

## The TDH31 Series Low Cost OEM Vacuum and Compound Range Pressure Transducer



SERIES: TDH31



### APPLICATIONS

- Hydraulic / Mobile Hydraulic
- Pneumatic Systems
- Food and Beverage Industry
- Pumps and Compressors
- Energy and water management
- Construction and Agricultural Equipment

### DESCRIPTION

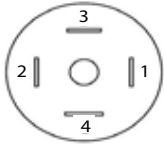
The TDH31 Series Pressure Transducer utilizes piezoresistance technology in an all stainless steel body. It is compact in size, has long term stability, ease of installation and is very economical as well as reliable.

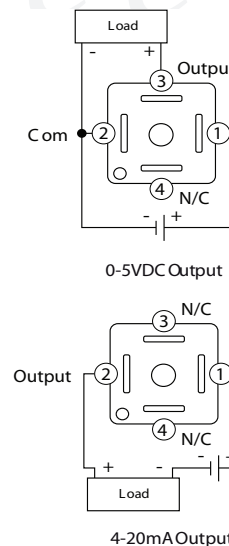
The TDH31 sets a new price-performance standard for low cost, high volume commercial and industrial applications.

### FEATURES

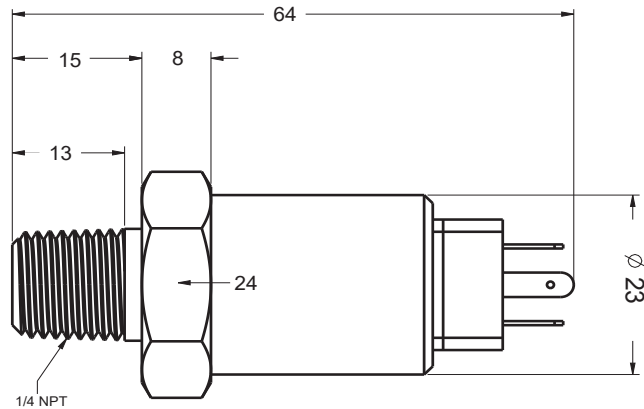
- Vacuum to 85 psi Ranges
- Various Outputs
- Compact Design
- 316 Stainless steel Housing
- Low Cost
- Industrial 1% Accuracy
- Custom Outputs and Ranges Available
- OEM Tested and Approved
- Low power consumption

### ELECTRICAL CONNECTIONS

Signal	Function	Color	Pin	Electrical Connector
0-5V	Supply V + Com Output N/A	Red Black White N/A	1 2 3 4	DIN 4 pin (9.4)   Black
4-20mA	Supply V Output	Red Black	1 2	



## DIMENSIONS



Dimensions are in millimeters and for reference only

## SPECIFICATIONS

### Performance @ 25°C (77 °F)

Accuracy	1% FS, BFSL (includes non-linearity, hysteresis and non-repeatability)
Stability	0.2% FS
Thermal Error	1% FS
Compensated Temperatures	-10 to 75 °C (14 to 167 °F)
Operating Temperatures	-20 to 80 °C (-4 to 176 °F)
Current Consumption	Approx 4mA for 0-5 & 0.5-4.5 voltage output, 11mA for 0-10 voltage output, 23mA for current output (4-20mA)
Zero and Span Offset Tolerance	1.5%
Shock	50g, 11ms, 1/2 sign
Vibration	11g peak from 10 to 400 Hz
Reverse Polarity Protection	Yes

### Mechanical Configuration

Pressure Port	1/4 NPT (standard) *
Electrical Connection	9.4 mini DIN, 3 pin Packard *
Ingress Rating	IP65 with T-Direct standard 9.4 DIN cable
Housing	316 stainless steel
Diaphragm Material	316 SS - Vac-0, Vac-15, Vac-45 Ceramic - Vac-85
Sealing Material	Neoprene
Approvals	CE

### Input

Supply Voltage / (Output)	8-28 VDC (0-5V, 4-20mA) 5 VDC (0.5-4.5V) 12-36 VDC (0-10V)
Pressure Range	Vacuum to 85 psig*
Proof Pressure	1.5 x full scale
Burst Pressure	3 x full scale
Fatigue Life	More than 4 million cycles

For best performance use shielded cables.

Mating connectors and cable assemblies sold separately.

\* Consult factory for further OEM options.

## ORDERING

Series	Output	Pressure Type	Pressure Range	Pressure Port	Electrical Connection	Accuracy
TDH31	B	G	V000	03	D00	4
	B = 4-20mA (2 wire) C = 0-5V (3 wire) **	G = Gauge	(psi) Vac-0= V000 Vac-15= V015 Vac-45= V045 Vac-85= V085 **	03= 1/4" NPT Male **	D00= 4 pin Mini 9.4 DIN B00= 3 pin Packard **	4= 1% **

\*\*= Consult factory for further OEM options

Pressure ranges and outputs listed above are quick ship versions

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use. While we provide application assistance personally, through our literature and the Transducers Direct web site, it is up to the customer to determine the suitability of the product in the application.

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