

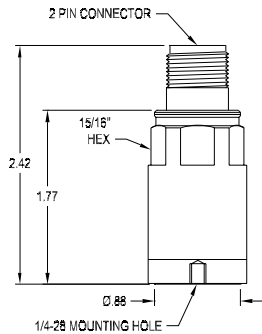


Wilcoxon Research 793V Series Piezoelectric velocity transducers



Features:

- Intrinsic safety certified (options for Model 793V, consult factory)
- 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
- Reverse wiring protection



Models	793V	793V-5	Units
Dynamic			
Sensitivity, $\pm 10\%$ ¹ , 25°C.....	100	500	mV/in/sec
Velocity range	50	10	in/sec peak
Amplitude nonlinearity.....	2.5%	5%	
Frequency response:			
$\pm 10\%$	3.0 - 3,500	8.0 - 3,500	Hz
± 3 dB	2.5 - 7,000	5.0 - 7,000	Hz
Resonance frequency, mounted, nom	15	15	kHz
Transverse sensitivity, max.	5% of axial	5% of axial	
Temperature response			
-50°C	-5%	-5%	
+80°C	+3%	+3%	
+120°C	-5%	-5%	
Electrical			
Power requirement: voltage source.....	18 - 30	18 - 30	VDC
current regulating diode	2 - 10	2 - 10	mA
Electrical noise, equiv. in/sec, nominal:			
Broadband 2.5 Hz to 25 kHz.....	100	40	μ in/sec
Spectral 10 Hz.....	10	4.0	μ in/sec/√Hz
100 Hz.....	1.0	0.4	μ in/sec/√Hz
1000 Hz.....	0.2	0.05	μ in/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 or 200	25,000 or 200	/f Ω
Bias output voltage, nominal	10	10	VDC
Grounding	case isolated, internally shielded	case isolated, internally shielded	
Environmental			
Temperature range.....	-50 to 120° C	-50 to 120° C	
Vibration limit.....	250	250	g peak
Shock limit.....	2,500	2,500	g peak
Electromagnetic sensitivity, equiv. in/sec.....	25	25	μ in/sec/gauss
Sealing	hermetic	hermetic	
Base strain sensitivity	0.0005	0.0005	in/sec/ μ strain
Physical			
Weight.....	145 g	145 g	
Case material	316L stainless steel	316L stainless steel	
Mounting.....	1/4-28 tapped hole	1/4-28 tapped hole	
Output connector.....	MIL-C-5015, 2-pin style	MIL-C-5015, 2-pin style	
Connections			
Pin A.....	signal, power	signal, power	
Pin B.....	common	common	
Mating connector.....	R6 (Amphenol 97-3106A-10SL-4S)		
Recommended cable.....	J9T2		

Options: Intrinsic safety certifications for model 793V.

Accessories supplied: SF6 mounting stud, calibration data

Notes: ¹ For a 100 mV/ips sensor with a $\pm 5\%$ sensitivity tolerance, order model 793V100-5.

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