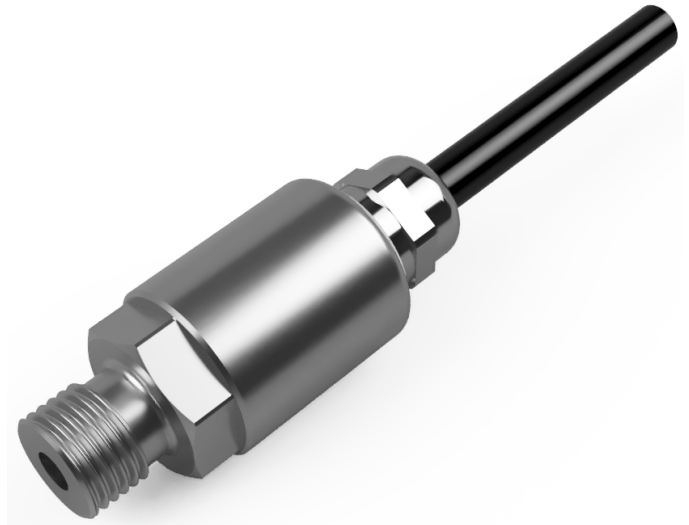


Titan Series

Model: TPTLR

Low Range

Pressure Transducer



Description:

The Titan TPTLR series of pressure transducers have been developed using a Stainless Steel piezo-resistive silicon 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 and also standard connectors such as mini DIN & large DIN 43650 right angled connectors. We also have the option of an integrated MIL-C spec or customer specific connectors.

The internal PCB uses passive components to ensure the low power consumption is maintained, ideal for battery powered applications. Being passive also makes it suitable for applications that require a fast dynamic measurement of pressure. Outputs include raw mV/V, rationalised 2mV/V, 3mV/V or 10mV/V and 20mV/V which can be powered from 2 - 30V dc supply.

Product Highlights:

- Pressure ranges from 50mbar up to 20 Bar
- Accuracy $<\pm 0.25\%$ / $<\pm 0.10\%$
- Responsive stainless steel sensor
- Passive millivolt output
- Low power consumption
- Naturally high frequency response
- Choice of mechanical connections
- Cost effective for OEM solutions

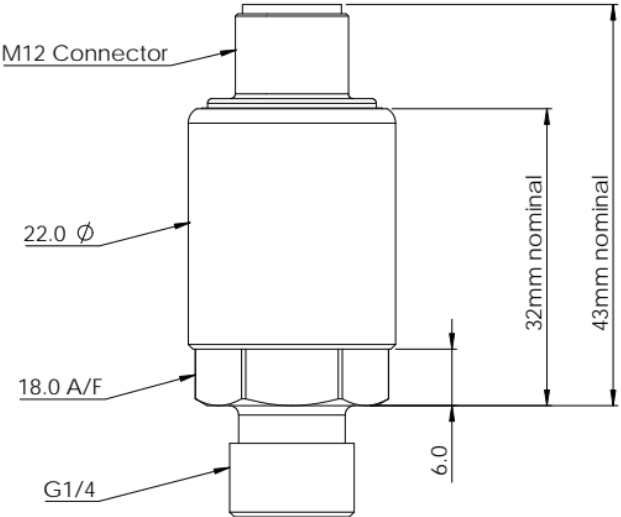
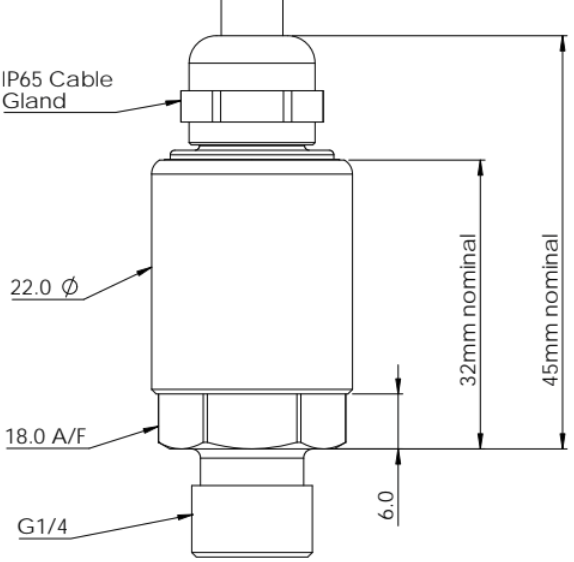
Applications include, but not limited to:

- OEM installations
- Laboratory & Research testing
- Pneumatic testing
- Medical testing / prototyping
- Data loggers
- Aerospace test and research
- Automotive component testing
- Academic research

Specification:

Titan Pressure Transducer - TPTLR			
Sensor technology	Piezo-resistive, Silicon		
Output Versions	mV/V, 2mV/V, 3mV/V, 10mV/V, 20mV/V		
Supply voltage	3 - 12V dc		
Pressure reference	Gauge (standard), Sealed Gauge, Absolute		
Pressure ranges	70, 200, 350, 700, 1000mbar 2, 3.5, 7, 10, 20 Bar		
Safe over pressure	1.5 times rated pressure		
Burst Pressure	3 times rated pressure		
Accuracy (NL&H)	$\leq \pm 0.25\%$ / $\leq \pm 0.10\%$ FS (dependant on range)		
Long Term Stability:	$\leq \pm 0.10\%$ FS		
Frequency Response	Various, dependant on capsule range		
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: $\pm 0.02\%$ FS/°C, TSS: $< -0.015\%$ /°C		
Media wetted parts	303 & 316 Stainless Steel, Viton, EPDM, NBR		
Permissible media	All fluids compatible with media wetted parts		
Electrical connection	Mini DIN43650 Connector, M12 x 1, 4-pin connector, Cable Outlet with screened PVC cable (IP65), Moulded Cable Outlet with PUR cable (IP67), MIL-C spec connector		
Pressure connection	G $\frac{1}{4}$ " DIN 3852 male & female, $\frac{1}{4}$ " NPT male, 7/16-20 UNF-2A male SAE#4 J514		
Environmental Protection	M12 connector	Gauge reference ≤ 50 bar: IP65	Absolute, Sealed Gauge reference or > 50 bar range: IP67
	Cable Outlet	Screened PVC Cable: IP65, Moulded PUR Cable: IP67	
	MIL-C Spec	IP67	

Dimensional Drawings:

M12 Connector	Cable Outlet
	
Moulded	Mini DIN 43650
MIL-C Spec Connector	

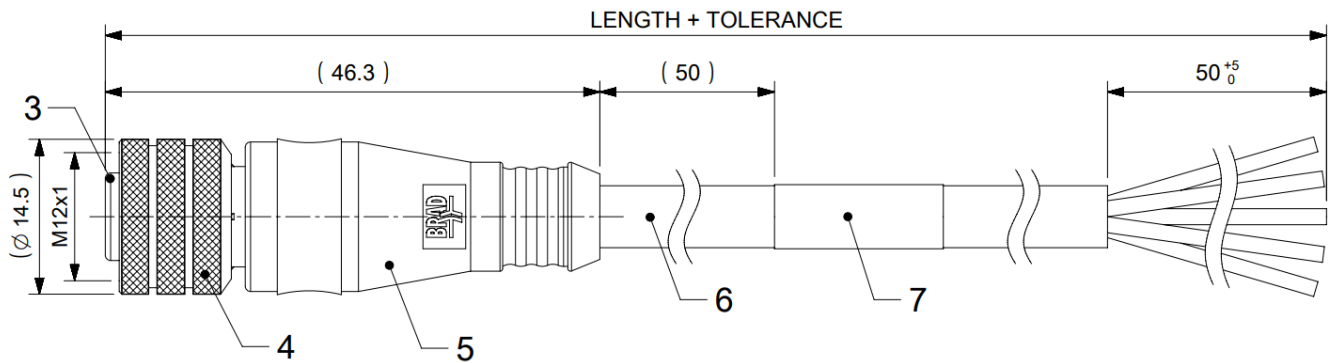


Part Numbering system

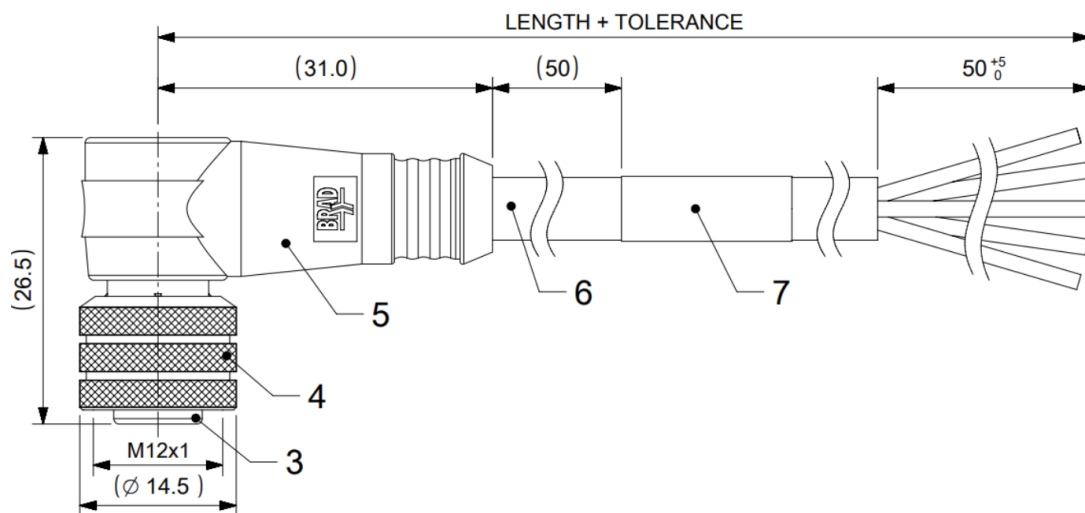
TPTLR - Titan Pressure Transducer	TPTLR	-	X	X	-	X	X	-	X	X	-	X	X	X	X	-	X	X
Output Type																		
mV/V	A																	
2mV/V	B																	
3mV/V	C																	
10mV/V	D																	
20mV/V	E																	
Accuracy Class																		
0.25%	A																	
(Dependant on pressure range) 0.1%	B																	
Electrical Connection																		
Connector M12 x 1, 4-pin male	A																	
Cable Outlet IP66	B																	
Mini Plug & Socket DIN 43650	D																	
MIL-C Spec connector	E																	
Process Connection																		
G1/4" male DIN 3852	G																	
G1/4" female DIN 3852	F																	
1/4" NPT male	N																	
7/16-20 UNF-2A male SAE#4 J514	U																	
Housing Material																		
303 Stainless Steel	A																	
316 Stainless Steel	B																	
Seal Material																		
Viton	V																	
(Drinking Water Approved) EPDM	E																	
NBR	N																	
Pressure Range																		
50mbar										0	0	5	0					
200mbar										0	2	0	0					
350mbar										0	3	5	0					
700mbar										0	7	0	0					
1000mbar										1	0	0	0					
2 Bar										2	0	0	0					
3.5 Bar										3	0	0	0					
7 Bar										7	0	0	0					
10 Bar										1	0	0	1					
20 Bar										2	0	0	1					
5 Psi (example)										P	0	0	5					
10 Psi (example)										P	0	1	0					
Pressure Datum																		
Gauge																G		
Special Options																		
None																	0	0

Accessories:

Mating M12 cable cordset - Straight



Mating M12 cable cordset - Right-Angled



Temperature Reducing Adaptor

