

Vibration monitoring in ATEX applications



Vibration transmitter for the ATEX categories 3D/3G

- Permanent vibration monitoring according to ISO 10816
- True RMS monitoring of overall velocity
- 2-wire loop powered
- Robust stainless steel housing



Monitoring of machine health

The vibration transmitter type VT monitors machines and equipment according to ISO 10816. The sensor measures the true RMS velocity to evaluate the overall machine health.

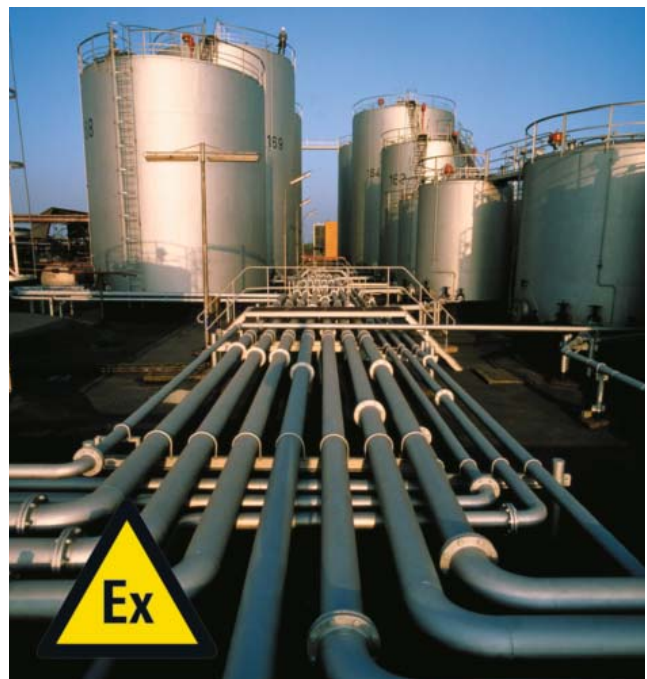
The values are then transmitted as an analogue signal (4...20 mA) directly to the PLC.

Use in hazardous areas

Permanent vibration monitoring protects plant and equipment in hazardous areas ATEX category 3D/3G from consequential damages which can be caused for example by unbalance conditions of rotating components.

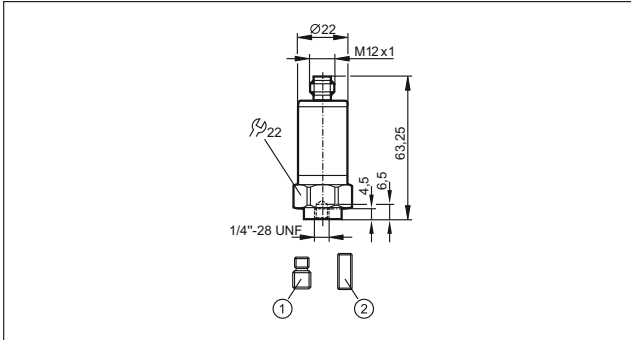
Quick and easy installation

No extra parameter software is required.



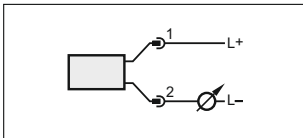
Overall vibration monitoring of rotating equipment such as fans, centrifuges etc.

Dimensions





- 1) threaded adapter 1/4" -28 UNF / M8 x 1.25 mm
 - 2) threaded adapter 1/4" -28 UNF
- tightening torque 8 Nm


Wiring diagram



Technical data

Vibration transmitter VTV12A	
Monitoring of overall velocity of machines and equipment according to ISO 10816 in ATEX area category 3D/3G	
Marking of the unit	 II 3D Ex tc IIIC T110°C Dc X  II 3G Ex nA IIC T4 Gc X
Operating voltage [V]	9.6...32 DC
Analogue output [mA]	4...20
Load for analogue output [Ω]	max. (U _b - 9.6 V) x 50; 720 at U _b = 24V
Protection	IP 67; for use outside EX area IP 69K
Ambient temperature [°C]	-20...60
Housing material	high-grade stainless steel 316L (1.4404)
Shock resistance [g]	400
Frequency range [Hz]	10...1000
Accuracy [%]	< ± 3
Repeatability [%]	< 0.5
Non-linearity [in % of the span]	0.25
Measuring range [mm/s]	4 mA = 0; 20 mA = 25
Measurand	vibration velocity true RMS
Connection	M12 connector

Connection technology

Type	Description	Order no.
ATEX approval, group II, category 3G/2D		
	Connection cable, M12 socket / M12 coupling, 5 m black, PUR cable	EVC12A
	Connection cable, M12 socket / M12 coupling, 10 m black, PUR cable	EVC13A