

Piezoelectric velocity transducers

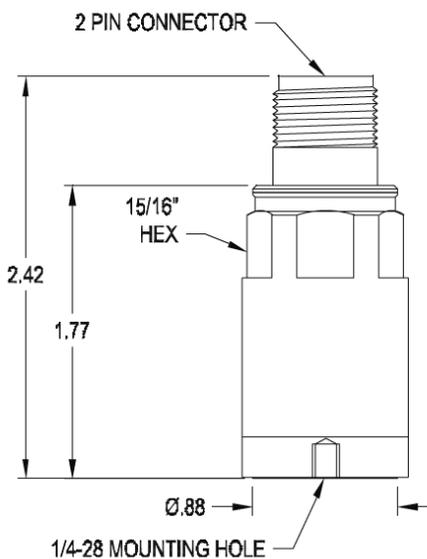
793V series



Key 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

Certifications



Connections, 793V and 793V-5	
Function	Connector pin
power/signal	A
common	B

Note: Due to continuous process improvement, specifications are subject to change without notice.
This document is cleared for public release.

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793V series

SPECIFICATIONS

	793V	793V-5
Sensitivity, $\pm 10\%^1$, 25° C	100 mV/in/sec	500 mV/in/sec
Velocity range	50 in/sec peak	10 in/sec peak
Amplitude nonlinearity	2.5%	5%
Frequency response:	$\pm 10\%$ ± 3 dB	
	3.0 - 3,500 Hz	8.0 - 3,500 Hz
	2.5 - 7,000 Hz	5.0 - 7,000 Hz
Resonance frequency, mounted, nominal	15 kHz	15 kHz
Transverse sensitivity, max	5% of axial	5% of axial
Temperature response:	-50° C	-5%
	+80° C	+3%
	+120° C	-5%
Voltage source	18 - 30 VDC	18 - 30 VDC
Current regulating diode	2 - 10 mA	2 - 10 mA
Electrical noise, equiv. in/sec, nominal:		
Broadband	2.5 Hz to 25 kHz	100 μ in/sec
Spectral	10 Hz	40 μ in/sec
	100 Hz	10 μ in/sec/ $\sqrt{\text{Hz}}$
	1,000 Hz	4.0 μ in/sec/ $\sqrt{\text{Hz}}$
		1.0 μ in/sec/ $\sqrt{\text{Hz}}$
		0.4 μ in/sec/ $\sqrt{\text{Hz}}$
		0.2 μ in/sec/ $\sqrt{\text{Hz}}$
Output impedance, nominal 4 mA supply	200 Ω	200 Ω
Bias output voltage, nominal	10 VDC	10 VDC
Grounding	case isolated, internally shielded	case isolated, internally shielded
Temperature range	-50 to +120° C	-50 to +120° C
Vibration limit	250 g peak	250 g peak
Shock limit	5,000 g peak	5,000 g peak
Electromagnetic sensitivity, equiv. in/sec	25 μ in/sec/gauss	25 μ in/sec/gauss
Sealing	hermetic	hermetic
Base strain sensitivity	0.0005 in/sec/ μ strain	0.0005 in/sec/ μ strain
Weight	145 grams	145 grams
Case material	316L stainless steel	316L stainless steel
Mounting	1/4-28 tapped hole	1/4-28 tapped hole
Output connector	2 pin, MIL-C-5015 style	2 pin, MIL-C-5015 style
Mating connector	R6	R6
Recommended cabling	J9T2	J9T2

Contact

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Accessories supplied:

- Calibration data (level 3)
- SF6 mounting stud (metric mounting available)

Options: Intrinsic safety certifications for model 793V.

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

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