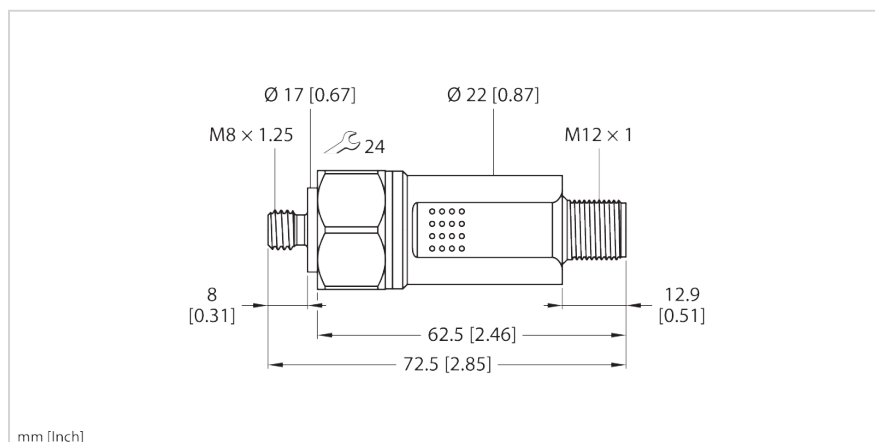


CMVT-M8TA1X-LI220-H1141

Vibration Sensor

For condition monitoring with 4–20 mA (0–20 mm/s RMS)



Type designation	CMVT-M8TA1X-LI220-H1141
Ident-No.	100053262

Technical data

Vibration - Acceleration	
Sampling rate of the acceleration measuring cell	23,6 KHz
Vibration - Speed	
RMS measuring range	0...25 mm/s
RMS accuracy, typical	≤ ±0,5 % @ 159 Hz
Power supply	
Operating voltage U_B	18...30 VDC
Electrical data	
Current consumption	< 100 mA
Residual ripple	≤ 10 % U_{SS}
Outputs	
Current output	4...20 mA
Load resistance current output	≤ 0,5 kΩ
Mechanical data	
Design	Cylinder, threaded
Dimensions	72,5 mm x 23,8 mm
Housing material	Stainless steel
Electrical connection	Connector, M12 x 1

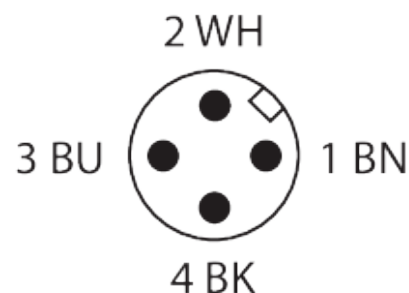
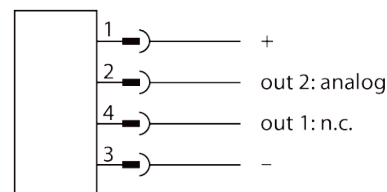
Features

- Stainless steel housing with M8 screw-in thread
- Speed output RMS
- Detection over one axis
- 4...20 mA corresponds to 0 to 20 mm/s RMS
- High protection class IP66/IP67
- Connector, M12 × 1, 4-pin

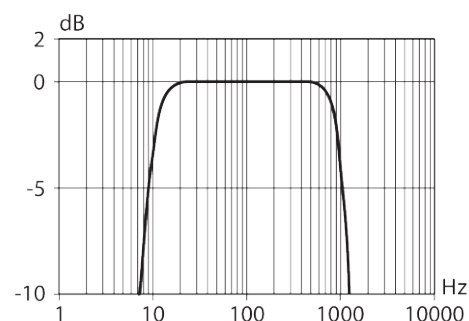
Technical data

Ambient conditions	
Ambient temperature	-40...+80 °C
Shock resistance (EN 60068-2-27)	60 g, 6 ms
Vibration resistance (EN 60068-2-6)	20 g; 5 h/axis; 3 axes
Protection class	IP66 IP67
Tests/approvals	
MTTF	164 Years acc. to SN 29500 (Ed. 99) 40 °C

Wiring diagram



Typical frequency response



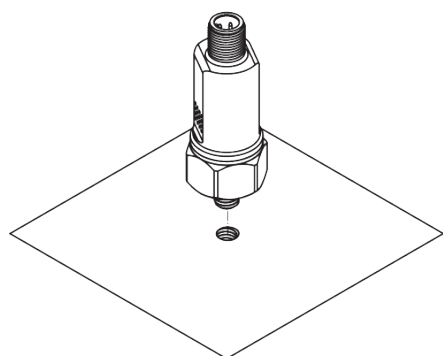
Functional principle

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 is output via the standardized 4...20-mA interface.

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.

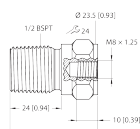
If other thread sizes are present in the component to be monitored, a wide range of accessories including thread adapters is available.

Mounting accessories

MA-M8-1/2-BSPT

100050775

M8 to 1/2" BSPT

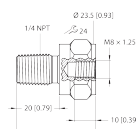


mm (inch)

MA-M8-1/4-NPT

100050776

M8 to 1/4" NPT

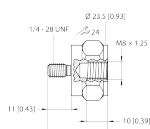


mm (inch)

MA-M8-1/4-UNF28G

100050777

M8 to 1/4" UNF 28 G

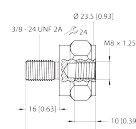


mm (inch)

MA-M8-3/8-24UNF2A

100050778

M8 to 3/8" 24 UNF 2A

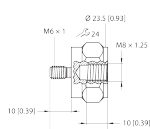


mm (inch)

MA-M8-M6

100050779

M8 to M6

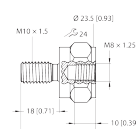


mm (inch)

MA-M8-M10

100050780

M8 to M10

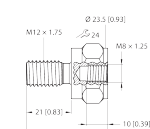


mm (inch)

MA-M8-M12

100050781

M8 to M12

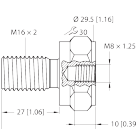


mm (inch)

MA-M8-M16

100050782

M8 to M16

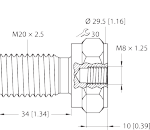


mm (inch)

MA-M8-M20

100050783

M8 to M20

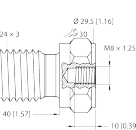


mm (inch)

MA-M8-M24

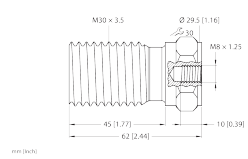
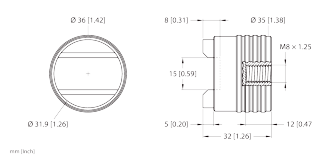
100050784

M8 to M24



mm (inch)

Mounting accessories

MA-M8-M30	100050785	MAGKIT-M8T	100055273
 M8 to M30		 Mounting magnet for installing the CMVT-M8T housing; the sensor's magnetic mounting provides a flexible installation option. Permanent and operationally secure fixing depends on the application conditions and must be evaluated by the user.	