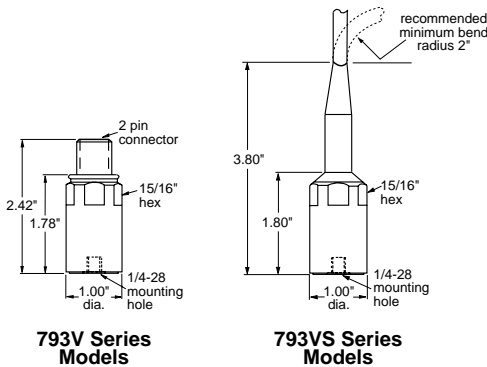


Model 793V Series Piezoelectric Velocity Transducers



FEATURES:

- Intrinsic safety certified options for Model 793V
- Industrial ruggedness
- Eliminates distortion caused by high frequency signals
- Corrosion-resistant
- Internally integrated to velocity
- Ultra low-noise electronics for clear signals at very low vibration levels
- Miswiring protection



SPECIFICATIONS

DYNAMIC

	All Models	793V	793V-5	Units
Sensitivity, ±10%, 25°C	—	100	500	mV/in/sec
Velocity Range	—	50	10	in/sec peak
Amplitude Nonlinearity	1%			
Frequency Response:				
±10%	—	2.0 - 3,500	8.0 - 3,500	Hz
±3 dB	—	1.5 - 7,000	5.0 - 7,000	Hz
Resonance Frequency, mounted, nom	15 kHz			
Transverse Sensitivity, max.	5 % of axial			
Temperature Response	see graph			

ELECTRICAL

Power Requirement:				
voltage source	18 - 30 VDC			
current regulating diode ¹	2 - 10 mA			
Electrical Noise, equiv. in/sec, nominal:				
Broadband 2.5 Hz to 25 kHz	—	100	40	µin/sec
Spectral				
10 Hz	—	10	4.0	µin/sec/√Hz
100 Hz	—	1.0	0.4	µin/sec/√Hz
1000 Hz	—	0.2	0.05	µin/sec/√Hz
Absolute Phase Shift, nom. the greater of:	—	tan ⁻¹ 2/f or 2°	tan ⁻¹ 5/f or 2°	
Output Impedance, nominal 4mA supply, the greater of:	—			
5,000/f	—	5,000/f	25,000/f	
or 200Ω	—	or 200Ω	or 200Ω	
Bias Output Voltage, nominal	10 VDC			
Grounding	case isolated, internally shielded			

ENVIRONMENTAL

Temperature Range	-50 to 120°C ^{2,3}
Vibration Limit	250 g peak
Shock Limit	5,000 g peak
Electromagnetic Sensitivity, equiv. in/sec	25 µin/sec/gauss
Sealing	hermetic
Base Strain Sensitivity	0.0005 in/sec/µstrain

PHYSICAL

Weight	145 grams
Case Material	316L stainless steel
Mounting	1/4 - 28 tapped hole
Output Connector	MIL-C-5015 2-pin
Connections	Pin A signal, power Pin B common
Cabling ² : Mating Connector	Wilcoxon R6 (Amphenol 97-3106A-10SL-4S)
Recommended Cable	J9T2, two conductor shielded, Tefzel jacket, 30 pF/ft.

NOTES:

- 1 A maximum current of 6 mA is recommended for operating temperatures in excess of 100 °C.
- 2 Cabling for "S" option model is J61, coaxial, polyurethane jacket, 30 pF/ft, 80°C maximum temperature.
- 3 Cabling for "SG" option model is J81, two conductor shielded, polyurethane jacket, 45 pF/ft, 80°C maximum temperature.

OPTIONS:

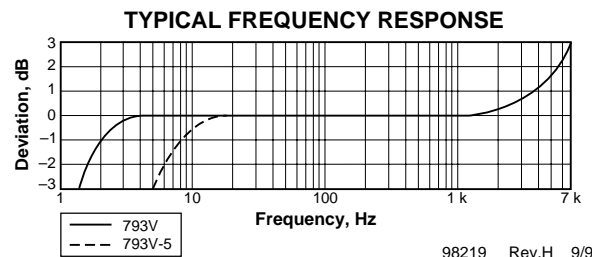
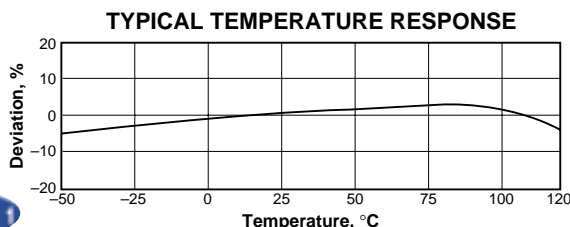
Intrinsic safety certifications for Model 793V; stainless steel flexible hose; 10 ft. sealed integral cable (793VS or 793VSG), temperature sensor (793VT), customer specified sensitivity, low frequency filtering, cable length, connector.

ACCESSORIES SUPPLIED:

SF6 mounting stud, calibration data.

ACCESSORIES AVAILABLE:

R6SL-J9T2-XX splash-proof cable assembly, magnetic mounting bases, SF8 cementing studs, power supplies, amplifiers, signal conditioners.



Due to continued research and development, Wilcoxon Research reserves the right to amend this specification without notice.



98219 Rev.H 9/99