

VE801 Series

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



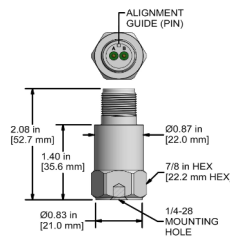
Regulatory Information

CSA 221421	CSACa 24ATEX1004X
CSA 25CA80263368X	IECEx CSA 240015X
CLII, DIV 2, GRP A, B, C and D T3/T4	Ex ec IIC T* °C Gc
CLII, DIV 1, GRP E, F and G T135°C	Ex to IIC T135 °C Dc
CLIII	*Temperature code for gas for ambient range:
Ex ec IIC T* Gc	T4 for ambient range of -40 °C to +80 °C
Ex to IIC T135°C Dc	T3 for ambient range of -40 °C to +121 °C
CLII, ZN 2, AEx ec IIC T* Gc	V=28VDC I=10mA
ZN 22, AEx to IIIB T135°C Dc	VE801-1A must be used with Q2R connector on CB102, CB190, CB111, CB206 or CB296 Cabling
*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	

VE801-1A

2 Pin Connector

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

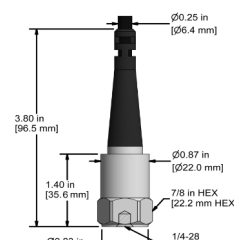


Stock Product

VE801-2A

Integral Cable

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

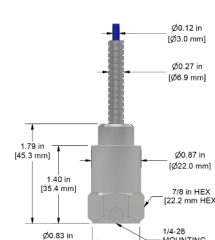


Built To Order

VE801-3A

Armored Integral Cable

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



Built To Order

Specifications	Standard	Metric	Specifications	Standard	Metric
Part Number	VE801	M/ or M8/VE801	<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 $\geq 22\text{V}$, 12Vbias		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	3.2 oz	90 grams
Spectral Noise @ 100 Hz	2 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Case Material	316L Stainless Steel	
Spectral Noise @ 1000 Hz	0.5 $\mu\text{IPS}/\sqrt{\text{Hz}}$		Mounting Thread	1/4-28 Blind Tapped Hole	
Output Impedance	<100 ohm		Connector (Non-Integral)	2 Pin MIL-C-5015	
Bias Output Voltage	10-14 VDC		Resonant Frequency	1,380,000 CPM	23000 Hz
Case Isolation	>10 ⁸ ohm		Mounting Torque	2 to 5 ft. lbs.	2,7 to 6,8 Nm
			Mounting Hardware Supplied	1/4-28 Stud	M6x1 or M8x1.25 Adapter Stud
			Calibration Certificate	CA10	

Typical Frequency Response

