

# TA102 Series

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

SECTION 1 - VIBRATION SENSORS  
Dual Output Accelerometers



Actual Product Size Shown

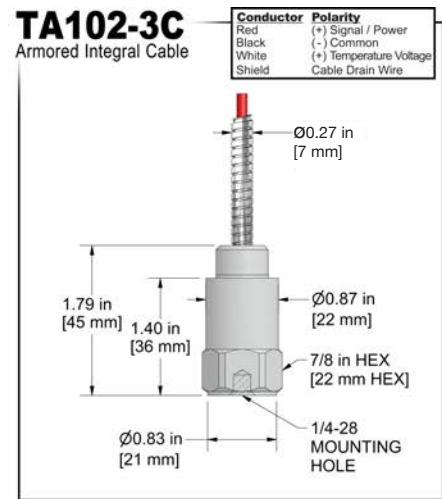
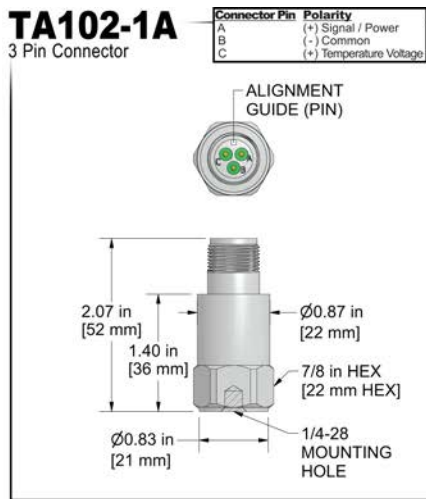


Requires **Multi-Conductor Cable**

## 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	
<b>Electrical</b>		
Settling Time	<2.5 seconds	
Voltage Source	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 <sup>9</sup> ohm	

Specifications	Standard	Metric
<b>Environmental</b>		
Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	Welded, Hermetic	
Submersible Depth (TA102-2C/3C)	200 ft.	60 m
<b>Physical</b>		
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	TA102-2C	TA102-3C
	(1/4-28 Stud)	(1/4-28 Stud)	(1/4-28 Stud)
		- / [ ] - [ ] (length in feet) (termination)	- / [ ] / [ ] - [ ] (maximum armor length 100 ft.) (cable length in feet) (termination)
Metric	M/TA102-1A	M/TA102-2C	M/TA102-3C
	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)	(M6x1 Adapter Stud)
		- / [ ] - [ ] (length in feet) (termination)	- / [ ] / [ ] - [ ] (maximum armor length 100 ft.) (cable length in feet) (termination)
		[ ] M - [ ] (length in meters) (termination)	[ ] M / [ ] M - [ ] (maximum armor length 30 m) (cable length in meters) (termination)

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

**INTERTECHNOLOGY**  
INC.

19 Waterman Ave, Toronto, Ont. M4B1Y2  
Ph#416-445-5500 Fax#416-445-1170  
Toll Free: 1-800-465-1600  
Email: sales@intertechnology.com  
Website: www.intertechnology.com



VIBRATION ANALYSIS HARDWARE