

Titan Series

Model: TTTa

Temperature Transmitter



Description:

The Titan TTT series of Temperature Transmitters have been developed to incorporate industry standard PT100 & PT1000 temperature sensing elements housed in a robust stainless steel housing & paired with our latest electronics enables a stable and accurate analogue (TTTa) or digital (TTTd) output calibrated and compensated to the specific temperature range of the application. The TTT series 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.

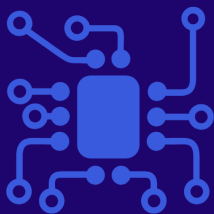
The TTT comes with various options of probe length, process connection and output type including standard PT100 or PT1000 resistance, 4-20mA / 2-wire, 0 - 5 or 0 - 10V / 3-wire, 0.5 to 4.5V ratiometric output from a 2.7 to 5.5V supply or if you prefer digital interfaces then we can offer i2c or SPi configurations. With these variations of outputs the TTT series will suit a multitude of applications.

Product Highlights:

- Temperature ranges from -25 to +125°C
- Accuracy Based on Class A or Class B
- All stainless steel construction
- Various analogue & digital outputs
- Choice of mechanical connections
- Cost effective for OEM solutions

Applications include, but not limited to:

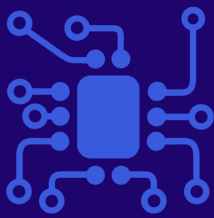
- OEM installations
- Laboratory & Research testing
- Hydraulic & Pneumatic testing
- Medical testing / prototyping
- Data loggers
- Automotive component testing
- Academic research



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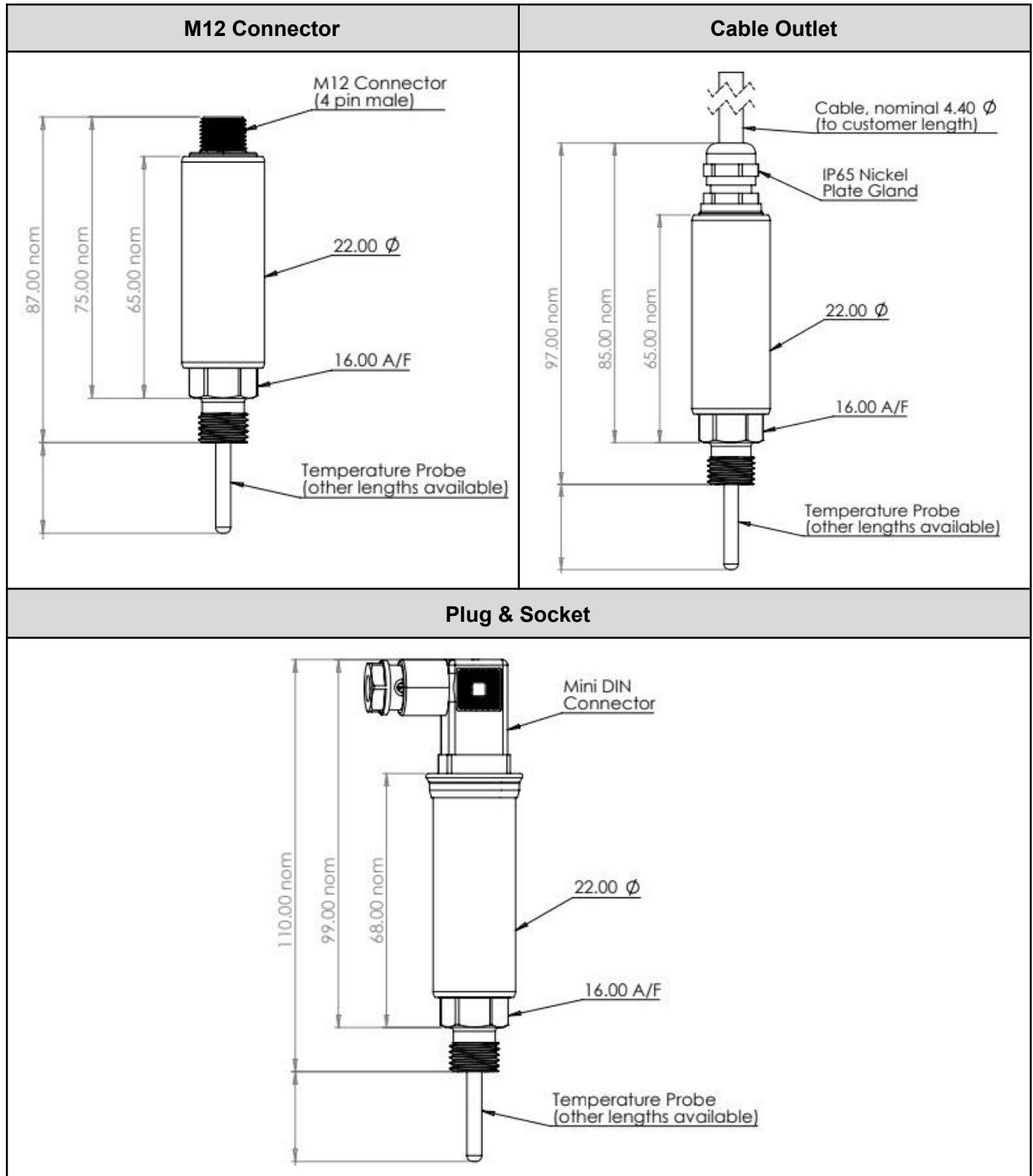
Specification:

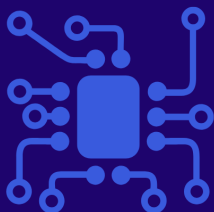
Titan Temperature Transmitter - TTT		
Sensor technology	Resistance Thermometer Detector	
Output Versions	4-20mA (2-wire), 0-5V/1-5V/0-10V (3-wire), 0.5 to 4.5V (3-wire ratiometric)	
Supply voltage	4-20mA: 10 - 32V dc / 0-5V/1-5V/0-10V/: 13 - 32V dc / Ratiometric: 2.7 - 5.5V dc	
Temperature ranges	Calibration ranges available between: -25 to +125°C (-13 to +257°F)	
Accuracy ()	Class A: Class B:	
Long Term Stability:	≤ ±0.10 % FS	
Response time:	Sample time: <10mseconds Overall temperature response: <150mseconds	
Ambient temperature	-20 °C to +85 °C	
Media temperature	-25 °C to +125 °C	
Storage temperature	-20 °C to +80 °C	
Media wetted parts	303 Stainless Steel, Al ₂ O ₃ , 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)	
Pressure connection	G¼" DIN 3852 male, ¼" NPT male	
Probe Size and Tolerance	5mm x 4mm OD: Length ±1mm 21mm x 4mm OD: Length ±1mm 51mm x 4mm OD: Length ±1mm 101mm x 4mm OD: Length ±1mm	
Environmental Protection	M12 connector	IP67
	Plug & Socket	IP65
	Cable Outlet	Screened PVC Cable: IP65, Moulded PUR Cable: IP67



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Dimensional Drawings:

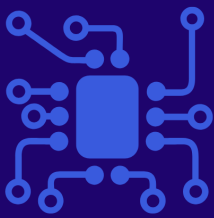




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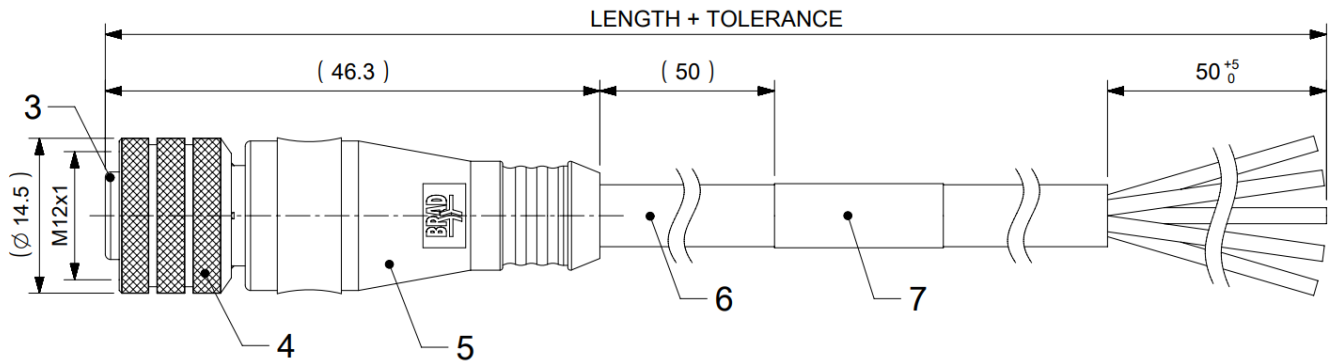
Part Numbering system

TTTa - Titan Temperature Transmitter																			
TTTa	-	X	X	-	X	X	X	-	X	X	-	X	X	X	X	X	X	X	X
Output Type																			
4-20mA (2-wire)	A																		
0-5V (3-wire)	B																		
1-5V (3-wire)	C																		
0-10V (3-wire)	D																		
0.5 to 4.5V (3-wire)	E																		
Accuracy Class																			
Class A	A																		
Class B	B																		
Electrical Connection																			
Connector M12 x 1, 4-pin male				A															
Cable Outlet IP65				B															
Moulded Cable IP67				C															
Mini Plug & Socket DIN 43650				D															
Process Connection																			
G1/4" male DIN 3852					G														
1/4" NPT male					N														
Housing Material																			
303 Stainless Steel					A														
Probe Length																			
5mm								0	0	5									
21mm								0	2	1									
51mm								0	5	1									
101mm								1	0	1									
Pressure Range																			
-0 to +50°C											M	0	0	P	0	5	0		
-0 to +100°C											M	0	0	P	1	0	0		
-25 to +125°C											M	2	5	P	1	2	5		
-10 to +30°C											M	1	0	P	0	3	0		
-13 to +257°F											M	1	3	P	2	5	7		
32 to +212°F											M	3	2	P	2	1	2		
Measurement Units																			
Centigrade																		C	
Fahrenheit																		F	
Special Options																			
None																		0	0



Accessories:

Mating M12 cable cordset - Straight



Mating M12 cable cordset - Right-Angled

