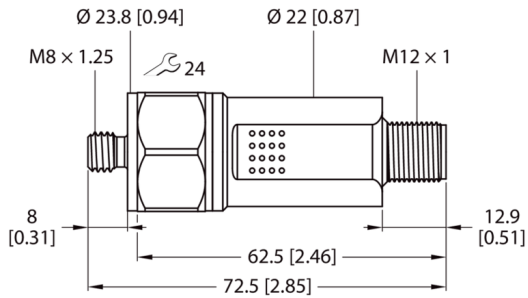


CMVT-M8TE1X-LI2IOL-H1141

Vibration & Temperature Sensor

For condition monitoring with IO-Link and raw data transfer via BLOB and 4–20 mA.



Type designation CMVT-M8TE1X-LI2IOL-H1141

Ident-No. 100054457

Technical data

Vibration - Acceleration

Sampling rate of the acceleration measuring cell	64 KHz
RMS measuring range	33,9 g
RMS resolution	0.01 g
Accuracy RMS, typical	≤ +0,5 % @ 159 Hz

Vibration - Speed

RMS measuring range	0...256 mm/s @ 159 Hz
RMS resolution	0.01 mm/s
RMS accuracy, typical	≤ ±0,5 % @ 159 Hz

Temperature

Temperature measuring range	-40...80 °C
Temperature linearity deviation	≤ 10 %

Power supply

Operating voltage U_B	18...30 VDC
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Electrical data

Current consumption	< 120 mA in IO-Link mode
Residual ripple	≤ 10 % U_{SS}

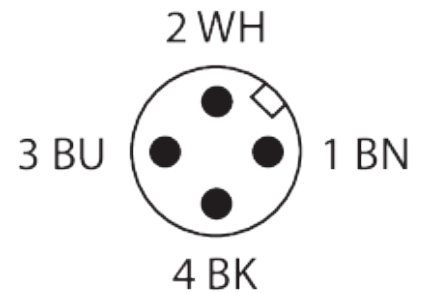
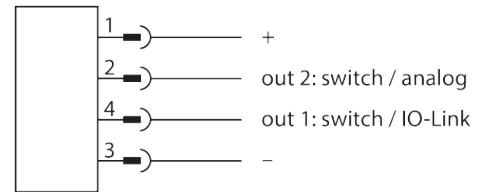
Features

- Stainless steel housing with M8 screw-in thread
- Speed output RMS and acceleration RMS, peak
- Acceleration measurement range: peak 48 g
- Peak value ranging from 10 Hz to 10 kHz.
- Bearing condition indicator
- BLOB raw signal recording with a sampling rate of up to 64 kHz (low-pass filter at 12 kHz).
- Recording over 1 axis
- Frequency ranges configurable
- IO-Link, PNP, 4...20 mA
- Temperature measuring range -40 °C to +80 °C
- High protection class IP66/IP67
- M12 × 1 connector, 4-pin

Technical data

Interfaces	
Communication protocol	IO-Link
IO-Link	
Communication mode	COM 3 (230.4 kBaud)
Function Pin 2	4...20 mA/SIO
Function pin 4	IO-Link/SIO
Mechanical data	
Design	Cylinder, threaded
Dimensions	72,5 mm x 23,8 mm
Housing material	Stainless steel
Electrical connection	Connector, M12 x 1
Ambient conditions	
Ambient temperature	-40...+80 °C
Shock resistance (EN 60068-2-27)	60 g, 6 ms
Protection class	IP66 IP67
Tests/approvals	
MTTF	112 Years acc. to SN 29500 (Ed. 99) 40 °C

Wiring diagram



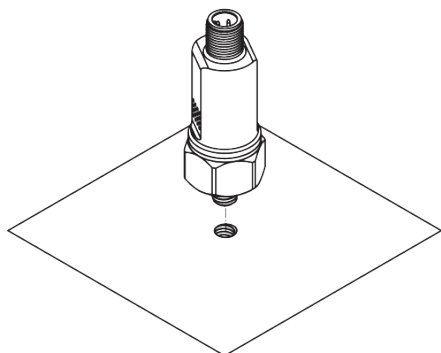
Functional principle

Condition monitoring sensors help to prevent unplanned downtimes and malfunctions during the production process. They monitor the condition of the machine as a preventative measure.

Using the CM sensors can prevent system downtime or machine damage, which in turn improves system effectiveness and allows uninterrupted operation.

The use of CMVT sensors also directly benefits the user in a quantifiable way. Information on vibration and temperature is output via the standardized IO-Link protocol. Warning and alarm messages can also be displayed via simple switching outputs.

Assembly instructions



 24 mm
8 Nm

Installation information:

Using an M8 screw-in thread, the vibration sensors can be easily screwed into the component to be monitored and fastened into place.

If other thread sizes are present in the component to be monitored, a wide range of accessories including thread adapters is available.