

# ATC Active Thermocouple Gauge



The Edwards Active Thermocouple (ATC-E) gauges mount directly on either the ATC-D or ATC-M thermocouple tubes to form a compact, stand-alone transducer.



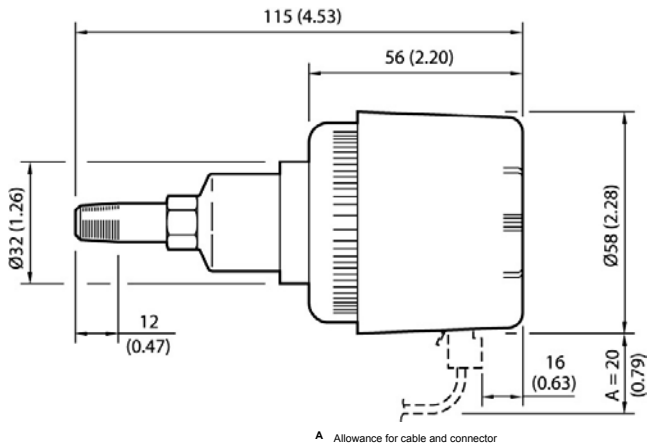
The ATC-E electronics module drives both medium and low pressure gauge tubes. These gauges offer a cost effective measuring solution for higher pressures.

## 4 Features & Benefits

Page 146

- Drive electronics mount directly on the gauge tube which simplifies the system design and saves valuable rack space
- Wide range, regulated, internal power supply runs from standard d.c. power supplies from +13.5 to +36 V and is tolerant to voltage fluctuations
- Standard analog outputs of 0 to +10 V d.c. and gauge identifier allows for easy interface with a computer or PLC and provides fault output indication
- Adjustable set-point with vacuum status LED can be used for process control and interlocking and includes a digital vacuum status signal with set-point level ready visually
- Low output impedance and integral Faraday shield provides a high level of noise immunity and permits long cable runs of up to 100 meters

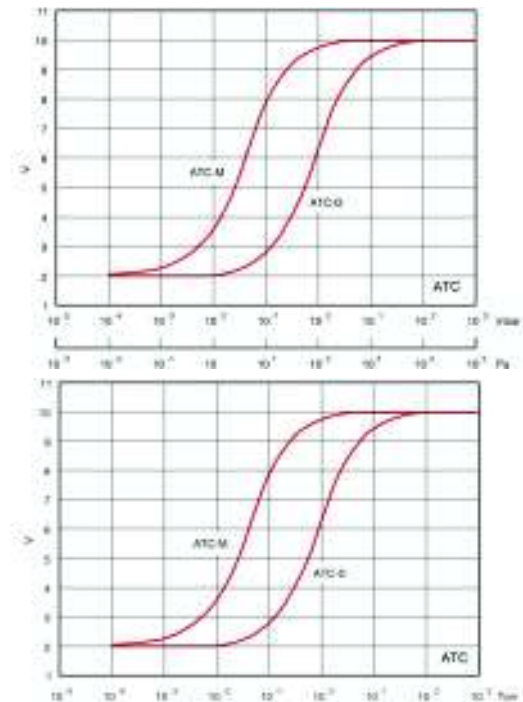
## Dimensions



## Applications

Active thermocouple gauges are ideally suited to applications where a simple rugged gauge is required to measure higher pressures.

## Performance Curves



## Technical Data

### ATC-E Electronics Module

Power supply	+13.5 to +36 V d.c. (max 1 V ripple)
Power consumption	0.54W maximum
Output signal	
Operating	2 to 10 V d.c.
Fault output	0 to 2 V d.c., 10 to 13.5 V d.c.
Output impedance	0.1 ohms
Minimum load	10 k ohms

### Tube Type Selection

Adjustments	Adjust set point visually via potentiometer
Set point	Open collector transistor
Range of set point	2 to 85 full scale voltage
Fixed hysteresis	12 full scale voltage
Level setting	±2 full scale voltage
Rating	40 V d.c., 100 mA maximum
Temperature range	
Operating	+5 to +60 °C
Storage	0 to +70 °C
Weight	110 g
External interface connector	8 way FCC68 / RJ45 socket

### ATC-D, ATC-M gauge tubes

Pressure range	
ATC-D	50 to $5 \times 10^{-2}$ Torr 65 to $6.5 \times 10^{-2}$ mbar
ATC-M	1 to $1 \times 10^{-3}$ Torr 1.3 to $1.3 \times 10^{-3}$ mbar
Maximum overpressure	
ATC-D	10 bar absolute
ATC-M	3.4 bar absolute
Weight	55 g
Internal volume	
ATC-D	1 cm <sup>3</sup>
ATC-M	8 cm <sup>3</sup>

For more information, contact Edwards.

## Ordering Information

Product Description	Order No.
ATC-E Electronics module	D35108000
ATC-D 1/8 inch NPT gauge tube	D35512000
ATC-M 1/8 inch NPT gauge tubes	D35513000
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
NW10 Adapter Pipe 1/8NPT Female S/S	C10501072
Surge Protector Box	D40006000