



## PRODUCT DATA

# Active Strain Gauge Range: 2000 to 1 mbar



The BOC 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 Active Gauge Controller where it can be combined with many other sensor types to provide a complete vacuum instrument solution.

### Features & Benefits

- Drive electronics combined in the gauge head
  - Simplifies system design
  - Saves valuable rack space
- Wide range, regulated internal power supply
  - Runs from standard dc power supplies +13.5 to +36V
  - Tolerant to voltage fluctuations
- Standard analogue output 0 to 10V dc
  - Easy to interface with a computer or PLC
- High accuracy and stability
  - Accuracy  $\pm 0.2\%$  full scale
  - Stability 0.2% full scale
- Corrosion resistant, rugged design
  - Only material exposed to vacuum is stainless steel 316
  - Enclosure rating IP65
- Gas independent measurement
  - Pressure measurement is completely independent of gas type making this gauge ideal for applications where gases other than nitrogen are used
- Excellent high pressure resolution
  - Ability to resolve 1 mbar changes in system pressure even at pressures near atmospheric makes the gauge ideal for monitoring large, slow-pumping systems
- Part of the Active gauge range
  - Standard supply requirements and output voltage allow simple integration into systems using active Pirani, thermocouple, inverted magnetron, strain, wide range and ionization gauges. All of these are compatible with the Active Gauge Controller, a multi-channel digital display and controller

# TECHNICAL DATA

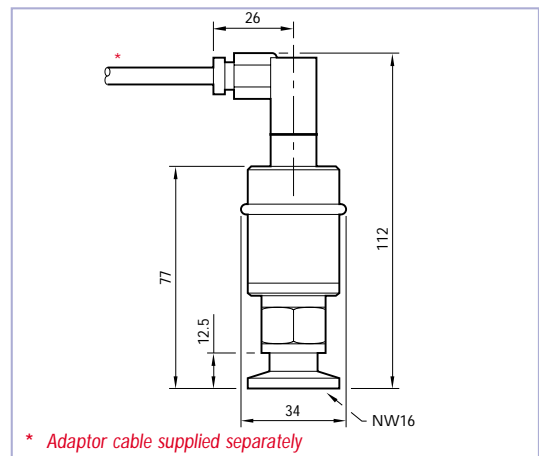
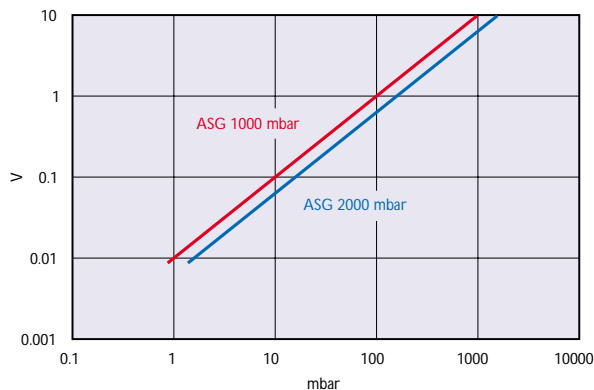
## SPECIFICATIONS

• Full scale pressure ranges	2000, 1000 mbar	• Temperature Range	
• Accuracy	±0.2% full scale	Compensated	+10 to +50°C
• Stability	0.2% full scale	Operating	-20 to +90°C
• Temperature coefficient	0.05% full scale per °C	• Materials exposed to vacuum	Stainless steel 316
• Power Supply	+ 13.5 +36V dc	• Internal Volume	1.25cm <sup>3</sup>
• Power Consumption	0.4W	• Weight	120g
• Output Signal		• Electrical connector	Miniature 4 pin Din
Operating	0 to 10V dc linear	• Vacuum fitting	1/8" NPT male or NW16
Output impedance	>200Ω	• Standards	
Minimum load	50kΩ	Electronic design	EN 61010-1
Response Speed	5 msec	Electromagnetic compatibility	EN 61326 (Class B Emissions)
Adjustments	Set full scale and set zero	Enclosure rating	IP 65

## PIN ALLOCATION

Miniature Din (Gauge Head only)		FCC-68 (with adaptor cable)	
1	Power supply positive	1	Power supply positive
2	Power supply common	2	Power supply common
3	Gauge output	3	Gauge output
4	Signal common	4	Gauge identification
		5	Signal common
		6	No connection
		7	No connection
		8	No connection

## OUTPUT CHARACTERISTICS / DIMENSIONS (mm)



## ORDERING INFORMATION

PRODUCT DESCRIPTION	ORDERING INFORMATION	PRODUCT DESCRIPTION	ORDERING INFORMATION
ASG NW16 1000 mbar	D357-26-000	<b>Cable assemblies</b> (include FCC68 compatible connectors at both ends)	
ASG NW16 2000 mbar	D357-28-000	0.5m	D400-01-005
ASG 1/8" NPT 1000 mbar	D357-25-000	1m	D400-01-010
ASG 1/8" NPT 2000 mbar	D357-27-000	3m	D400-01-030
ASG adaptor cable (0.5m)		5m	D400-01-050
miniature DIN to female FCC68	D400-03-060	10m	D400-01-100
		15m	D400-01-150
		25m	D400-01-250
		50m	D400-01-500
		100m	D400-01-999
		Non standard lengths and screened cables available on request	

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