

Introducing the TDG series Intrinsically Safe Industrial Pressure Transducers. (When used with approved barrier)

SERIES: TDG01/03/04 I.S.



FEATURES

- Gauge, Absolute, Vacuum and Compound Pressure Models Available
- Submersible, General Purpose and Wash Down Enclosures
- High Stability Achieved by CVD Sensing Element
- Voltage and Current Output Models
- Custom pressure ranges available
- ASIC Technology, No Zero/Span Potentiometers

DESCRIPTION

The TDG series features stability and accuracy in a variety of enclosure options. The TDG series extends the packaging options via an all welded stainless steel back end for demanding submersible and industrial applications.

The TDG series feature proven CVD sensing technology, an ASIC (amplified units), and modular packaging to provide a sensor line that can easily accommodate specials while not sacrificing high performance.

ELECTRICAL CONNECTIONS

Power Supply Requirements

Voltage Units: 1.5 vdc Over Max Output (voltage outputs)

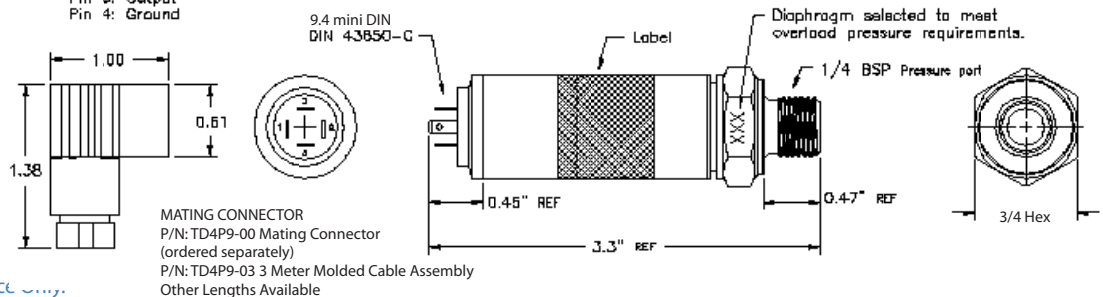
Current Units: 7-35vdc for 4-20 ma

Voltage Units with conduit/cable
Red= +Power
Black= -Power
White= Output

Voltage Units with Din
Pin 1: +Power Supply
Pin 2: -Power Supply
Pin 3: Output
Pin 4: Ground

Current Units with conduit/cable
Red= +Power
Black= Output
Pin 1 +Power Supply

Current Units with Din
Pin 1 +Power Supply
Pin 2 Output
Pin 3 N/C
Pin 4 Gr



Dimensions In Inches And Are Reference Only.

SPECIFICATIONS

Input	
Pressure Range	Vacuum to 400 bar (6000 psi)
Proof Pressure	2 x / 4 x Full Scale (FS) (1.5 x Fs for 400 bar, >= 5000 psi)
Burst Pressure	>35 x FS <= 6 bar (100 psi); >20 x FS >=60 bar (1000 psi); >5 x FS <= 400 bar (6000 psi)
Fatigue Life	Designed for more than 100 million FS cycles
Performance	
Long Term Drift	0.2% FS/year (non-cumulative)
Accuracy	0.25% / 0.5% FS typical (optional 0.15%)
Thermal Error	1.5% FS typical (optional 1% FS)
Compensated Temperatures	-20° to 80° C (-5° to 180° F)
Operating Temperatures	-40° to 125° C (-22° to 260° F) for the mini DIN -20° to 80° C (-5° to 180° F) for the Conduit/Cable Amplified units >100°C maximum 24 Vdc supply
Zero Tolerance	1% of span
Span Tolerance	1% of span
Response Time	0.5 ms
Mechanical Configuration	
Pressure Port	See ordering chart
Wetted Parts	17-4 PH Stainless Steel
Electrical Connection	See ordering chart
Enclosure	316 ss, 17-4 PH ss IP65 for the mini DIN
Vibration	70g, peak to peak sinusoidal, 5 to 2000 Hz (Random Vibration: 20 to 2000 Hz @ 1 20g Peak per MIL-STD.-810E Method 514.4)
Acceleration	100g steady acceleration in any direction 0.032% FS/g for 1 bar (15 psi) range decreasing logarithmically to 0.0007% FS/g for 400 bar (6000 psi) range.
Shock	20g, 11 ms, per MIL-STD.-810E Method 516.4 Procedure I
Approvals	(Intrinsically safe) class 1, division 1 & 2, groups C & D (check electrical connection code to determine division)
Weight	Approx. 100 grams (additional cable; 75 g/m)

ORDERING

Series	Output	Pressure Type	Pressure Range	Pressure Port	Electrical Connection	Accuracy	I.S.
TDG03	D	G	1000	03	D	2	S
TDG03= 2X Over Pressure	B= 4-20ma H= 1-5 vdc	G = Gauge	vac-0 0-15 vac-15 0-30 vac-45 0-60 vac-85 0-100 vac-135 0-150 vac-185 0-200 vac-285 0-250	03= 1/4" NPT Male 09= 7/16" x 20 SAE #4 (J1926-2) 01= 1/8" NPT MALE **	D= 4 pin Mini 9.4 DIN (class 1, div 1) O= 1/2"npt male conduit w/ 1 meter cable (class 1, div 2)	3= 0.5% 2= 0.25% 1= 0.15% **	S= intrinsically safe
TDG01= 4X Over Pressure	K= 0.5 - 4.5 vdc D= 0-10 vdc		0-300 0-500 0-600 0-1000 0-1500 0-2000 0-3000 0-4000 0-5000 0-6000	OR			
TDG04 = when "O"	C= 0-5 vdc			Pressure Type	Pressure Range		
Electrical Connection is Selected	all voltage outputs are 3 wire non-ratiometric **			A= Absolute	0060		

Proper Barriers must be used with this product.
**= Consult factory for further options.