

Velocity output vibration transmitter

Description

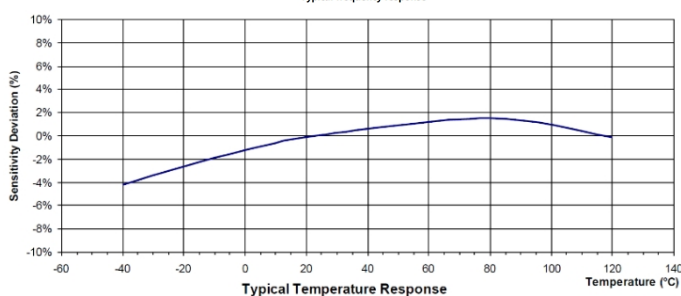
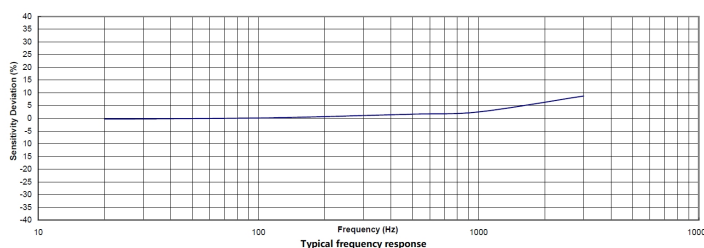
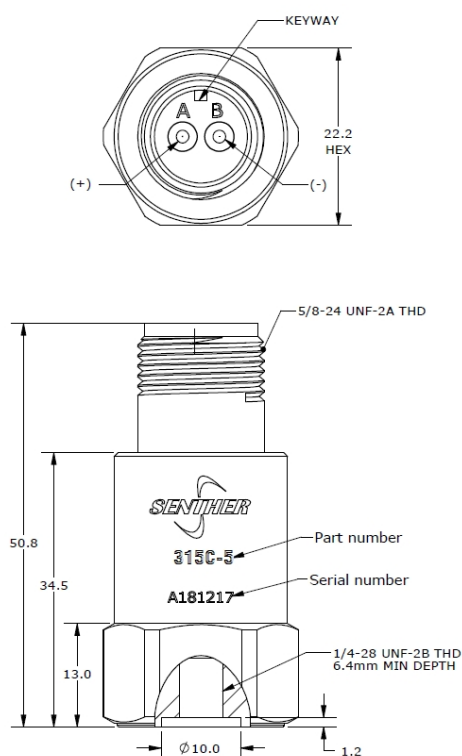
Model 315V is an industrial piezo-electrical accelerometer permitting vibration measurements. 315V features an annular shear ceramic crystal which exhibits excellent output stability over time. The accelerometer incorporates an internal circuit with in a two-wire system which transmits the 4~20mA current velocity output through the same cable that supplies the voltage excitation. Signal ground is internal shielded and isolated from the outer case of the unit. Polarity inversion protection for the amplify circuit is inherent in the circuit design. The welded stainless-steel construction provides a hermetic housing. The standard MIL-C-5015 glass insulated connector provides long-term stability over the operating temperature range. In addition to adhesive mounting, 315V has 1/4-28 threaded holes for stud mounting on the test object. The 315V provides wide frequency response and shock resistance, which is ideal for industrial vibration monitoring under incidental shock environment. Senter's model 16-L is a MIL-C-5015 connector mating cable for the sensor.

Features

- Vibration velocity output
- 4-20mA current signal
- Hermetic seal
- Case isolated
- EMI / RFI shielded
- Shock resistance

Application

- Blowing machine
- Gear box monitoring
- Bearing detection
- Machine monitoring



Specification

Typical at +24°C (+75°F), 15Vdc and 100Hz, unless otherwise stated.

Part Number	315V-0.5	315V-0.8	315V-1	315V-2	315V-5	315V-10	
Measurement Range	0.0-0.5	0.0-0.8	0.0-1.0	0.0-2.0	0.0-5.0	0.0-10.0	in/sec rms
	0.0-12.7	0.0-20.3	0.0-25.4	0.0-50.8	0.0-127.0	0.0-254.0	mm/sec rms
FSO ±5%	16	16	16	16	16	16	mA
Frequency Range ±10%	6-1000	4-1000	3-1000	3-1000	3-1000	3-1000	Hz
Non-Linearity	±1	±1	±1	±1	±1	±1	%
Sinusoidal Vibration Limit	±500	±500	±500	±500	±500	±500	g
Shock Limit	±2000	±2000	±2000	±2000	±2000	±2000	g pk
Settling Time (Within 2% of value)	<15	<15	<15	<15	<15	<15	sec
Weight	87	87	87	87	87	87	gm







Specifications	Standard	Units
Excitation Voltage	12 - 30	VDC
Zero Current	3.5 – 4.5	mA
Insulation Resistance (@100Vdc)	>100	MΩ
Temperature Range	-40 - 85	°C
Humidity	IP68	
Sensing Element	Piezo Ceramic(Shear)	
Case Material	Stainless Steel	
Connector	2 Pin MIL-C-5015	

Accessories

Calibration certificate included.

Part Number	Description	Availability
PM0011	Mounting stud ¼-28 to ¼-28 thread	One stud Included
PM0008	Mounting stud ¼-28 to M6 thread	
PM0007	Mounting stud ¼-28 to M10 thread	Optional
PM0445	Adhesive mounting adapter	Optional
MB0001	Flat bottom magnet mounting adapter	Optional
MB0011	Saddle-shaped magnet mounting adapter	Optional
16A-10	10 meter mating cable with MIL-C-5015 connector	Optional
16A-10-B	10 meter mating cable with MIL-C-5015 to BNC connector	Optional
IN-3062	8 channels data acquisition system	Optional

Measurement configuration

Sensor	Mating cable	DC power supply	Signal conditioner	Data acquisition	Computer
					

Ordering information

315	V	-	1	-	A
Model	Output signal	-	Range	-	Mounting stud
315	V=Velocity RMS signal by loop current output	-	0.5=0.5in/sec 0.8=0.8in/sec 1=1in/sec 2=2in/sec 5=5in/sec 10=10in/sec	-	A= 1/4-28 to 1/4-28 thread B= 1/4-28 to M6 metric thread C*=Special

