TA284-M12A Series

Dual Output Sensor, Temperature & Acceleration, M8x1.25 Captive Bolt, Side Exit 4 Pin M12 Connector, 100 mV/g, 10 mV/°C, ±10%

VIBRATION ANALYSIS HARDWARE

Product Features

High Performance in a Low Cost Sensor

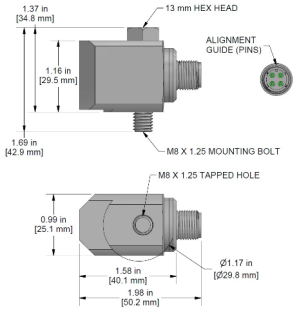
Helps to Detect Bearing Defects and Temperature Changes

- Temperature (10 mV/°C) and Acceleration (100 mV/g) Outputs in One Sensor via a 4 Pin M12 Connector
- Popularly sold with SC300 Series Signal Conditioners with built-in Temperature Output

TA284-M12A

4 Pin Connector

Connector Pin	Polarity
1	(+) Signal/Power
2	(-) Common
3	Not Used
4	(+) Temperature Voltage



Stock Product

Specifications	Standard	Metric
Part Number	TA284-M12A	
Sensitivity (±10%)	100 mV/g	
Frequency Response (±3dB)	30-900,000 CPM	0,5-15000 Hz
Frequency Response (±10%)	120-600,000 CPM	2,0-10000 Hz
Dynamic Range	± 50 g, peak *Vsource ≥ 22V, 12Vbias	
Temperature Measurement Range	-40 to 250°F	-40 to 121°C
Temperature Output	10 mV/°C	
Temperature Sensor	750 mV = 25 °C (±1)	
Electrical		
Settling Time	<2.5 seconds	
Voltage Source (IEPE)	18-30 VDC	
Constant Current Excitation	2-10 mA	
Spectral Noise @ 10 Hz	14 µg/√Hz	
Spectral Noise @ 100 Hz	2.3 µg/√Hz	
Spectral Noise @ 1000 Hz	2 µg/√Hz	
Output Impedance	<100 ohm	
Bias Output Voltage	10-14 VDC	
Case Isolation	>10^8 ohm	

Specifications	Standard	Metric
Environmental		
Operating Temperature Range	-40 to 250°F	-40 to 121°C
Maximum Shock Protection	5,000 g, peak	
Electromagnetic Sensitivity	CE	
Sealing	IP68	
Submersible Depth	200 ft.	60 m
SIL Rating	SIL 2	
Physical		
Sensing Element	PZT Ceramic	
Sensing Structure	Shear Mode	
Weight	6.3 oz	180 grams
Case Material	316L Stainless Steel	
Connector (Non-Integral)	4 Pin M12	
Resonant Frequency	1,380,000 CPM	23000 Hz
Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Mounting Hardware Supplied	M8 Captive Bolt	
Calibration Certificate	CA10	

Typical Frequency Response