

# TA936 Series

Nonincendive, CSA North America Class I, Division 2, Class II, Division 1, Class III, ATEX/IECEx Zone 2, 22 Approved Dual Output Sensor, Acceleration and Temperature, Side Exit 3 Pin Connector, 100 mV/g, 10 mV/°C, ±10%



## Regulatory Information

CSA 221421  
CSA 25CA80263368X  
CLI, DIV 2, GRP A, B, C and D T3/T4  
CLII, DIV 1, GRP E, F and G T135°C  
CLIII  
Ex ec IIC T\* Gc  
Ex tc IIIC T135°C Dc  
CLI, ZN 2, AEx ec IIC T\* Gc  
ZN 22, AEx tc IIIB T135°C Dc  
\*Temperature Class depends on the ambient temperature  
T4, T135°C for ambient temperature range of -40°C to +80°C  
T3 for ambient temperature range of -40°C to +121°C  
Vmax = 28VDC Imax = 10mA  
Reference Product Manual MNX10128 / Install Per INS10191

IECEx CSA 24.0015X  
Ex ec IIC T\*\*C Gc  
Ex tc IIIC T135°C Dc

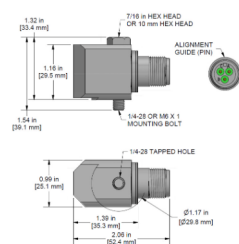
T4, T135°C for ambient temperature range of -40°C to +80°C  
T3 for ambient temperature range of -40°C to +121°C  
\*Temperature Class depends on the ambient temperature  
Vmax=28VDC Imax=10mA  
Install per INS10208  
Reference Product Manual MNX10132  
CSACa 24 ATEX1004X  
Ex ec IIC T\*\*C Gc  
Ex tc IIIC T135°C Dc  
T4, T135°C for ambient temperature range of -40°C to +80°C  
T3 for ambient temperature range of -40°C to +121°C  
\*Temperature Class depends on the ambient temperature  
Vmax=28VDC Imax=10mA  
Install per INS10209  
Reference Product Manual MNX10133

Approved Cabling: CB212, CB191\*, CB298 (\*Approved for Use in T4 Applications Only)

### TA936-1A

3 Pin Connector

| Connector | Polarity                |
|-----------|-------------------------|
| Pin       |                         |
| A         | (+) Signal/Power        |
| B         | (-) Common              |
| C         | (+) Temperature Voltage |

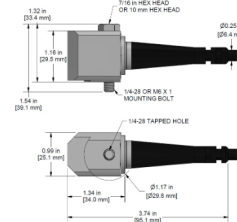


Stock Product

### TA936-2C

CB191 Integral Cable

| Conductor | Polarity                |
|-----------|-------------------------|
| Red       | (+) Signal/Power        |
| Black     | (-) Common              |
| White     | (+) Temperature Voltage |
| Shield    | Cable Drain Wire        |

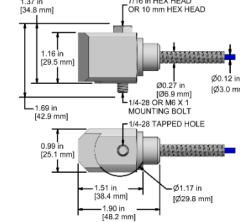


Built To Order

### TA936-3C

CB298 Armored Integral Cable

| Conductor | Polarity                |
|-----------|-------------------------|
| Red       | (+) Signal/Power        |
| Black     | (-) Common              |
| White     | (+) Temperature Voltage |
| Shield    | Cable Drain Wire        |



Built To Order

| Specifications                | Standard             | Metric        | Specifications              | Standard             | Metric            |
|-------------------------------|----------------------|---------------|-----------------------------|----------------------|-------------------|
| Part Number                   | TA936                | M/TA936       | <b>Environmental</b>        |                      |                   |
| Sensitivity (±10%)            | 100 mV/g             |               | Operating Temperature Range | -40 to 250 °F        | -40 to 121 °C     |
| Frequency Response (±3dB)     | 30-516,000 CPM       | 0.5-8600 Hz   | Maximum Shock Protection    | 5,000 g, peak        |                   |
| Dynamic Range                 | ± 80 g, peak         |               | Electromagnetic Sensitivity | CE                   |                   |
| Temperature Measurement Range | 36.5 to 212 °F       | 2.5 to 100 °C | Sealing                     | Welded, Hermetic     |                   |
| Temperature Output            | 10 mV/°C             |               | <b>Physical</b>             |                      |                   |
| Transverse Sensitivity        | ≤5%                  |               | Sensing Element             | PZT Ceramic          |                   |
| <b>Electrical</b>             |                      |               | Sensing Structure           | Shear Mode           |                   |
| Settling Time                 | <2 Seconds           |               | Weight                      | 5.3 oz               | 151 grams         |
| Voltage Source                | 18-28 VDC            |               | Case Material               | 316L Stainless Steel |                   |
| Constant Current Excitation   | 2-10 mA              |               | Mounting Thread             | 1/4-28               |                   |
| Spectral Noise @ 10 Hz        | 30 µg/√Hz            |               | Connector (Non-Integral)    | 3 Pin MIL-C-5015     |                   |
| Spectral Noise @ 100 Hz       | 19 µg/√Hz            |               | Resonant Frequency          | 1,260,000 CPM        | 21000 Hz          |
| Spectral Noise @ 1000 Hz      | 15 µg/√Hz            |               | Mounting Torque             | 2 to 5 ft. lbs.      | 2.7 to 6.8 Nm     |
| Output Impedance              | <100 ohm             |               | Mounting Hardware Supplied  | 1/4-28 Captive Bolt  | M6x1 Captive Bolt |
| Bias Output Voltage           | 10-14 VDC            |               | Calibration Certificate     | CA10                 |                   |
| Case Isolation                | >10 <sup>8</sup> ohm |               |                             |                      |                   |

## Typical Frequency Response

