



## CMCP797V Velocity Sensor, Side Entry 2 Pin MS 5015



### Features:

- Side Entry Velocity Sensor
- 100 or 500 mV/In/Sec ±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
- ¼"-28 UNF or M8x1.25 Captive Mounting Bolt
- 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:            |  |
| CMCP797V:               | 100mV/In/Sec (4mV/mm/s) ±10% Nominal 80Hz at 22°C                                      |
| CMCP797V-500:           | 500mV/Sec (20mV/mm/s) ±10% Nominal 80Hz at 22°C  |
| Frequency Response:     | 3 Hz to 4.5 kHz ±10% (180 cpm to 270k cpm)<br>2 Hz to 6 kHz ±3dB (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 <sup>8</sup> 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<br>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:           | 6.5 Oz (185 grams)                           |
| Mounting:         | 1/4"-28 UNF or M8x1.25 Captive Mounting Bolt |
| 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

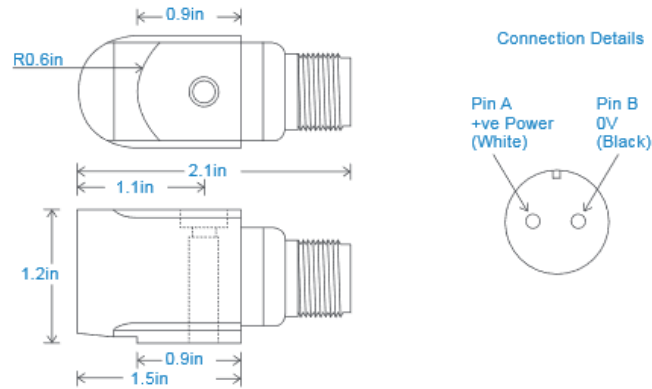
Class 1, Zone 0, AEx, ia, IIC, T4, Ga, -55°C to + 110°C

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:

|                 |  |
|-----------------|--|
| CMCP797V        | Velocity Sensor, Side Entry 2 Pin MS Connector, 100mV/in/s, ¼-28 UNF Mount |
| CMCP797V-M8     | Velocity Sensor, Side Entry 2 Pin MS Connector, 100mV/in/s, M8x1.25 Mount  |
| CMCP797V-500    | Velocity Sensor, Side Entry 2 Pin MS Connector, 500mV/in/s, ¼-28 UNF Mount |
| CMCP797V-500-M8 | Velocity Sensor, Side Entry 2 Pin MS Connector, 500mV/in/s, M8x1.25 Mount  |

## 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**  
CMCP797V-M12



**Submersible**  
CMCP797V-IP



**Integral Armored Cable**  
CMCP797V-I