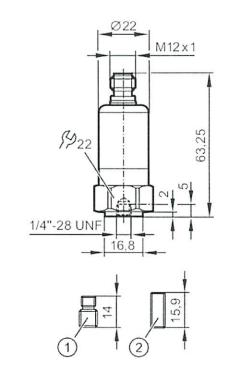
# **VTV122**

#### Vibration transmitter

VIBRATION TRANSMITTER





set screw 1/4"-28 UNF / M8 x 1.25 mm set screw 1/4"-28 UNF Tightening torque 8 Nm  $\,$ 1





Product characteristics				
Measuring range of vibration [mm/s]		025; (RMS)		
Frequency range	[Hz]	101000		
Application				
Application		Vibration transmitter to ISO 10816		
Electrical data				
Operating voltage	[V]	9.632 DC		
Protection class		Ш		
Type of sensor		Microelectromechanical system (MEMS)		
Inputs / outputs				
Total number of inputs and outputs		1		
Outputs				
Analog current output	[mA]	420		
Max. load	[Ω]	< (Ub - 9,6 V) x 50; Ub = 24 V: 720		



# Michael J. Trask

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864-848-3993 FX: 864-848-9569

www.traskinst.com

# **VTV122**

#### Vibration transmitter

VIBRATION TRANSMITTER



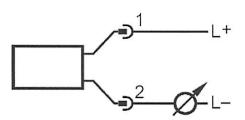
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#### Connection



1 L+

2 4...20 mA

# **VTV122**

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#### Vibration transmitter

VIBRATION TRANSMITTER

Measuring/setting range				
Measuring range of vibration [mm/s]		025; (RMS)		
Frequency range	[Hz]	101000		
Number of measurement		1		
axes		1		
Accuracy / deviations				
Measuring error		< ± 3		
[% of the final value]				
Repeatability		< 0,5; (% of the final value)		
Linearity deviation		0,25 %		
Operating conditions				
Ambient temperature	[°C]	-30125		
Note on ambient tempera	ture	UL application: < 80 °C		
Storage temperature	[°C]	-30125		
Protection		IP 67; IP 68; IP 69K		
Tests / approvals				
		EN 61000-4-2 ESD	4 kV CD / 8 kV AD	
		EN 61000-4-3 HF radiated	10 V/m	
EMC		EN 61000-4-4 Burst	2 kV	
		EN 61000-4-5 Surge	1 kV	
Charl variotana		EN 61000-4-6 HF conducted	10 V	
Shock resistance MTTF	[voore]	400 g		
	[years]	881		
Mechanical data				
Weight	[g]	123.5		
Type of mounting		set screw		
Material		stainless steel (1.4404 / 316L)		
Tightening torque	[Nm]	8		
Accessories				
Items supplied		set screw: 1 x 1/4"-28 UNF / M8 x 1,25 mm		
		set screw: 1 x 1/4"-28 UNF		
Remarks				
Pack quantity		1 pc:	S.	
Electrical connection				
Connector: 1 x M12				





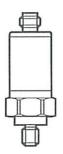
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Operating instructions Vibration transmitter

> efectoreod VTV122

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#### Symbols used

▶ Instruction

Important note

Non-compliance can result in malfunctions or interference.

#### 1 Safety instructions

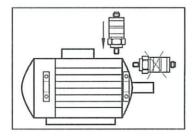
- Please read the product description prior to set-up of the unit. Ensure that the product is suitable for your application without any restrictions.
- · The unit conforms to the relevant regulations and EC directives.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application.
- That is why installation, electrical connection, set-up, operation and maintenance of the unit must only be carried out by qualified personnel authorised by the machine operator.

#### 2 Functions and features

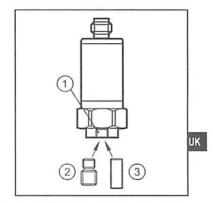
The vibration transmitter detects the vibration in the system (measured / evaluated physical unit = vibration velocity). This is converted into an analogue signal at the current output.

#### 3 Installation

- Mount only in a thick housing wall (e.g. transport thread).
- Ensure that the signal direction is correct.
- Ensure a safe vibration transmission and allow no elastic intermediate layers.



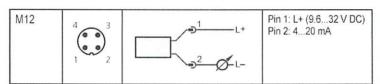
- ▶ Select either the ¼"-28 UNF / M8 (2) or the ¼"-28 UNF (3) threaded adapter and insert into the unit (1). Both adapters are supplied.
- ► Tighten using a 3 mm Allen key. Tightening torque 8 Nm.
- ▶ Drill and tap a hole at the mounting location:
  - M8 hole / depth min. 10 mm
  - or 1/4" UNF hole / depth min. 13 mm.



▶ Tighten the sensor with a tightening torque of 8 Nm.

#### 4 Electrical connection

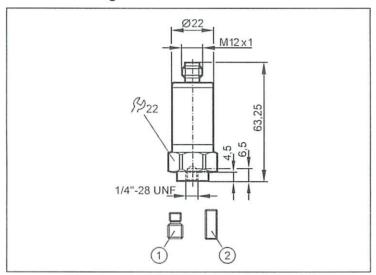
The unit must be connected by a qualified electrician. The national and international regulations for the installation of electrical equipment must be adhered to.



# 4.1 Measuring range

V <sub>eff</sub>	mm/s	025
out	mA	420
Response delay	s	0,5
Frequency range	Hz	101000

# 5 Scale drawing



- 1: threaded adapter ¼"-28 UNF / M8 2: threaded adapter ¼"-28 UNF tightening torque 8 Nm

# 6 Maintenance, repair, disposal

The operation of the unit is maintenance-free. It is not possible to repair the unit. After use dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.

# 7 Technical data

Technical data and further information at  $www.ifm.com \rightarrow Select\ your\ country \rightarrow Data\ sheet\ search$