

Eclipse®

Pressure Transducer

615 821 $\frac{+}{=}$ 615-869

The Eclipse is designed to meet the needs of high volume OEM's whose applications demand a reliable pressure transducer for typical industrial environments. The Eclipse's combination of rugged packaging, internal signal amplification, and low price make it ideal for many applications.

The pressure media is contained by a brazed assembly of steel and stainless steel. There are no hidden O-rings or elastomers containing the media.

A plated steel case protects the internal electronics. From 5 V excitation, its 4 V ratiometric output can interface directly to microprocessors with onboard A/D converters.



Features

- 100 through 7100 PSIS ranges
- High performance at low price
- Weatherproof type connector
- Reverse polarity protection
- Ratiometric output
- IP65 sealed steel case

Benefits

- Suitable for many applications
- Reduces OEM system cost
- High reliability and user flexibility
- Not damaged by wiring errors
- Increased system accuracy
- Complete environmental protection for electronics

Applications

- Energy management
 - "smart" compressors
 - refrigeration/chiller control
- Hydraulic / Pneumatic Controls
- Automotive
- Air Compressors
- Off Road Vehicles



DATA INSTRUMENTS®

Technical Specifications

RANGE	0-100, 200, 300, 500, 1000, 2000, 3000, 5000, 7100 psi 0-10, 15, 20, 35, 100, 200, 350, 500 bar all ranges are sealed gage
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PHYSICAL

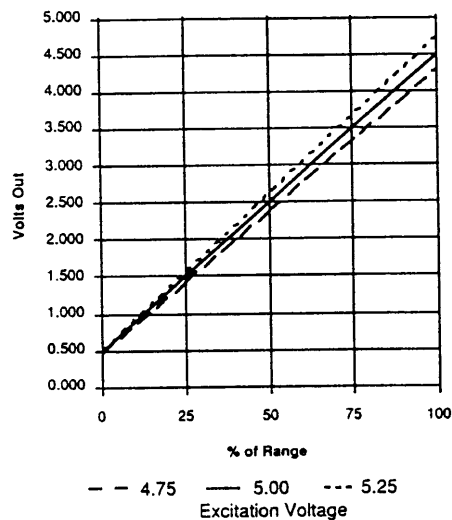
Overload	1.5 x rated range without damage 5 x rated range without bursting
Material in Contact with Media	300 series stainless steel, nickel plated carbon steel, braze compound
Shock Resistance	50 g's peak (5 milliseconds)
Vibration Resistance	Meets MIL-STD 810B, Figure 514-4, Curve AK, Time Scheule II Random Vibration Test (Overall g rms = 20.7 minimum)

ELECTRICAL

Output Voltage	0.50 to 4.50 V min to max pressure
Excitation Voltage	+5 Vdc $\pm$ 0.25 V
Null Offset	0.50 V
Supply Current (max)	20 mA
Output	
Minimum load	10 K ohms
Sink (max)	0.3 mA
Reverse Polarity Protection	YES
Insulation Resistance	1000 megohms at 25 Vdc
Electrical Connection	Standard Packard Metri-Pack™. Requires Packard #12065287 mating connector. Optional Hirschman. Mating connector supplied.

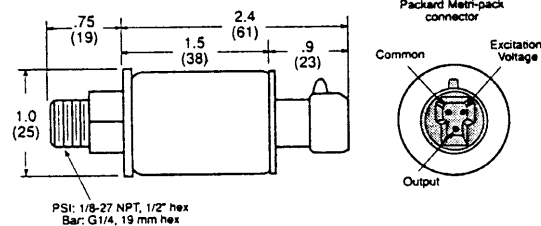
PERFORMANCE

Accuracy	$\pm$ 1% of span from best fit straight line. Includes effects of non-linearity, hysteresis and repeatability.
Compensated Temperature Range	0° to 180° F (- 18° to 82° C)
Operating and Storage Temperature Range	- 40° to 221° F (- 40° to 105° C)
Total Error	$\pm$ 4% of full scale Includes the effects of temperature, non-linearity, hysteresis, and repeatability.

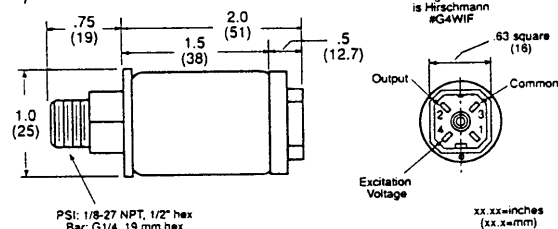


Dimensions

standard



optional



Data Instruments products are protected by one or more of the following patents: U.S. 4,667,158; 4,327,350; 4,368,575; 4,912,409; 4,864,232; 4,866,378; 5,068,607; U.K. 2054954; Japan 1498268; France 8014767; 8101087. Additional U.S. and Foreign patents pending.

WARRANTY

All Data Instruments products are warranted against defective materials and workmanship. This warranty applies for a period of one year from the date of delivery to the original purchaser. Any product that is found within the one year period not to meet these standards will be replaced or repaired at the discretion of Data Instruments. No other warranty is expressed or implied. Although Data Instruments manufactures its products to exacting specification standards, we assume no responsibility for their misuse. Data Instruments accepts no liability for damages, incidental or punitive, in applications using our products. *Please note:* It is solely the user's responsibility to properly install and maintain transducers. Data Instruments manufactures its products to meet stringent specifications and cannot assume responsibility for those consequences arising from their misuse or unauthorized modification.

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