



STI Vibration Monitoring Inc.

# Vibration Monitoring and Machine Protection Systems

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## CMCP793V

### Velocity Sensor, Top Entry 2 Pin MS Connector



#### Features:

- Top Exit Velocity Sensor
- 100 or 500 mV/In/Sec  $\pm 10\%$  (4mV or 20mV/mm/s)
- 140°C Max Temperature Range
- 2 Pin MS 5015 Connector
- Class 1 Division 2 Approved
- Class 1 Division 1 Approved with IS Barrier or Isolator
- 1/4"-28 UNF and M8x1.25 Mounting Studs Included
- Sealed to IP68

#### Typical Applications

Fans, Motors, Pumps, Compressors, Centrifuges, Conveyors, Air Handlers, Gearboxes, Rolls, Dryers, Presses, Cooling, HVAC, Spindles, Machine Tooling, Process Equipment and many more.

#### Technical Performance

Mounted Base Resonance:	22 kHz (nominal)
Sensitivity:	
CMCP793V:	100mV/In/Sec (4mV/mm/s) $\pm 10\%$ Nominal 80Hz at 22°C
CMCP793V-500:	500mV/Sec (20mV/mm/s) $\pm 10\%$ Nominal 80Hz at 22°C
Frequency Response:	3 Hz to 4.5 kHz $\pm 10\%$ (180 cpm to 270k cpm) 2 Hz to 6 kHz $\pm 3\text{dB}$ (120 cpm to 260k cpm)
Isolation:	Base Isolated
Measurement Range:	
100mV/In/Sec Option:	40 In/Sec
500mV/In/Sec Option:	10 In/Sec
Transverse Sensitivity:	Less than 5%

#### Electrical

Electrical Noise:	0.1mg max
Current Range:	0.5mA to 8mA
Bias Voltage:	10-12 Vdc
Settling Time:	1 Second
Output Impedance:	200 Ohms max.
Case Isolation:	$>10^8$ Ohms at 500 Volts

#### Environmental

Operating Temperature Range:	-67 to 284°F (-55 to 140°C)
Sealing:	IP68 / Hermetically Sealed
Maximum Shock:	5000 g
Approvals:	CE Approved CSA/UL Class 1 Division 2, Groups B, C and D

#### Mechanical

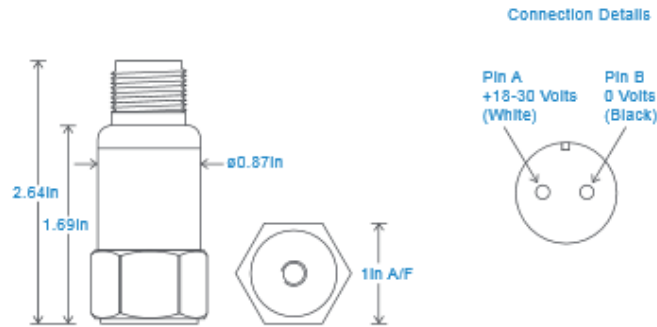
Case Material:	Stainless Steel
Sensing Element:	PZT/Compression
Mounting Torque:	5.9ft. lbs (8Nm)
Weight:	4.4 Oz (125 grams)
Mounting:	1/4"-28 UNF and M8x1.25 Mounting Studs Provided
Mating Connector:	2 Pin MIL 5015 MS Connector

Condition Monitoring Custom Products

### Hazardous Location Ratings

Class I, II, III, Division 1 and 2, Groups A-G, T4, -55°C to + 110°C IP65  
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C  
Zone 20, AEx, ia, IIIC, T130°C, IP65, Da, -55°C to + 110°C  
Class I, II, III, Division 1, 2, Groups A-G, T6, -55°C to + 110°C  
Zone 20, AEx, ia, IIIX, T80°C, IP65, DA, -55°C to + 110°C

### Dimensions



### Ordering Information:

CMCP793V Velocity Sensor, Top Entry 2 Pin MS Connector, 100mV/in/s (4mV/mm/s)  
CMCP793V-500 Velocity Sensor, Top Entry 2 Pin MS Connector, 500mV/in/s (20mV/mm/s)

### Recommended Cable Assemblies:

General Purpose TPE Jacketed Cable (Rated to 120°C)  
CMCP602L Series 2 Socket MS Connector, Locking Collar, IP67  
CMCP602LST Series 2 Socket MS Connector, Push On Seal Tight, IP68

High Temperature FEP Jacketed Cable (Rated to 200°C)  
CMCP602H Series 2 Socket MS Connector, Locking Collar, IP67  
CMCP602HST Series 2 Socket MS Connector, Push On Seal Tight, IP68

### Similar Products



**M12 Connector**  
CMCP793V-M12



**Submersible**  
CMCP793V-IP



**Integral Armored Cable**  
CMCP793V-I