

CMCP1100 Series General Purpose Industrial Accelerometers

Features

- 100mV/g +/-5%
- 0.32 to 10kHz Frequency Range (± 3 dB)
- Waterproof (Epoxy Sealed)
- Compact Size, 1/2" x 1.05"
- Santoprene Strain Relief
- UV and Oil Resistant Integral TPE Cable
- Optional High Temperature FEP Cable
- Optional Stainless Steel Braided Armor



The **CMCP1100 Series** 100mV/g ICP accelerometers are of quality standards. The waterproof accelerometers are fully enclosed in a epoxy filled stainless steel case and are provided with a 1/4"-28 UNF mounting stud. The **CMCP1100** accelerometers are available with either general purpose TPE, high temperature FEP or stainless steel braided armor TPE integral cables. Sensors can be ordered with either a top exit cable or side exit. 5, 10 and 20 meter cables (16', 32' and 64') are guaranteed to be in stock though other lengths may be ordered as required.

In addition to the integral cable version the **CMCP1100 Series** also features the **CMCP1100C Compact Accelerometer**, pictured below, which is equipped with an M6 3 Pin EuroStyle Connector which can be used with the CMCP604 Series Cables.

Ordering Information:

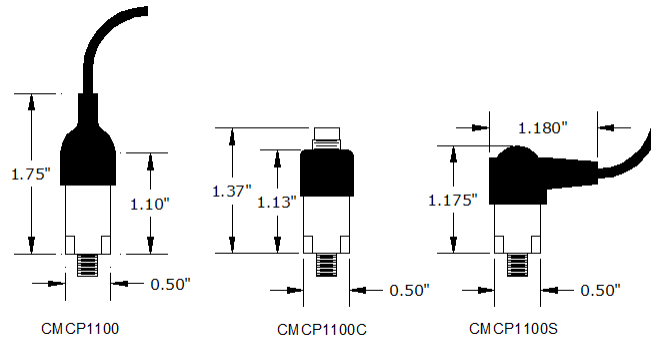
Part No.	-XX	-XX	-XX	Description
CMCP1100				Low Cost Industrial Accelerometer
CMCP1100HT				High Temperature FEP Cable
CMCP1100S				Side Exit
	-05			5 Meter Integral Cable (16.5 feet)
	-10			10 Meter Integral Cable (33 feet)
	-20			20 Meter Integral Cable (66 feet)
	-XX			Specify Length
		-00		Blunt Cut
		-01		Female BNC Connector
		-02		Male BNC Connector
			-00	Without Armor
			-03	With Stainless Steel Braided Armor

Part No.	Description
CMCP1100C	Low Cost Industrial Accelerometer with M6 3 Pin



See Page 2 for Technical Specifications

CMCP1100 Series General Purpose Industrial Accelerometers



DYNAMIC PERFORMANCE	ENGLISH	SI
Sensitivity ($\pm 10\%$)	100 mV/g	10.2 mV/(m/s ²)
Measurement Range	± 50 g	± 500 m/s ²
Frequency Range: (± 3 dB)	0.32 – 10k Hz	0.32 – 10k Hz
Mounted Resonant Freq.	>25 kHz	25 kHz
Amplitude Linearity	$\pm 1\%$	$\pm 1\%$
Transverse Sensitivity	$\pm 5\%$	$\pm 5\%$
ENVIRONMENTAL		
Shock Limit	7,000 g pk	70k m/s ² pk
Temperature Range (STD)	-65 to +185° F	-54 to 85° C
Temperature Range (HT)	-65 to 250° F	-54 to 120° C
ELECTRICAL		
Settling Time	2.5 sec	2.5 sec
Excitation Voltage	18 to 28 VDC	18 to 28 VDC
Excitation Constant Current	2 to 20 mA	2 to 20 mA
Output Impedance	<100 ohms	<100 ohms
Output Bias Voltage	8 to 12 VDC	8 to 12 VDC
Electrical Case Isolation	>10 ⁸ ohms	>10 ⁸ ohms
Electrical Protection	RFI/ESD	RFI/ESD
Integral Cable	22 AWG, 221° F	22 AWG, 105° C
MECHANICAL		
Size	0.50" x 1.37" typical	12.7 x 34.8 mm
Weight (including 5 M cable)	2.5 oz	70.7 g
Mounting Thread	1/4-28 UNF-2B	1/4-28 UNF-2B
Mounting Torque	2 to 5 ft-lb	2.7 to 6.8 N-m
Sensing Element	Ceramic/Shear	Ceramic/Shear
Case Material	Stainless Steel	Stainless Steel
Sealing	Potted	Potted
Wrench Flats	7/16"	7/16"
Integral Cable	0.13" OD	3.3mm
Optional Braided Armor	Stainless Steel	
Braided Armor Diameter	0.16"	4.06mm

Spectral Noise:

1 Hz:	85 $\mu\text{g} / \sqrt{\text{Hz}}$	850 ($\mu\text{m/s}^2$) / $\sqrt{\text{Hz}}$
10 Hz:	10 $\mu\text{g} / \sqrt{\text{Hz}}$	100 ($\mu\text{m/s}^2$) / $\sqrt{\text{Hz}}$
100 Hz:	2.7 $\mu\text{g} / \sqrt{\text{Hz}}$	27 ($\mu\text{m/s}^2$) / $\sqrt{\text{Hz}}$
1000 Hz:	1.0 $\mu\text{g} / \sqrt{\text{Hz}}$	10 ($\mu\text{m/s}^2$) / $\sqrt{\text{Hz}}$

