

The TDH33 Series Low Cost OEM Pressure Transducer with all Stainless Steel Wetted Parts



SERIES: TDH33



APPLICATIONS

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

DESCRIPTION

The TDH33 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.

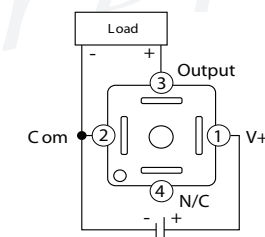
The TDH33 sets a new price-performance standard for low cost, high volume commercial and industrial applications.

FEATURES

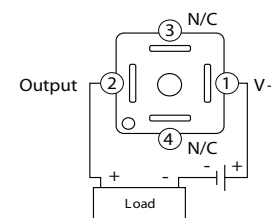
- Vac to 285 psi or 3 to 10,000 psi Range
- Various Outputs
- Compact Design
- 316 Stainless steel Housing
- All stainless steel wetted parts
- High 125 ° C (257 ° F) operating temperature
- Low Cost
- Industrial 1% Accuracy
- Custom Outputs and Ranges Available
- OEM Tested and Approved
- Low power consumption

ELECTRICAL CONNECTIONS

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

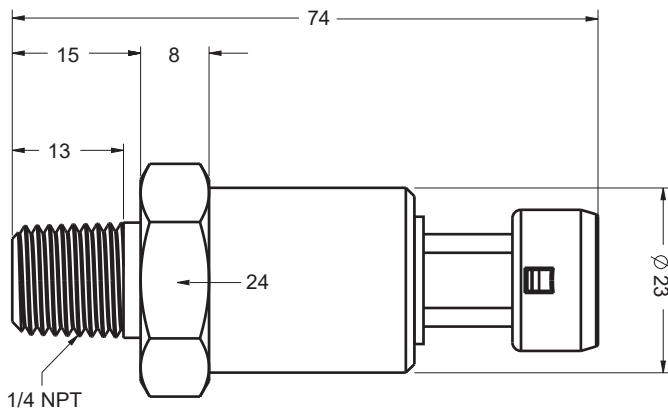


0-5VDC Output

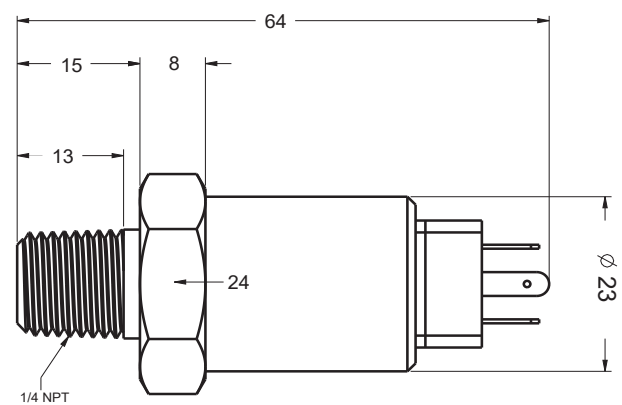


4-20mA Output

DIMENSIONS



Over all length of Packard connector units will change with different outputs and pressure ranges. 74mm is the max possible length.



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 100 °C (14 to 212 ° F)
Operating Temperatures	-20 to 125 ° C (-4 to 257 ° 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 IP66 with T-Direct standard Packard cable
Housing	316 stainless steel
Diaphragm Material	316L SS <1500 psi, 17-4 SS 1500 psi and above, wetted parts are SS, no internal Orings
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	Vac to 285 psi or 3 to 10,000 psi
Proof Pressure	3-6000 psi = 3 x 6000-10K psi = 2 x
Burst Pressure	3-6000 psi = 4x 6000-10K psi = 3x
Fatigue Life	More than 4 million cycles

TRANSDUCERS
direct®

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
TDH33	B	G	0050	03	D00	4
	B = 4-20mA (2 wire) C = 0-5V (3 wire) K = 0.5-4.5 vdc (3 wire) 5 vdc supply (ratiometric) **	G = Gauge	(psi) V000 0015 V015 0025 V045 0050 V085 0100 V135 0250 V185 0500 V285 1000 3000 5000 **	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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