

VE801 Series

Nonincendive, CSA North America Class I, Division 2 and IECEx/ATEX Zone 2 Approved Piezo Velocity Sensor, Top Exit 2 Pin Connector, 100 mV/in/sec, ±10%



VIBRATION ANALYSIS HARDWARE



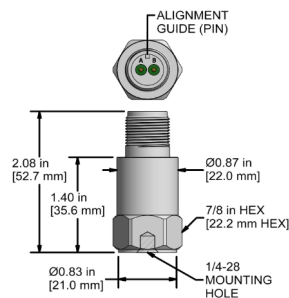
Regulatory Information

CSA 221421	CSACa 24ATEX1004X
Ex nA IIC T3/T4	IECEx CSA 240015X
DIP A22 IP6X T150°C (T-Code =T3) or T105°C (T-Code = T4)	Ex ec IIC T* °C Gc
AEx nA IIC T3 / T4, CI, ZONE 2	Ex tc IIIC T135 °C Dc
AEx tD 22, IP6X T150°C (T-Code=T3) or T105°C (T-Code=T4)	*Temperature code for gas for ambient range:
CI D2, Gr A-D, CII D2, Gr F,G, CIII	T4 for ambient range of -40 °C to +80 °C
OPERATING TEMP CODE: T3	T3 for ambient range of -40 °C to +121 °C
AMBIENT TEMP RANGE = -40°C TO +125°C	V=28VDC I=10mA
OPERATING TEMP CODE: T4	
AMBIENT TEMP RANGE = -40°C TO +80°C	
Control Drawing INS10035	
Vmax = 28VDC, Imax = 100mA	VE801-1A must be used with Q2R connector on CB102, CB111, or CB296 Cabling

VE801-1A

2 Pin Connector

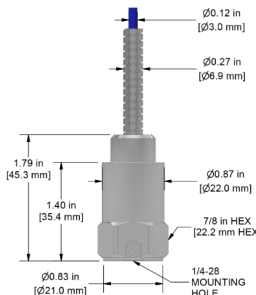
Connector Pin	Polarity
A	(+) Signal/Power
B	(-) Common



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	Environmental		
Sensitivity (±10%)	100 mV/in/sec		Operating Temperature Range	-58 to 250 °F	-50 to 121 °C
Frequency Response (±3dB)	90-720,000 CPM	1.5-12000 Hz	Maximum Shock Protection	5,000 g, peak	
Frequency Response (±10%)	120-270,000 CPM	2,0-4500 Hz	Electromagnetic Sensitivity	CE	
Dynamic Range	± 50 in/sec. pk *Vsource ≥ 22V, 12Vbias		Sealing	Welded, Hermetic	
Electrical			Submersible Depth	200 ft.	60 m
Settling Time	<5 Seconds		SIL Rating	SIL 3	
Voltage Source	18-30 VDC		Physical		
Constant Current Excitation	2-10 mA		Sensing Element	PZT Ceramic	
Spectral Noise @ 10 Hz	25 µIPS/√Hz		Sensing Structure	Shear Mode	
Spectral Noise @ 100 Hz	2 µIPS/√Hz		Weight	3.2 oz	90 grams
Spectral Noise @ 1000 Hz	0.5 µIPS/√Hz		Case Material	316L Stainless Steel	
Output Impedance	<100 ohm		Mounting Thread	1/4-28 Blind Tapped Hole	
Bias Output Voltage	10-14 VDC		Connector (Non-Integral)	2 Pin MIL-C-5015	
Case Isolation	>10 ⁹ ohm		Resonant Frequency	1,380,000 CPM	23000 Hz
			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

