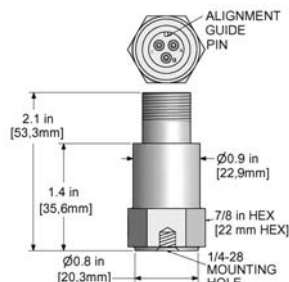


TA102 Series**Dual Temperature / Acceleration Output,
Top Exit Connector / Cable, 100 mV/g, 10 mV/°C**

CE

TA102-1A**3 Pin Connector**

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

**TA102-2A****Integral Cable**

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

**Part Numbers & Ordering Information:**

When Ordering Metric, add "M" prefix.
(Example: M/TA102-2A/010-Z)

TA102-1A Dual temperature acceleration output, 100 mV/g 10 mV/°C, 3 pin top connector

TA102-2A/010-Z	10 ft. (3 m), blunt cut end
TA102-2A/020-Z	20 ft. (6 m), blunt cut end
TA102-2A/030-Z	30 ft. (9 m), blunt cut end
TA102-2A/050-Z	50 ft. (15 m), blunt cut end
TA102-2A/100-Z	100 ft. (30 m), blunt cut end

* Custom Lengths Available Upon Request

Performance Specifications

	English	Metric
Sensitivity	±10%	100 mV/g
Frequency Response	±3 dB	30-900,000 CPM
	±10%	120-720,000 CPM
Dynamic Range		±50 g, peak
Temperature Measurement Range		±50 g, peak
Temperature Output		10 mV/°C
		36.5° to 250° F
		2.5° to 121°C
		10 mV/°C
Electrical		
Settling Time (Turn on Time)		
@ Room Temp (68°F/20°C)	<2.5 Seconds	<2.5 Seconds
Power Requirement		
Voltage Source	18-30 VDC	18-30 VDC
Constant Current Excitation	2-10 mA	2-10 mA
Electrical Noise (Typical)		
Broadband 2.5 Hz to 25 kHz	200 σg, rms	200 σg, rms
Spectral 10 Hz	14 σg/√Hz	14 σg/√Hz
100 Hz	2.3 σg/√Hz	2.3 σg/√Hz
1000 Hz	2 σg/√Hz	2 σg/√Hz
Output Impedance, Max	<100 ohm	<100 ohm
Bias Output Voltage	10-14 VDC	10-14 VDC
Electrical Case Isolation	>10 ⁸ ohm	>10 ⁸ ohm

Environmental

	English	Metric
Temperature Range	-40 to 250° F	-40 to 121° C
Maximum Shock Protection	5,000 g, peak	5000 g, peak
Electromagnetic Sensitivity	CE	CE
Sealing	Welded, Hermetic	Welded, Hermetic
Submersible Depth (TA102-2A)	500 ft.	152 m

Physical

	English	Metric
Sensing Element	PZT Ceramic	PZT Ceramic
Sensing Structure	Shear Mode	Shear Mode
Weight	3.2 oz.	90 grams
Case Material	316L Stainless Steel	316L Stainless Steel
Mounting Hole	1/4-28	1/4-28
Connector (TA102-1A)	3 Pin MIL-C-5015	3 Pin MIL-C-5015
Integral Cable (TA102-2A)	CB105	CB105

Mechanical

	English	Metric
Resonant Frequency	1,500,000 CPM	25000 Hz
Mounting Torque	2 to 5 ft. lbs.	2.7 to 6.8 Nm

Supplied Accessories

	English	Metric
Mounting Hardware	1/4-28 Stud	M6x1 Adapter Stud
Calibration Certificate	CA10	CA10

Common Applications**Industries Served**

- Automotive
- Pulp and Paper
- Manufacturing
- Steel
- Pharmaceutical
- Wastewater Treatment
- Power

Typical Applications

- Air Handlers
- Fourdriniers
- Pumps, Underwater
- Conveyors
- Gear Boxes
- Roll and Process Equipment
- Dryer Sections <250° F (121° C)
- Motors
- Spindles
- Fans
- Press Sections
- Pumps

Measurement Types

- Permanent Mount

For optional accessories, please see the *Sensor Accessory Selection Chart*.



VIBRATION ANALYSIS HARDWARE