

VE802 Series

Nonincendive, CSA North America Class I, Division 2, Class II, Division 1,
Class III, ATEX/IECEx Zone 2, 22 Approved Piezo Velocity Sensor, Side Exit 2
Pin Connector, 100 mV/in/sec, $\pm 10\%$



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

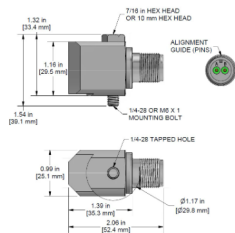
CSACa 24ATEX1004X
IECEx CSA 240015X
Ex ec IIC T* °C Gc
Ex tc IIIC T135 °C Dc
*Temperature code for gas for ambient range:
T4 for ambient range of -40 °C to +80 °C
T3 for ambient range of -40 °C to +121 °C
V=28VDC I=10mA

VE802-1A must be used with Q2R connector on CB102, CB190, CB111, CB206, or CB296 Cabling

VE802-1A

2 Pin Connector

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

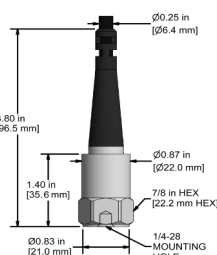


Stock Product

VE802-2A

Integral Cable

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

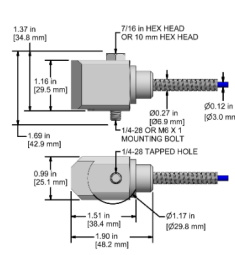


Built To Order

VE802-3A

CB296 Armored Integral Cable

Conductor	Polarity
Red	(+) Signal/Power
Black	(-) Common
Shield	Cable Shield Drain



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	VE802	M/VE802	<u>Environmental</u>		
Sensitivity ($\pm 10\%$)	100 mV/in/sec		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response ($\pm 3\text{dB}$)	90-720,000 CPM	1,5-12000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response ($\pm 10\%$)	120-270,000 CPM	2,0-4500 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 50 in/sec. pk *Vsource $\geq 22\text{V}$, 12V/bias		Sealing	Welded, Hermetic	
Transverse Sensitivity	$\leq 5\%$		Submersible Depth	200 ft.	60 m
<u>Electrical</u>			SIL Rating	SIL 3	
Settling Time	<5 Seconds		<u>Physical</u>		
Voltage Source	18-30 VDC		Sensing Element	PZT Ceramic	
Constant Current Excitation	2-10 mA		Sensing Structure	Shear Mode	
Spectral Noise @ 10 Hz	25 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Weight	5.1 oz	145 grams
Spectral Noise @ 100 Hz	2 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	0.5 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Connector (Non-Integral)	2 Pin MIL-C-5015	
Output Impedance	<100 ohm		Resonant Frequency	1,320,000 CPM	22000 Hz
Bias Output Voltage	10-14 VDC		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
Case Isolation	>10 ⁸ ohm		Mounting Hardware Supplied	1/4-28 Captive Bolt	M6x1 Captive Bolt
			Calibration Certificate	CA10	

Typical Frequency Response

