

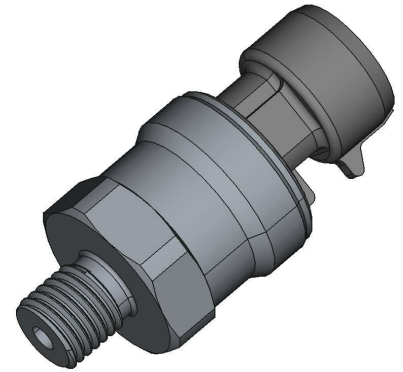
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## Titan-Moto

### Model: A-Series

#### Autosport Pressure Sensor



#### Description:

Introducing Titan-Moto A-Series: a perfect solution into the world of Autosport pressure sensing technology, designed to meet the most rigorous demands of on-vehicle pressure measurement in the motorsport and automotive industry. Engineered with precision, it offers wide options of pressure range from 2 to 400 bar and accurate voltage output, either from a ratiometric 5V supply or 8-16V DC, ensuring compatibility with varied vehicle, test stand and dyno systems.

Customization is paramount: choose from a variety of electrical and pressure connections, each crafted to suit a multitude of applications. Experience unparalleled reliability and accuracy with the Titan-Moto A-Series, driving performance to the pinnacle.

#### Product Highlights:

- Pressure ranges from 2 bar ... 400 bar
- Accuracy class:  $\leq \pm 0.5\%$  /  $\leq \pm 0.25\%$
- Ceramic sensor, high corrosion resistance
- Reliable voltage output
- 5V ratiometric or 8-16V regulated supply
- Cost effective, compact design

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

- On-vehicle pressure sensing
  - Test Stand monitoring
  - Dyno pressure measurement
- Coolant, brake, water, boost, fuel and oil

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## Specification:

Titan-Moto - A-Series Pressure Sensor	
Sensor technology	Piezo-resistive
Output Versions	0.5 to 4.5V (3-wire), $\pm 0.5\%$ setting error
Supply voltage	<b>Ratiometric:</b> 4.5-5.5V dc, <b>Regulated:</b> 8-16V dc
Current consumption:	<i>(TBT)</i> <b>Ratiometric:</b> 2.5mA, <b>Regulated:</b> 5mA
Output Impedance:	<i>TBT</i>
Pressure reference	Sealed Gauge, Absolute
Pressure ranges (bar)	2, 5, 10, 20, 50, 100, 200, 400
Pressure ranges (psi)	30, 75, 150, 300, 750, 1500, 3000, 6000
Safe over range	1.5 times rated pressure
Burst rating	3 times rated pressure
Accuracy (NL&H)	$\leq \pm 0.5\%$ / $\leq \pm 0.25\%$
Long Term Stability:	$\leq \pm 0.10\%$ FS
Response time	<5mseconds
Operating temperature	-20 °C to +135 °C
Compensated temperature	20 °C to +125 °C
Temperature effects	Typical thermal zero/span coefficients. TZS: $\pm 0.04\%$ FS/°C, TSS: $< -0.02\%$ /°C
Media wetted parts	303 Stainless Steel (316L optional), Al <sub>2</sub> O <sub>3</sub> , Viton (peroxide-cured), EPDM, HNBR, FFKM
Permissible media	All fluids compatible with media wetted parts
Electrical connection	FEP Insulated Screened Cable, 26AWG, M12x1, 4-pin Connector, Packard Metri-Pak 150 Series Connector
Pressure connection	3/8"-24 UNF, Dash-3 (SAE J514), M10x1 (ISO 6149-2) 1/8" NPT male, 1/4" NPT male, G1/4" DIN3852 male
Environmental Protection	IP67 (1m for 30mins)
EMC Protection & Vibration	<i>(TBT)</i> (EN E50082-1 and Mil-Std-810C, Curve L, 20G)

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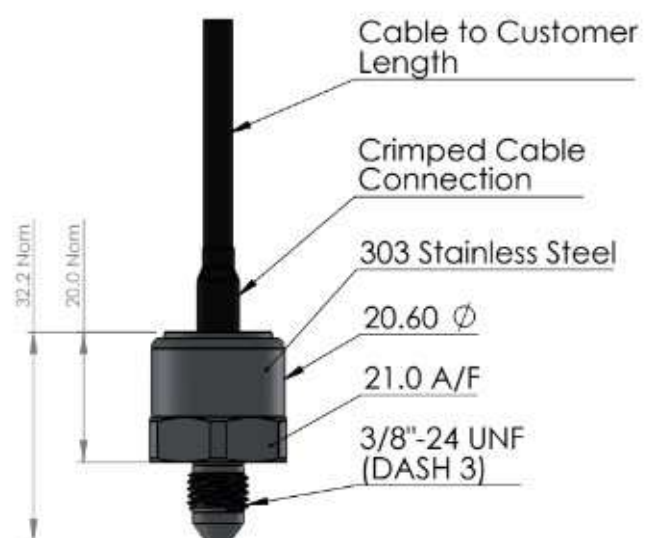
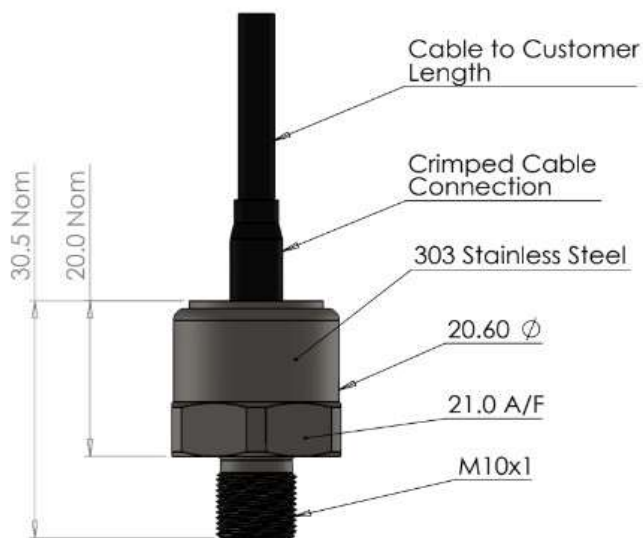
Weight

35g

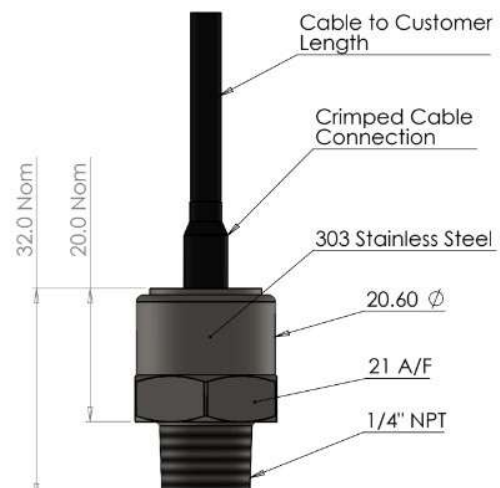
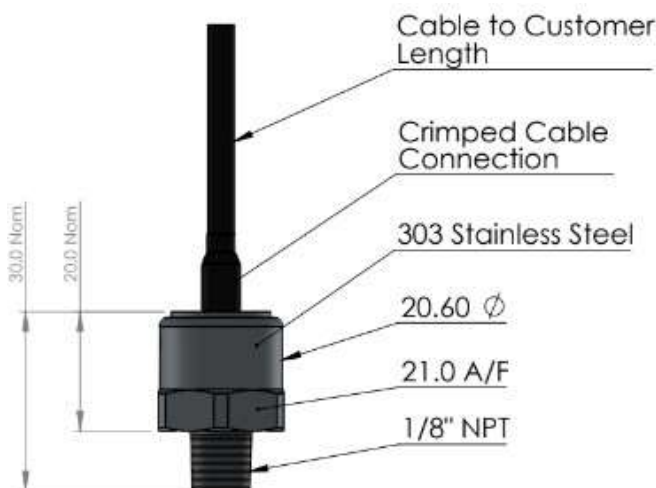
- TBT: To be tested to confirm definitive values

## Dimensional Drawings:

### Titan-Moto - A-Series Pressure Sensor - Cable version



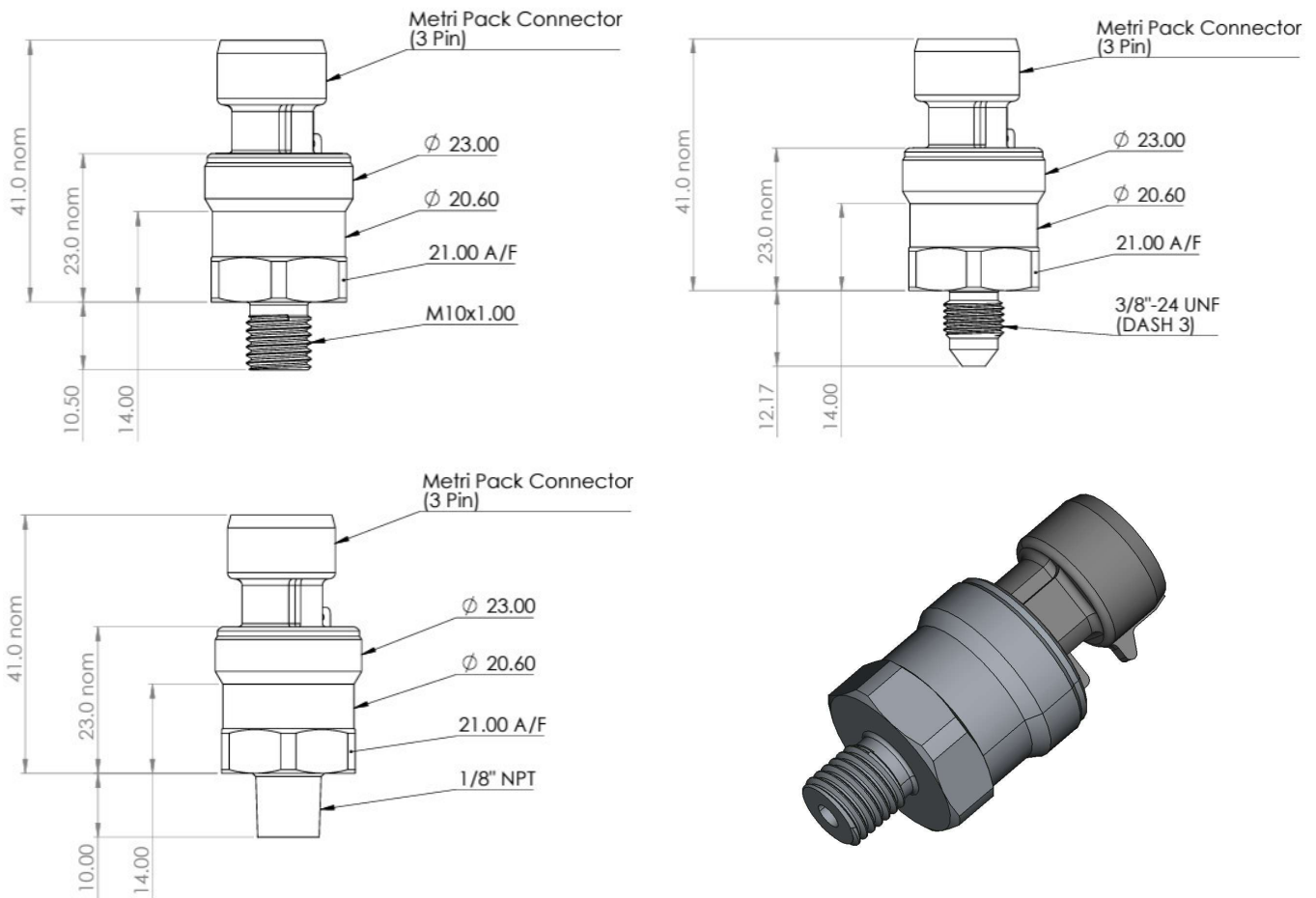
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## Titan-Moto - A-Series Pressure Sensor - Metripak 150 Series version

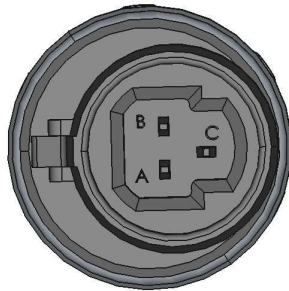


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## Wiring:

Function	+Ve Supply	0V Supply	Signal
FEP Cable core colours	Red	Blue	Green
Connector Pins	B	A	C



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## Part Numbering system

A-Series, Motorsport Pressure Transmitter														
AS	-	X	X	-	X	X	-	X	X	-	X	X	X	X
Output / Supply Type														
0.5 to 4.5V (3-wire), 5V dc ratiometric	A													
0.5 to 4.5V (3-wire), 8-16V dc regulated	B													
Others on request	X													
Accuracy Class														
0.50%	A													
0.25%	B													
0.10%	C													
Electrical Connection														
FEP Insulated Screened Cable, 26AWG			A											
M12x1, 4-pin Connector			B											
Packard Metri-Pak 150 Series Connector			C											
Others on request			X											
Process Connection														
3/8"-24 UNF, Dash-3 (SAE J514)				A										
M10x1 (ISO 6149-2)				B										
1/8" NPT male				C										
1/4" NPT male				D										
G1/4" DIN3852 male				E										
Others on request				X										
Housing Material														
303 Stainless Steel					A									
Anodised Aluminium					B									
Seal Material														
FKM (Viton™)						V								
FFKM (Chemraz®)						C								
EPDM						E								
NBR						N								
HNBR						H								
Pressure Range														
2 Bar							2	0	0	0				
5 Bar							5	0	0	0				
10 Bar							1	0	0	2				
20 Bar							2	0	0	2				
50 Bar							5	0	0	2				
100 Bar							1	0	0	3				
200 Bar							2	0	0	3				
400 Bar							4	0	0	3				
72 Psi (example)							P	0	7	2				
5000 Psi (example)							P	5	K	0				
Pressure Datum														
Sealed Gauge											S			
Absolute											A			
Special Options														
None												0	0	
Pressure port restrictor												0	8	



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- Cable length is 50cm as standard, if alternative length required this is determined by adding the length in cm to the end of the part number, for instance 100cm will be: AS-AA-AB-AV-2000S-00(**100**)