

The TDEPT Series Ultra-High Resolution Digital Measurement 6x Over Pressure Dual Output OEM Pressure Transducer for Injection Molding Machines



SERIES: TDEPT

FEATURES

- Totally digital proprietary design
- Innovative redundant sensing elements
- Voltage and current outputs
- 6x over pressure
- 4-wire voltage output, 3 wire current output
- ASIC technology, no zero/span potentiometers
- Dual output, 0.15-10.15V and 4-20mA
- All stainless steel welded housing
- 6 pin Bendix connector
- Special 15,000 psi header
- Optional Maintenance Mode output with LED indication

DESCRIPTION

The TDEPT Series digital/configurable (an industry first) industrial pressure transducer features stability and accuracy over a wide temperature range at lower cost than competitive units typically not found in older analog designs yet is plug and play with most lower grade competitive units.

The transducer pressure cavity is machined from a solid piece of 17-4 PH stainless steel. The standard version includes a 7/16-20 SAE thread allowing a leak-proof, sealed system. There are no welds or organics exposed to the pressure media. The durability is excellent.

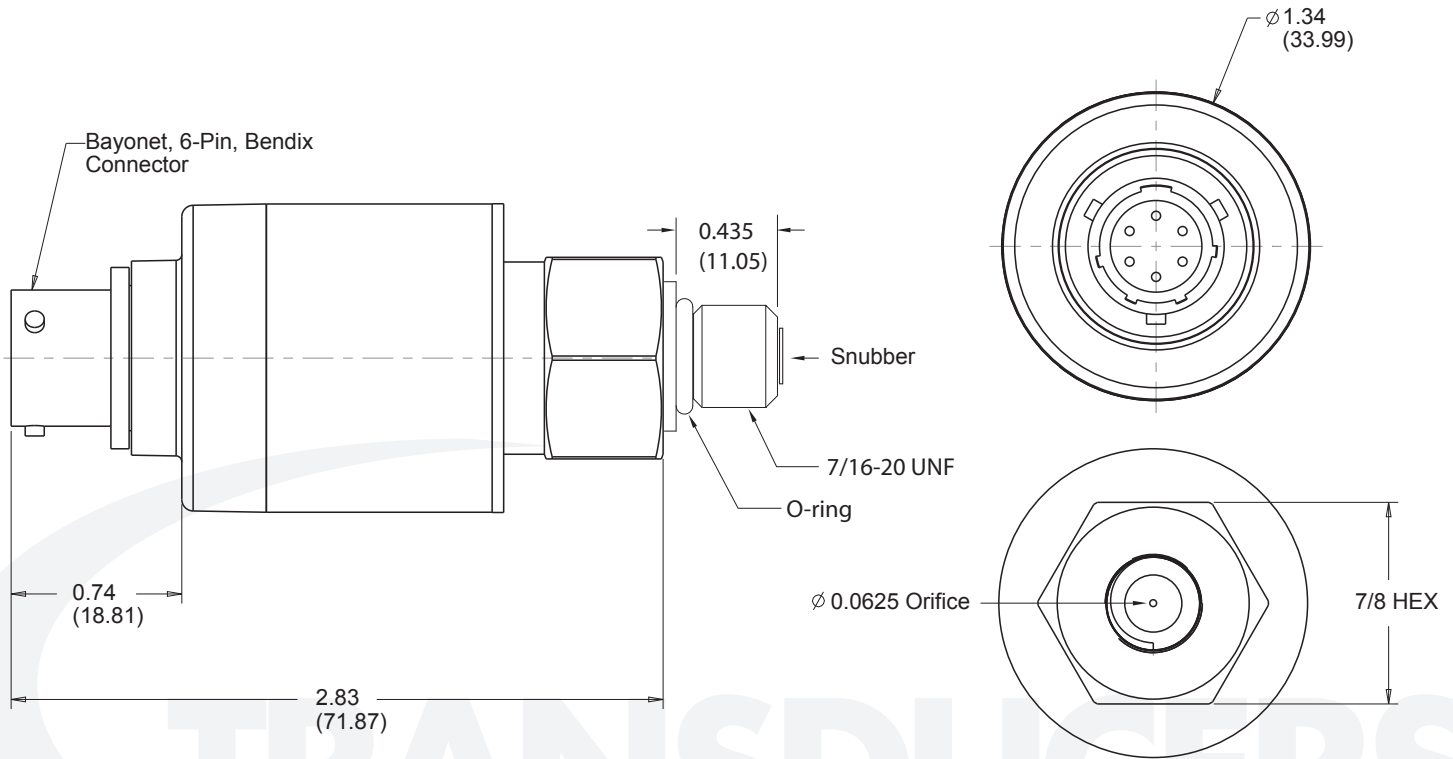
This product is geared to the OEM customer using medium to high volumes. The standard version is suitable for many

applications, but the dedicated design team at our Transducer Engineering Center stands ready to provide a semi-custom design where the volume and application warrants.

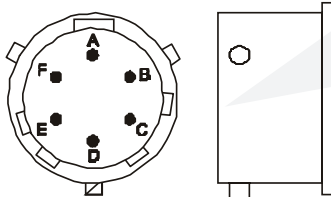
With its proprietary digital/ASIC technology, the TDEPT Series features field proven redundant sensing elements without the need for solder in resistors or trim pots that can drift over time. This provides years of excellent performance and reliability even in the harshest/demanding applications.

For applications where high spikes or water hammering is present that typically damages standard units.

ELECTRICAL CONNECTIONS



6 PIN BAYONET



LEAD	COLOR	6 PIN
SIGNAL+	RED	A
SIGNAL-	BLACK	B
EXCITATION+	WHITE	C
EXCITATION-	GREEN	D
M. MODE / LED*	BLUE	E
N/C	ORANGE	F

*OPTIONAL

Voltage Output (4 wire)

LEAD	COLOR	6 PIN
N/C	RED	A
N/C	BLACK	B
EXCITATION+	WHITE	C
EXCITATION-	GREEN	D
M. MODE / LED*	BLUE	E
SIGNAL +	ORANGE	F

*OPTIONAL

4-20mA Output (3 wire)

SPECIFICATIONS
Performance

Accuracy	Performance @ 25°C (77 °F)
Overrange Protection	0.5%
Pressure Range	6x
Burst Pressure	see ordering chart
Pressure Cycles	30,000 psi
Update Time	>100 million
	<=1msec

Environmental Data

Temperature	
Compensated Temperatures	-40° to 100° C (-40 to 212° F)
Operating Temperatures	-40° to 100° C (-40 to 212° F)
Storage	-40° to 125° C (-40° to 250° F)
TEB	2% BFSL (includes: Non-linearity, Hysteresis and Non-repeatability)
Long Term Drift	0.2% FS/year (non-cumulative)
Shock	50g, 11 ms, 1/2 sine
Vibration	10g, peak, 20 to 2400 Hz
EMI/FRI Protection	Yes
Ingress Rating	IP-65
7/16-20 Thread Torque	16 ft-lb max, 192 In-lb max, 22 Nm max

Mechanical Configuration

Pressure Connections	See ordering chart
Wetted Material	17-4PH stainless steel (for other materials consult factory)
Electrical Connection	6 Pin Bendix / Bayonet
Case	(housing) 304 stainless steel

Electrical Data

Excitation	11-28VDC
Output	Dual output, 0.15-10.15 VDC and 4-20mA (The output wire not being used should be capped off to prevent potential short circuit)
Output Impedance	<100 Ohms, Nominal
Current Consumption	<5mA (voltage output)
Output Noise	<2mV RMS
Reverse Polarity Protection	Yes
Zero and Span Offset Tolerance	1%
Wiring	Standard voltage output wiring is 4-wire. For 3-wire configuration, tie pins B & D together. 4-20mA output wiring is 3 wire (see wiring diagrams for each output)
Maintenance Mode/LED	Output indicates 1/2 bridge failure (pin E), green LED on = normal function, red LED on = 1/2 bridge failure. if this digital output is not connected, it should be capped off to prevent potential short circuit

ORDERING

Series	Output	Pressure Type	Pressure Range	Pressure Connection	Electrical Conn.	Cable Length	Accuracy	M. Mode/ LED	
TDEPT100	L2/B3	G	4000	03	S	00	3	L	15K
TDEPT100 = 6x Over Pressure	L2 = 0.15-10.15 vdc (4-wire) B3 = 4-20mA (3 wire)	G = Gauge	(in psi) 4000 5000	09= 7/16" x 20 **	S = Six Pin Bendix voltage 4 wire or Six Pin Bendix 4-20mA 3 wire	00 = None	3 = 0.5%	L = w/ LED	

**= Consult factory for further options.

Consult factory for quick ship versions.

Maintenance Mode is configured as normally open.

All straight-thread o-rings are Viton. It is customer's responsibility to determine compatibility.