

# **Titan Series**

Model: TPTd

**Digital Pressure Transmitter** 



## **Description:**

The Titan TPT series of pressure transducers have been developed using a Ceramic (96% Aluminium Oxide Al2O3) piezo-resistive sensing element housed in a robust stainless steel housing. It has the option of an integrated Cable outlet or an M12 x 1, 4-Pin connector both offering up to IP67\* ingress protection.

The internal PCB incorporates a versatile microprocessor enabling a range of digital communications including i2c and SPi from a 2.7 - 5.5V dc supply.

### **Product Highlights:**

- Pressure ranges from 0.5 up to 600 bar
- Accuracy <±0.25% / <±0.10%</li>
- Ceramic sensor, high corrosion resistance
- I2c and SPi supported
- Low power consumption
- Naturally high frequency response from 1kHz up to 75kHz
- Choice of mechanical connections
- Cost effective for OEM solutions

#### Applications include, but not limited to:

- OEM installations
- Laboratory & Research testing
- Medical testing / prototyping
- Pressure surge detection
- Data loggers
- Automotive component testing
- Academic research

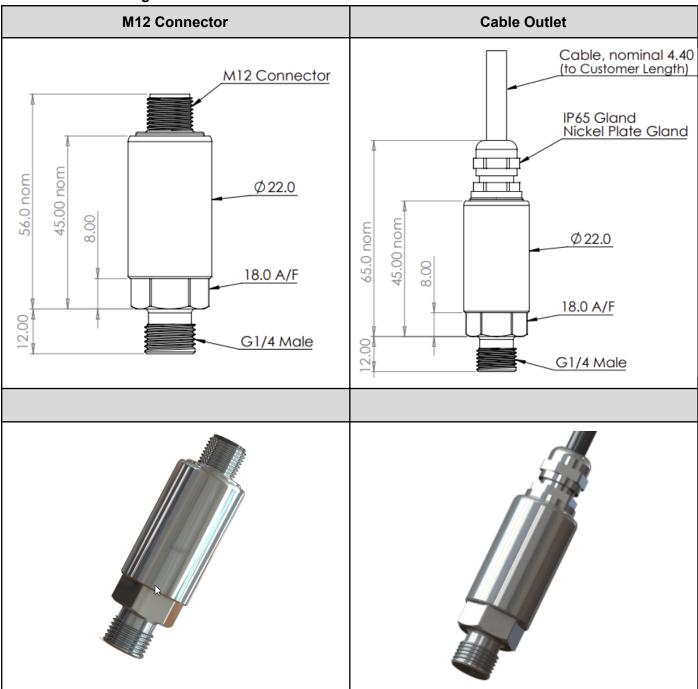


## Specification:

Titan Pressure Transmitter - TPTd									
Sensor technology	Piezo-resistive								
Communications	I2c, SPi								
Supply voltage		2.7 - 5.5V dc							
Pressure reference		Gauge (standard), Sealed Ga	uge, Absolute						
Pressure ranges	0.5, 1, 2, 5, 10, 20, 50, 100, 200, 400, 600 Bar								
Safe over pressure	1.5 times rated pressure								
Burst Pressure	3 times rated pressure								
Accuracy (NL&H)	≤ ±0.35 % / ≤ ±0.25 % / ≤ ±0.10 % FS								
Response Time	Various Options, Consult Sales								
Ambient temperature	-20 °C to +85 °C								
Media temperature	-40 °C to +125 °C								
Storage temperature	-20 °C to +80 °C								
Temperature effects	Typical thermal zero and span coefficients, TZS: ±0.02 %FS/°C, TSS: <-0.015 %/°C								
Media wetted parts	303 Stainless Steel, Al <sub>2</sub> O <sub>3</sub> , Viton								
Permissable media	All fluids compatible with media wetted parts								
Electrical connection	M12 x 1, 4-pin male connector (mating cable sold separately) Cable Outlet with 0.25m screened PVC cable								
Pressure connection	G1/4" DIN 3852 male & female, 1/4" NPT male, 7/16-20 UNF-2A male SAE#4 J514								
Environmental Protection	M12 connector	Gauge reference ≤ 50 bar: <b>IP65</b>	Absolute, Sealed Gauge reference or > 50 bar range: <b>IP67</b>						
	Cable Outlet	IP65							



## **Dimensional Drawings:**





Part Numbering system														
TPTd - Titan Pressure Transmitte	TPTd	- X	х	- X	Х	- X	Х	- X	Х	х	х	Х	- X	Х
Output Type														
i2c		Α												
SPi		В												
Accuracy Class														
0.35%			Α											
0.25%			В											
0.10%			С											
Electrical Connection														
Connector M12 x 1, 4-pin male				Α										
Cable Outlet IP65				В										
Process Connection														
G1/4" male DIN 3852					G									
G1/4" female DIN 3852					F									
1/4" NPT male					Ν									
7/16-20 UNF-2A male SAE#4 J514					U									
Housing Material														
303 Stainless Steel						Α								
316 Stainless Steel						В								
PVDF						С								
Seal Material														
Viton							V							
(Drinking Water Approved) EPDM							E							
NBR							N							
FFKM (Chemraz)							С							
Pressure Range									_					
0.5 Bar 1 Bar								0	5	0	0			
2 Bar								2	0	0	0			
5 Bar								5	0	0	0			
o Bar														
20 Bar								1	0	0	1			
50 Bar								5	0	0	1			
100 Bar								1	0	0	2			
200 Bar								2	0	0	2			
400 Bar								4	0	0	2			
600 Bar								6	0	0	2			
72 Psi (example)								P	0	7	2			
5000 Psi (example)								P	5	K	0			
Pressure Datum										· ``				
Gauge												G		
Sealed Gauge												s		
Absolute												Α		
Special Options													1	
None													0	0



#### Accessories:

