

# Vibration Transmitter MC-5HD



- Mounting type: DIN
  - Low Cost, High Performance
  - Output 4-20mA
  - Output Voltage 0-10V
  - Double relay (Alarm/shut off)
  - Sensor failed indication
  - On-Line vibration indication
  - Ascending/Descending level indication
  - Easy Programming
  - Universal power supply AC/DC
  - 2 wire Power Supply > 16V
  - 4 line LCD Display
  - Removable Display front for safety
  - Short circuit detection
  - Approval Ex / I.S.:
- FM, applicable in Class I, Div. 2, Group A, B, C, D -  
Class I, Div. 2, Group IIC Zone 2
- Maritime certified
- Det Norske Veritas, Ships & Offshore Standard for  
Certification No. 2.4 Approval GOST R:



## Summary:

The MC5 monitor lets you measure mechanical vibrations. It's 4-20 mA output works a signal transmitter for PLCs or DCS. With 2 additional relay outputs of Caution and Warning you can use it as a low cost monitor and great versatility. It has a frontal display where it shows the vibration in Real Time and also the relays state.

## Alarm threshold setting:

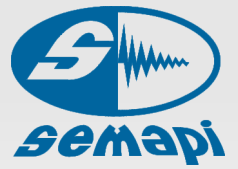
While measuring vibration you can set both the Caution and Warning thresholds. When this limits are surpassed you can trigger sound or light emitting alarms, independently, as well as a contactor that could trigger a protection to stop the machine being monitored.

## Relay Programming:

You can configure relays in 6 different ways:

- Milestone: As the limit is reached the relay activates
  - Window: You set a low and a high value. Exceeding both limits, the relay behaves the same.
  - Sensor error: Relay is activated by an error in reading the sensor.
  - Power Supply: Relay is activated any time that power is feeding the Module
  - Disconnected: Relay is in the off state (disengaged)
  - Delay: You can configure a delay from 0 to 3600 sec. In either the activation or deactivation of the relay.
- Hysteresis: You can configure it in between 0,1 to 25% of the input range or in between 1 and 2999 counts.

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## MC 5 Measuring Module:

Input: CTC PRO vibration type sensor (included)

Precision: 1%

Type: RMS or 0-Peak

Variable: Acceleration or Velocity

Measuring Range: 0,5 - 1 - 2 IPS and 10 -20 mm/s

Output: 4-20 mA proportional to scale.

Frequency Response: Acceleration 1Hz to 10.000 Hz - Velocity

1Hz to 1000Hz and 3Hz a 2500Hz

Operating Temperature: -32°C to + 80°C

Relative Humidity: 0 - 95 % non-condensing.

Enclosure: Insulated ABS

Sensor encasing: Stainless steel 316L

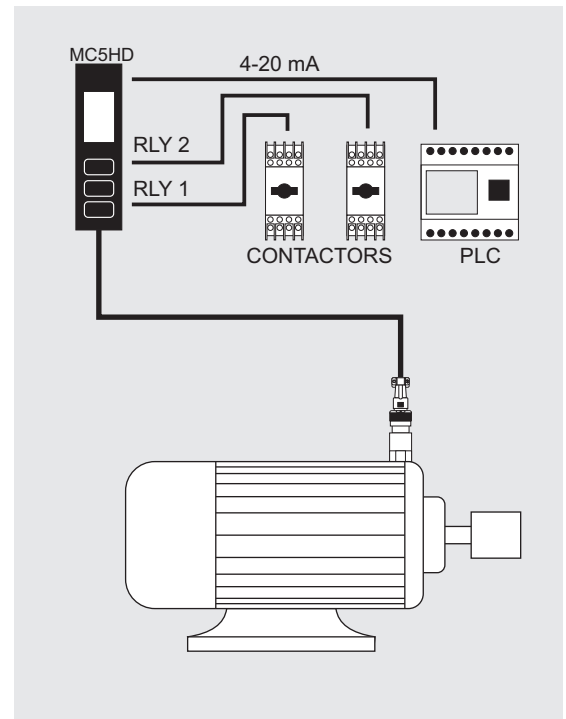
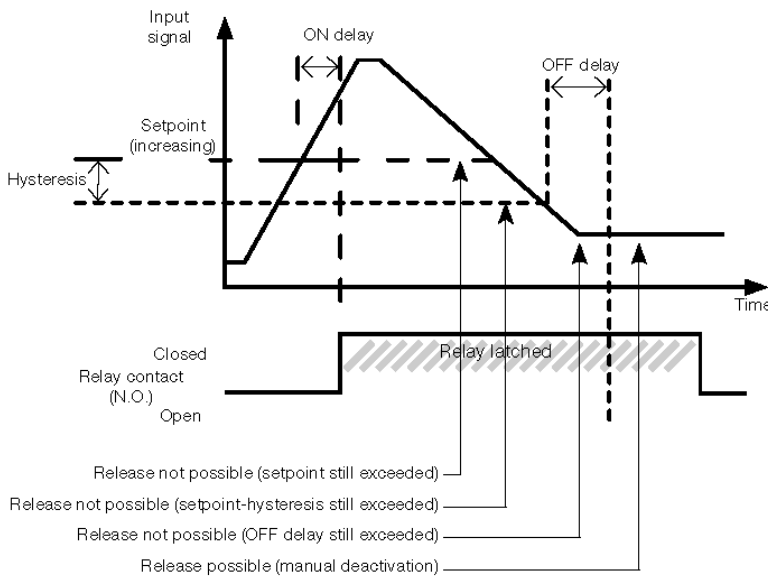
Sensor Mounting: Thread 1/4 28UNF

Sensor Connection: 2 pins MIL-C-5015

Sensor Temperature: -50 to 121 ° C



## Graphic depiction of latch function setpoint



# MC5

<p><b>H:</b> with Display <b>HD:</b> without Display</p> <p><b>Model</b></p>	<p><b>V:</b> Velocity <b>A:</b> Acceleration</p> <p><b>Variable</b></p>	<p><b>R:</b> RMS <b>P:</b> Peak</p> <p><b>Type</b></p>	<p><b>Velocity</b> 1: 0,5 IPS 2: 1 IPS 3: 2 IPS 4: 10 mm/s 5: 20mm/s <b>Acceleration</b> 0:1g 1: 2g 2: 5g 3:10g 4:20g</p> <p><b>Measuring Range</b></p>	<p><b>Velocity</b> <b>A:</b> 10Hz a 1.000Hz <b>B:</b> 3Hz a 2.500Hz</p> <p><b>Acceleration:</b> <b>A:</b> 3Hz a 10.000Hz <b>B:</b> 3Hz a 2.500Hz <b>C:</b> 3Hz a 5.000Hz</p> <p><b>Frequency Response</b></p>
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