

**NEW**

## The TD2000 Series Ultra High Resolution Digital Measurement, General Purpose, Pressure Transducer



**SERIES: TD2000**

### FEATURES

- Totally digital proprietary design
- Innovative redundant sensing elements
- 24V digital output for pressure or temp switch point
- Variety of voltage outputs available
- Custom pressure Ranges and outputs available
- More standard pressure ranges, Industry First
- 2x overpressure rating
- 0.05% BFSL accuracy
- ASIC technology, no zero/span potentiometers
- All stainless steel welded housing
- IP-69K rated seal available (high pressure wash down)
- Innovative low current consumption, ideal for custom wireless solutions
- Calibration Certificates provided

### DESCRIPTION

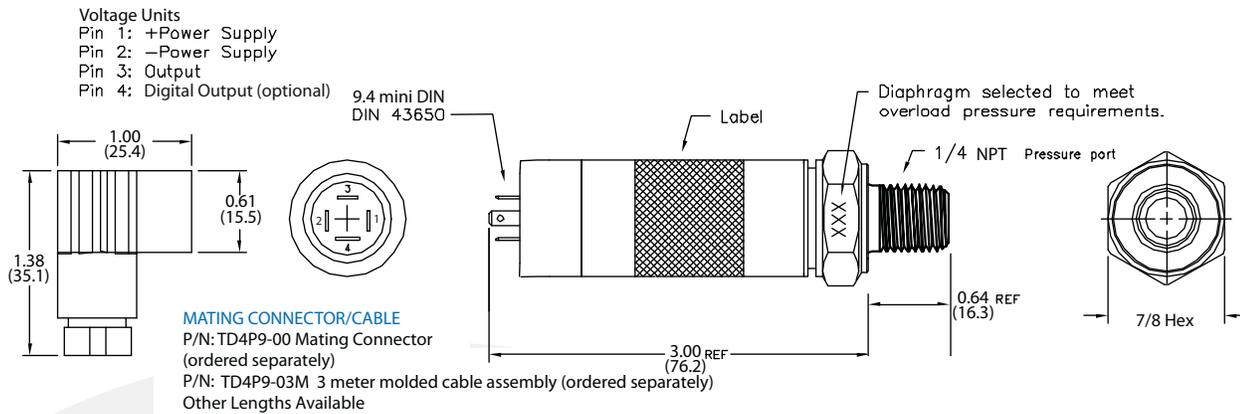
The TD2000 Series digital/configurable (an industry first) industrial pressure transducer features excellent stability and precision accuracy over a wide temperature range at lower cost than competitive units.

With its proprietary digital/ASIC technology, the TD2000 Series features field proven redundant sensing elements without the need for solder in resistors or trim pots that can drift over time. This provides years of excellent performance and reliability even in the harshest/demanding applications. This combined with the optional integrated temperature or pressure digital switch feature, makes the TD2000 Series truly an industry first and second to none.

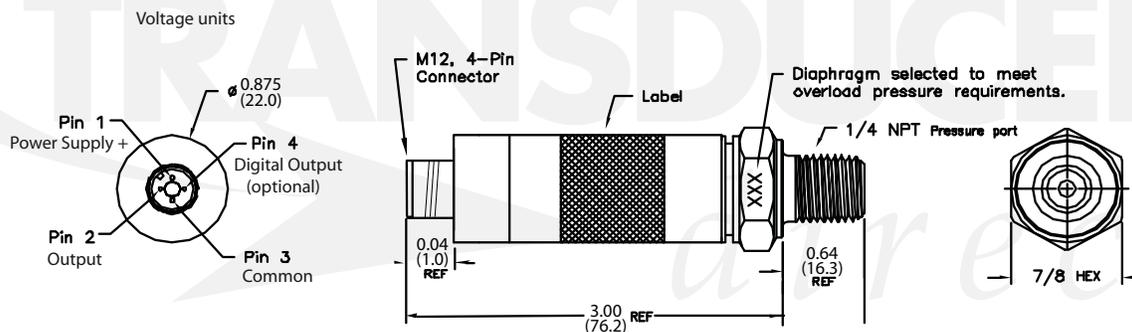
For extreme applications where power washers are used for wash down, the TD2000 Series optional IP69K seal, another industry first, makes it ideal no matter what the environment.

With its flexible low power design and lower manufacturing costs, the TD2000 Series offers outstanding value and makes it ideal for custom wireless applications.

**ELECTRICAL CONNECTIONS**



Wire Code for Voltage units:  
 Red = + Power supply  
 Black = Common  
 White = Output  
 Green = Digital Output (optional)



**M12 MATING CABLE ASSEMBLIES**

VOLTAGE OUTPUT TRANSDUCERS ONLY  
 M12 with 2 LEDs (green and yellow) Green shows power, Yellow shows digital output  
 P/N: TDM12-4F69-CR2L-01M 1 meter molded cable assembly  
 for voltage outputs only

Other Lengths Available

Wire Code for voltage units:  
 Brown = + Power Supply  
 White = Output  
 Blue = Common  
 Black = Digital Output (optional)

## SPECIFICATIONS

<b>Performance</b>	Performance @ 25°C (77 °F)
Accuracy	0.05% BFSL
Overrange Protection	2x Rated Pressure
Pressure Range	see ordering chart - up to 6000 psi (414 bar) (optional higher ranges available)
Burst Pressure	5x or 20,000 psi, whichever is less
Pressure Cycles	>100 million
Update Time	<=1msec
Digital Output	Optional digital output for pressure, maintenance or temp switch point, max load current 20mA
<b>Environmental Data</b>	
Temperature	
Compensated Temperatures	24° to 60° C (75 to 140° F)
Operating Temperatures	-40° to 100° C (-40 to 212° F)
Storage	-40° to 125° C (-40° to 250° F)
TEB	0.25% BFSL (includes: Non-linearity, Hysteresis and Non-repeatability)
Long Term Drift	0.2% FS/year (non-cumulative)
Shock	100g, 11 ms, 1/2 sine
Vibration	20g, peak, 20 to 2400 Hz
EMI/FRI Protection	Yes
Rating	Up to IP-69K available (high pressure wash down)
Approvals	CE
<b>Mechanical Configuration</b>	
Pressure Connections	See ordering chart
Wetted Material	17-4PH stainless steel (for other materials consult factory)
Electrical Connection	Cable, 9.4 Din, IP-69K 4 pin M12 Connector
Case	(housing) 304 stainless steel
<b>Electrical Data</b>	
Excitation	3.5-28VDC, Typ (must be at least 0.3V above full output voltage)
Output	see ordering chart
Output Impedance	<100 Ohms, Nominal
Current Consumption	<5mA (voltage output)
Output Noise	<2mV RMS
Reverse Polarity Protection	Yes
Zero and Span Offset Tolerance	1%
Set Point % for Pressure or Temp	For pressure, this is done by selecting a percentage of your transducer's full range and this will be the set point (40% of a 1000 psi range will have the set point at 400psi) "P40". For temperature, select what percentage of 80° C you want the set point to be (70% of 80° C is 56° C [132.8° F] and this will be the set point) "T70".
Maintenance Mode	The maintenance mode output indicates 1/2 bridge failure

## ORDERING

Series	Output	Pressure Type	Pressure Range	Pressure Connection	Electrical Connection	Accuracy	Pressure or Temp Set Point % (P or T)
TD2000	CC	G	0050	03	Q00	6	T40
TD2000 = 2x Over Pressure	CC= 0-5 vdc DD= 0-10 vdc HH= 1-5 vdc JJ= 1-6 vdc GG= 0.5-5.5 vdc (nonratiometric) WW= 0.5-4.5 vdc (nonratiometric) **	G = Gauge	0050 0900 0100 1000 0150 2000 0200 3000 0250 4000 0300 5000 0350 6000 0400 0500 0600 0700 0800 **	03= 1/4" NPT Male 09= 7/16" x 20 **	Q00= IP69K M12 D00= 4 pin 9.4 Mini DIN **	6= 0.05%	P or T10= 10% of pressure range or 10° C P or T20= 20% of pressure range or 20° C P or T30= 30% of pressure range or 30° C P or T40= 40% of pressure range or 40° C P or T50= 50% of pressure range or 50° C P or T60= 60% of pressure range or 60° C P or T70= 70% of pressure range or 70° C P or T80= 80% of pressure range or 80° C P90= 90% of pressure range  (P= % of the full pressure range selected) (full temp range is 10 to 80° C) **