressure range	1000 mbar
Accuracy	±0.2 full scale
Stability	±0.2 full scale
Temperature coefficient	±0.05 full scale per °C
Power supply	+13.5 to +36 V d.c.
Power consumption	0.4 W
Output signal	
Operating	0 to 10 V d.c. linear
Output impedance	>200 ohms
Minimum load	50 k ohms
Response speed	5 m/s
Adjustments	Set full scale and set zero
Temperature range	
Compensated	+10 to +50 °C
Operating	-20 to +90 °C
Materials exposed to vacuum	Stainless steel 316
Internal volume	1.25 cm ³
Weight	120g
Electrical connector	Miniature 4 pin Din
Vacuum fitting	1/8 Inch NPT
Standards	
Overall design	EN 61010-1
Electromagnetic compatibility	EN 61326 (Class B Emissions)
Enclosure rating	IP65

Ordering Information

Product Description	Order No.
ASG 1/8 Inch NPT, 1000 mbar	D35725000
ASG NW16, 1000 mbar	D35726000
ASG NW16, 2000 mbar	D35728000
ASG 1/8 Inch NPT, 2000 mbar	D35727000
ASG 1/8 Inch NPT, 1000 mbar, Certificated	D3572500C
ASG NW16, 1000 mbar, Certificated	D3572600C
ASG 1/8 Inch NPT, 2000 mbar, Certificated	D3572700C
ASG NW16, 2000 mbar, Certificated	D3572800C
Accessories & Spares	Order No.
0.5M Active Gauge Cable	D40001005
100M Active Gauge Cable Assembly	D40001999
10M Active Gauge Cable	D40001100
15M Active Gauge Cable	D40001150
1M Active Gauge Cable	D40001010
25M Active Gauge Cable	D40001250
3M Active Gauge Cable	D40001030
50M Active Gauge Cable	D40001500
5M Active Gauge Cable	D40001050
Adapter Cable AGC-ASG	D40003060
Surge Protector Box	D40006000