



CMCP547(A) Series Transmitter/Monitor



- Differential Expansion
- Low Cost
- Din rail mount
- 4-20 mA output
- Sensor fault detection
- Buffered transducer output
- Alert, Danger & OK Alarms and Relays
- Trip Multiply
- Remote Reset

Description:

The CMCP547(A) Series are differential expansion transmitters/monitors. They are compatible with DC voltage proximity (eddy) probe or LVDT inputs, they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the vibration signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-1.0 inch detection. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system. When specified with the alarm feature, the unit functions as a complete single channel monitor that includes alert and danger alarms, and output relays.

Buffered Output:

A BNC connector mounted on the front of the unit provides access to the buffered transducer output signal. This includes both the unfiltered vibration signal, and the DC bias voltage. Portable test equipment or analyzers can be connected to this output without disturbing other system outputs.

Fault Detection:

On board fault detection circuitry continuously monitors the transducer for normal operation. If a fault occurs, the output current is reduced to 2 mA to indicate the fault to the readout system. A red LED on the front of the unit is turned on to provide a local indication of the fault.

Alarms:

This monitoring option adds two independent set points, with LED alarm indicators and output relay contacts (Alert and Danger). Set points are adjustable via potentiometer, from 0 to 110% of full scale. Each has an adjustable delay of 1 to 10 seconds. Relay contacts can be independently configured by the user for either Normally Open (NO) (Standard) or Normally Closed (NC) operation. Relays are normally de-energized and can be configured for latching or non-latching (standard) operation. Latched alarms may be reset locally or by remote contact closure. SPST Relay contacts are rated 5 Amps @ 30 Vdc or 250 Vac for resistive loads. The Alarm option also provides set point multiplication of 3X via contact closure (2X available).

Displays And Assemblies:

Various display options, NEMA and explosion-proof enclosures, and assembled multi-channel systems are available. Consult your sales representative.



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Electrical Specifications:

Power: +24 Vdc @ 45 mA max. (30 mA typical at 2 full scale output). Reverse polarity and transient protection included. (With the Alarm/Relay option installed: 75 mA max.)

Buffered Output: BNC Connector

Accuracy: 0.5 % of Full Scale Range.

Output: 4-20 mA proportional to the full scale range.

Maximum Load: 600 Ohms Resistive.

Case: Isolated.

Environmental Specifications:

Operating Temp.: -20°C to +80°C (-4°F to +176°F).

Storage Temp.: -55°C to +125°C (-67°F to +257°F).

Relative Humidity: 0 - 95% Non-Condensing.

Mounting:

32 mm (G style) or 35 mm (T style) DIN Rail.

Ordering Example: To order a standard displacement monitor that accepts input from a 100 mV/mil Proximity Probe System, with a Full Scale of 0.5 inch detection, specify Part Number: CMCP547A-04-01.

NOTES:

1. The Full Scale option specified at order entry is used by the factory for initial calibration. However, several other ranges can be jumper selected in the field.
2. Transducer and Full Scale options not listed in the above table are available. Contact your sales representative.



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Ordering Information:

CMCP547(X)-(aa)-(bb)

CMCP547 Differential Expansion Transmitter

CMCP547A Differential Expansion Monitor

(aa) Input

01, 10 mV/mil

02, 20 mV/mil

03, 34 mV/mil

04, 100 mV/mil

05, 200 mV/mil

Specify, Specify Exact mV/mil

(bb) Full Scale

01, 0-0.5 inch

02, 0-1.0 inch

03, 0-2.0 inch

51, 0-12.5 mm

52, 0-25 mm

53, 0-50 mm