

TA102 Series

Dual Output, Temperature/Acceleration, Top Exit Connector/Cable, 100 mV/g, 10 mV/°C

SECTION I - VIBRATION SENSORS
Dual Output Accelerometers

Actual Product Size Shown

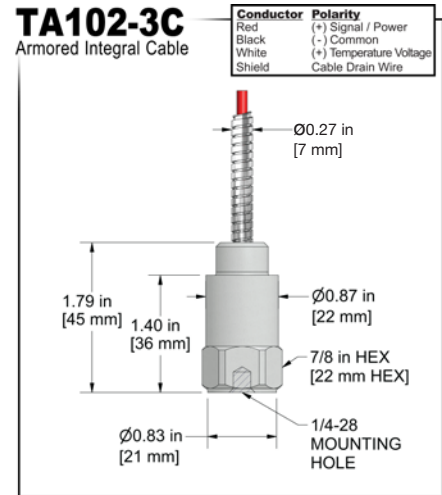
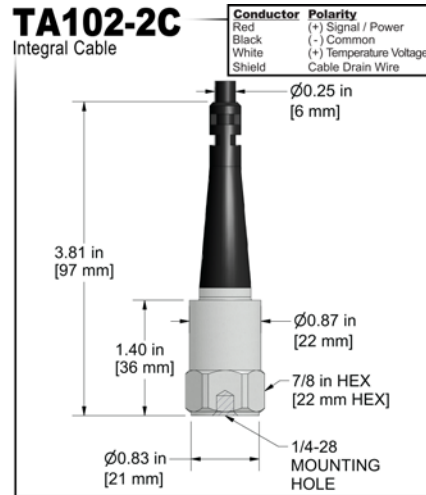
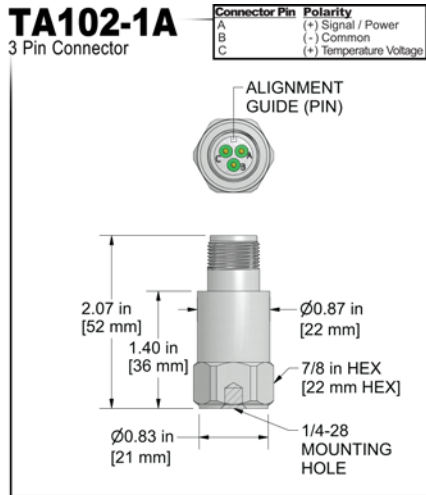


Requires **Multi-Conductor Cable**

Product Features

Temperature Output 10 mV/°C
High Performance in a Low Cost Sensor

- Standard 3 Pin MIL Connection
- Temperature and Acceleration in One Sensor
- Affordably Priced



Specifications	Standard	Metric
Part Number	TA102	M/TA102
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-900,000 CPM	0.5-15000 Hz
Frequency Response (±10%)	120-720,000 CPM	2.0-12000 Hz
Dynamic Range	± 80 g, peak	
Temperature Measurement Range	37° to 250° F	3° to 121° C
Temperature Output	10 mV/°C	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	8 µg/√Hz	
Spectral Noise @ 100 Hz	0.82 µg/√Hz	
Spectral Noise @ 1000 Hz	0.3 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (TA102-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	90 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	3 Pin MIL-C-5015	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

Ordering Information

Standard	TA102-1A (1/4-28 Stud)	TA102-2C - / (1/4-28 Stud)	TA102-3C - / (1/4-28 Stud)
	(length in feet) (termination)	(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/TA102-1A (M6x1 Adapter Stud)	M/TA102-2C - / (M6x1 Adapter Stud)	M/TA102-3C - / (M6x1 Adapter Stud)
	(length in feet) (termination)	(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)

Cable Termination Options: L Z

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TA104 Series

Dual Output, Temperature/Acceleration, Side Exit Connector/Cable, 100 mV/g, 10 mV/°C

SECTION 1 - VIBRATION SENSORS
Dual Output Accelerometers

Requires **Multi-Conductor Cable**

Product Features

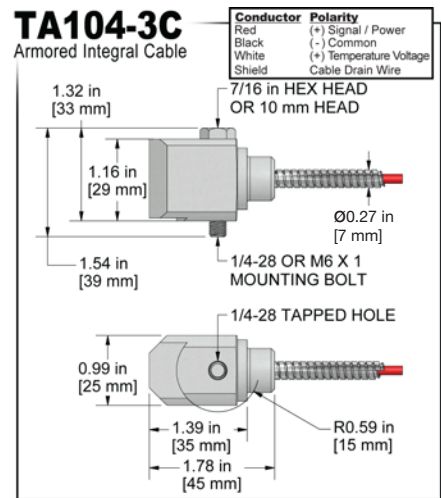
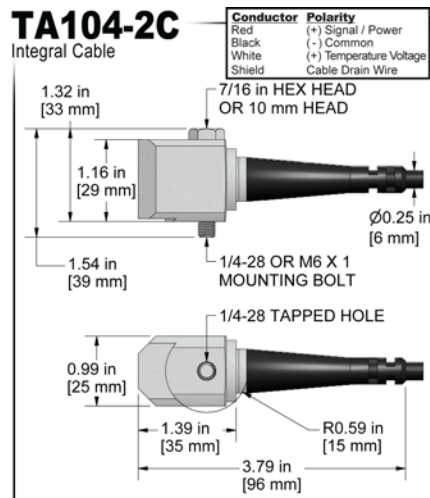
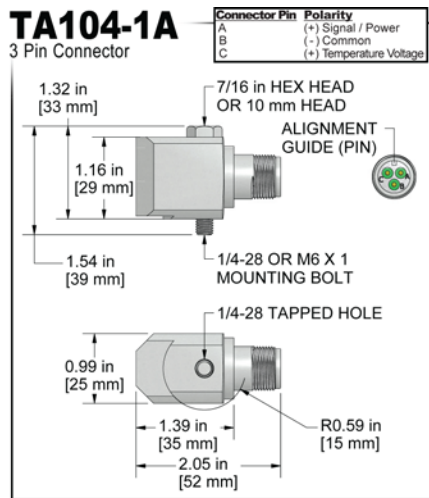
Temperature Output 10 mV/°C
High Performance in a Low Cost Sensor



Actual Product Size Shown



- Standard 3 Pin MIL Connection
- Temperature and Acceleration in One Sensor
- Affordably Priced



Specifications	Standard	Metric
Part Number	TA104	M/TA104
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-600,000 CPM	0.5-10000 Hz
Frequency Response (±10%)	120-300,000 CPM	2.0-5000 Hz
Dynamic Range	± 80 g, peak	
Temperature Measurement Range	37° to 250° F	3° to 121° C
Temperature Output	10 mV/°C	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	8 µg/√Hz	
Spectral Noise @ 100 Hz	0.82 µg/√Hz	
Spectral Noise @ 1000 Hz	0.3 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (TA104-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	5.6 oz	160 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	3 Pin MIL-C-5015	
Resonant Frequency	1,260,000 CPM	21000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm
Mounting Hardware	1/4-28 Captive Bolt	M6x1 Captive Bolt
Calibration Certificate	CA10	

Ordering Information

Standard	TA104-1A	TA104-2C - /	TA104-3C - /
	(1/4-28 Captive Bolt) Stock Product	(1/4-28 Captive Bolt) Build To Order	(1/4-28 Captive Bolt) Build To Order
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/TA104-1A	M/TA104-2C - /	M/TA104-3C - /
	(M6x1 Captive Bolt) Stock Product	(M6x1 Captive Bolt) Build To Order	(M6x1 Captive Bolt) Build To Order
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)

Cable Termination Options: L Z



VIBRATION ANALYSIS HARDWARE

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TA131 Series

Dual Output High g Accelerometer, Temperature/Acceleration
Top Exit Connector/Cable, 10 mV/g, 10 mV/°C

SECTION I - VIBRATION SENSORS
Dual Output Accelerometers



Actual Product Size Shown

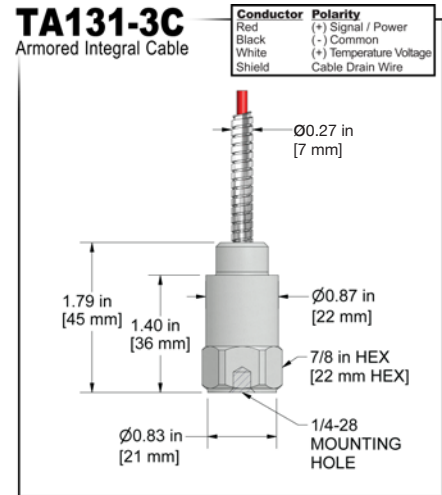
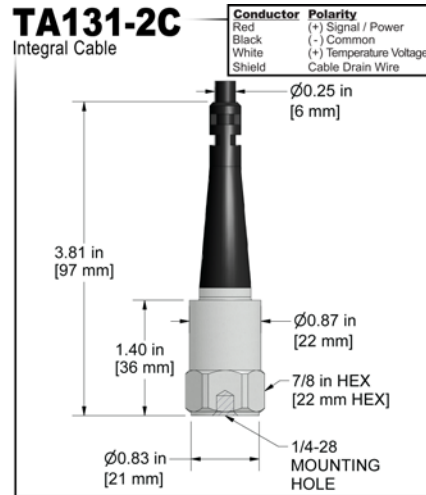
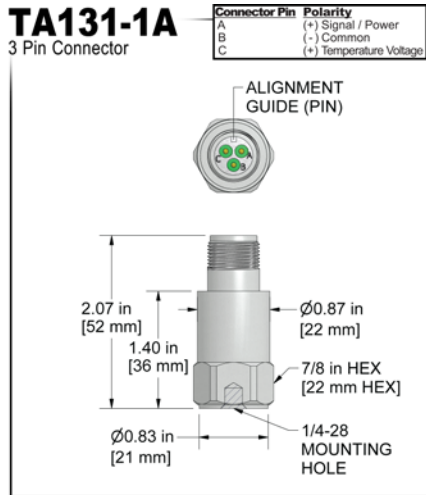


Requires **Multi-Conductor Cable**

Product Features

Temperature Output 10 mV/°C
High Performance at a Reasonable Price

- Standard 3 Pin MIL Connection
- Temperature and Acceleration in One Sensor
- Affordably Priced



Specifications	Standard	Metric
Part Number	TA131	M/TA131
Sensitivity (±10%)	10 mV/g	
Frequency Response (±3dB)	72-900,000 CPM	1,2-15000 Hz
Frequency Response (±10%)	150-360,000 CPM	2,5-6000 Hz
Dynamic Range	± 500 g, peak	
Temperature Measurement Range	37° to 250° F	3° to 121° C
Temperature Output	10 mV/°C	
Electrical		
Settling Time	<2 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	300 µg/√Hz	
Spectral Noise @ 100 Hz	30 µg/√Hz	
Spectral Noise @ 1000 Hz	6 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁸ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (TA131-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.2 oz	90 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	3 Pin MIL-C-5015	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

Ordering Information

Standard	TA131-1A (1/4-28 Stud)	TA131-2C - / (1/4-28 Stud)	TA131-3C - / (1/4-28 Stud)
		(length in feet) (termination)	(maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/TA131-1A (M6x1 Adapter Stud)	M/TA131-2C - / (M6x1 Adapter Stud)	M/TA131-3C - / (M6x1 Adapter Stud)
		(length in meters) (termination)	(maximum armor length 30 m) (cable length in meters) (termination)

Cable Termination Options: L Z

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TA133 Series

**Dual Output, Broad Range Sensor, Temperature/Acceleration,
Top Exit Connector, 500 mV/g, 10 mV/°C**



Actual Product Size Shown



Requires **Multi-Conductor Cable**

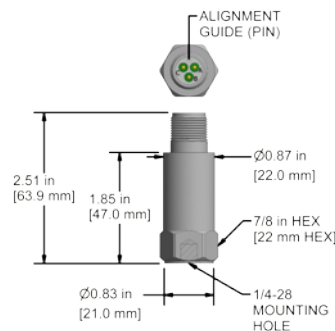
Product Features

**Temperature Output 10 mV/°C,
Acceleration Output 500 mV/g
3 Pin Top Connector**

- ± 10 g, Peak Dynamic Range
- 0,1 - 10000 Hz (6 - 600,000 CPM) Frequency Response
- 37 - 250°F (3 - 121°C) Temperature Range

TA133-1D 3 Pin Connector



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



Specifications	Standard	Metric
Part Number	TA133	M/TA133
Sensitivity ($\pm 10\%$)	500 mV/g	
Frequency Response ($\pm 3\text{dB}$)	6-600,000 CPM	0,1-10000 Hz
Frequency Response ($\pm 10\%$)	36-180,000 CPM	0,6-3000 Hz
Dynamic Range	± 10 g, peak	
Temperature Measurement Range	37° to 250° F	3° to 121° C
Temperature Output	10 mV/°C	
Electrical		
Settling Time	5 Seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	1.7 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 100 Hz	0.2 $\mu\text{g}/\sqrt{\text{Hz}}$	
Spectral Noise @ 1000 Hz	0.12 $\mu\text{g}/\sqrt{\text{Hz}}$	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.7 oz	104 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	3 Pin MIL-C-5015	
Resonant Frequency	960,000 CPM	16000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

Ordering Information

Standard	TA133-1D (1/4-28 Stud) 
Metric	M/TA133-1D (M6x1 Adapter Stud) 

Cable Termination Options: **L**  **Z** 



VIBRATION ANALYSIS HARDWARE

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TA135 Series

Dual Output, Temperature/Acceleration, Top Exit Connector/Cable, 500 mV/g, 10 mV/°C

SECTION I - VIBRATION SENSORS
Dual Output Accelerometers



Actual Product Size Shown

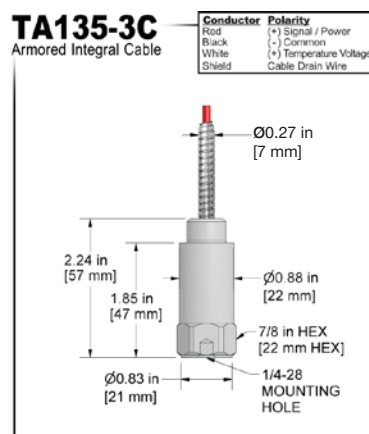
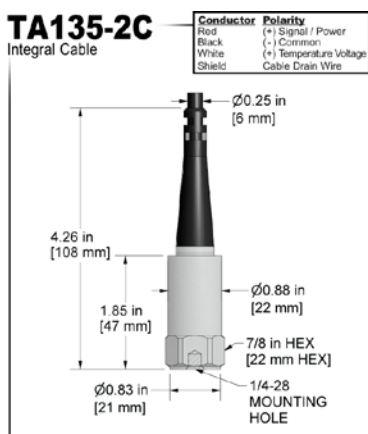
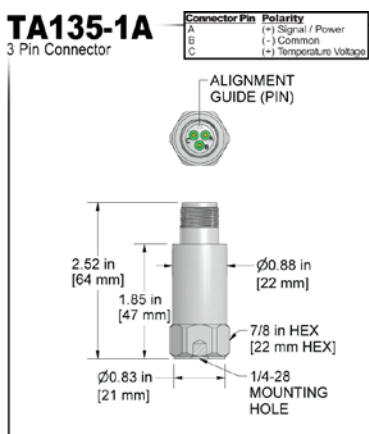


Requires **Multi-Conductor Cable**

Product Features

**Temperature Output 10 mV/°C,
Acceleration Output 500 mV/g**
3 Pin Top Connector

- ±10 g, Peak Dynamic Range
- 0,2 - 3000 Hz (12 - 180,000 CPM) Frequency Response
- 37 - 250°F (3 - 121°C) Temperature Range



Specifications	Standard	Metric
Part Number	TA135	M/TA135
Sensitivity (±10%)	500 mV/g	
Frequency Response (±3dB)	12-180,000 CPM	0,2-3000 Hz
Frequency Response (±10%)	36-90,000 CPM	0,6-1500 Hz
Dynamic Range	± 10 g, peak	
Temperature Measurement Range	37° to 250° F	3° to 121° C
Temperature Output	10 mV/°C	
Electrical		
Settling Time	5 Seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	1.7 µg/√Hz	
Spectral Noise @ 100 Hz	0.2 µg/√Hz	
Spectral Noise @ 1000 Hz	0.12 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10 ⁹ ohm	

Specifications	Standard	Metric
Environmental		
Temperature Range	-40 to 250°F	-40 to 121°C
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth (TA135-2C/3C)	200 ft.	60 m
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	3.5 oz	100 grams
Case Material	316L Stainless Steel	
Mounting	1/4-28	
Connector (non-integral)	3 Pin MIL-C-5015	
Resonant Frequency	960,000 CPM	16000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	

Ordering Information

Standard	TA135-1A (1/4-28 Stud)	TA135-2C - / (1/4-28 Stud)	TA135-3C - / (1/4-28 Stud)
Metric	M/TA135-1A (M6x1 Adapter Stud)	M/TA135-2C - / (M6x1 Adapter Stud)	M/TA135-3C - / (M6x1 Adapter Stud)

Cable Termination Options: L Z

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