

The TDH60 Series Low Cost OEM Dual Output Temperature and Pressure Transducer with all Stainless Steel Wetted Parts



SERIES: TDH60



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 TDH60 Series Dual Output Temperature and 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 TDH60 sets a new price-performance standard for low cost, high volume commercial and industrial applications.

FEATURES

- Vac ranges to +285 psi or pressure ranges 0 to 3 psi up to 10,000 psi
- Various Outputs
- Compact Design
- 316 Stainless steel Housing
- All stainless steel wetted parts
- High 125° C (257° F) operating temperature
- Low Cost
- Better 0.4% Accuracy
- Custom Outputs and Ranges Available
- OEM Tested and Approved
- Low power consumption

ELECTRICAL CONNECTIONS

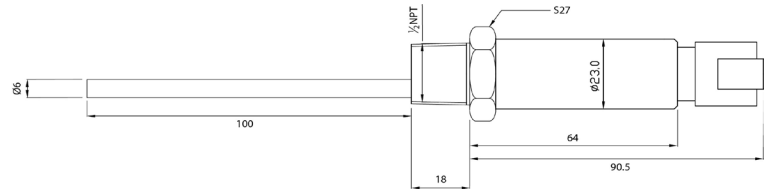
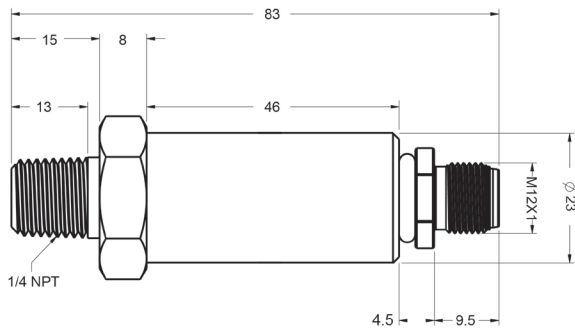
9.4MM DIN				9.4mm_DIN
SIGNAL	FUNCTION	COLOR	PIN	
VOLTAGE (0-5V, 0-10V, 0.5-4.5V...)	SUPPLY+	RED	1	
	COM	BLACK	2	
	T-OUTPUT+	WHITE	3	
	P-OUTPUT+	GREEN	4	
CURRENT (0-20mA, 4-20mA)	SUPPLY+	RED	1	
	P-OUTPUT	BLACK	2	
	T-OUTPUT	WHITE	3	
	NC	GREEN	4	

4-PIN M12				M12
SIGNAL	FUNCTION	COLOR	PIN	
VOLTAGE (0-5V, 0-10V, 0.5-4.5V...)	SUPPLY+	BROWN	1	
	P-OUTPUT+	WHITE	2	
	COM	BLUE	3	
	T-OUTPUT+	BLACK	4	
CURRENT (0-20mA, 4-20mA)	SUPPLY+	BROWN	1	
	P-OUTPUT	WHITE	2	
	NC	BLUE	3	
	T-OUTPUT	BLACK	4	

4-PIN DEUTSCH				4-PIN DEUTSCH
SIGNAL	FUNCTION	COLOR	PIN	
VOLTAGE (0-5V, 0-10V, 0.5-4.5V...)	COM	BLACK	1	
	SUPPLY+	RED	2	
	T-OUTPUT+	GREEN	3	
	P-OUTPUT+	WHITE	4	
CURRENT (0-20mA, 4-20mA)	NC	BLACK	1	
	SUPPLY+	RED	2	
	T-OUTPUT	GREEN	3	
	P-OUTPUT	WHITE	4	

Pin 1 = Black, Pin 2 = Red
Pin 3 = Green, Pin 4 = White

DIMENSIONS



Over all length of Deutsch connector units will change with different outputs and pressure ranges. 78.5mm is the max possible length.

Dimensions are in millimeters and for reference only

SPECIFICATIONS

Performance @ 25°C (77 °F)

Accuracy	0.4% FS, BFSL (includes non-linearity, hysteresis and non-repeatability)
Stability	0.2% FS
Thermal Error	1% FS
Compensated Temperatures	-Pressure (-40) to 125° C
Temperature measurement range	Temperature (-40) to 120° C
Current Consumption	46mA (4-20mA), 12mA (0-5V, 1-6V), 14mA (0-10V), 10mA (0.5-4.5V)

Temp probe max pressure	Equal to the pressure sensor (without extended temp probe), or 300bar (with extended 6 mm probe)
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	4 pin M12, 4 pin Deutsch (DT04-4P), 9.4 DIN 3 pin Deutsch (DT04-3P) *4-20mA only
Ingress Rating	IP67
Housing	316 stainless steel
Diaphragm Material	316L SS <1500 psi, 17-4 SS 1500 psi and above, wetted parts are SS, no internal O-rings

Input

Supply Voltage / (Output)	9-32 VDC (4-20mA) 7-32 VDC (0-5VDC) 12-32 VDC (0-10 VDC, 1-6 VDC) 5 VDC (0.5-4.5 VDC ratiometric) 7-32 VDC (0.5-4.5 VDC Non-ratiometric)
Pressure Range	Vac to 285 psi, pressure 0-3 psi, up to 10,000 psi >7250 psi require 0mm probe
Proof Pressure	3-6000 psi = 3 x
Burst Pressure	6000-10K psi = 2 x 3-6000 psi = 4x 6000-10K psi = 3x
Fatigue Life	More than 4 million cycles
Approvals	CE

For best performance use shielded cables.
Mating connectors and cable assemblies sold separately.

* Consult factory for further OEM options.

ORDERING

Series	Pressure Output	Temp Output	Pressure Type	Pressure Range	Pressure Port	Electrical Connection	Accuracy	Probe Length
TDH60	B	B	G	0050	03	Q00	5	10mm
	B = 4-20mA (3 wire) C = 0-5V (4 wire) D = 0-10V (4 wire) K = 0.5-4.5V (4 wire) **	B = 4-20mA (3 wire) C = 0-5V (4 wire) D = 0-10V (4 wire) K = 0.5-4.5V (4 wire) **	G = Gauge **	V000 0015 V015 0025 V045 0050 V085 0100 V135 0250 V185 0500 V285 1000 3000 5000 10,000 **	03= 1/4" NPT Male (0mm probe only) 06= 1/2" NPT Male (STD) **	Q00= M12 X300= 3 pin Deutsch (current output only) X400= 4 pin Deutsch **	5= 0.4%	Probe length 0-100mm (if 0mm then leave blank) * >7250psi only available as 0mm*

**= 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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