

# VIBRATION TRANSMITTER

# TR-26



The integrated transmitter TR-26 measures the absolute vibrations of any rotating machine support and it is able to interface directly in 2 wires technique (current loop 4 ÷ 20 mA) to an acquisition system (PLC or DCS).

The transmitter, secured directly on machinery, generates an electric signal (4÷20 mA) which is proportional respectively to vibration velocity or acceleration. The transmitter is made of an AISI 316L body with machine connection thread; the connection to the acquisition system is effected by means of a MIL-C-5015-2 poles connector.

NOTE: The transmitter is available in different configuration versions and does not need any set-up or maintenance.

The transmitter is certificate SIL 2 for functional safety.

The transmitter is certified for application in classified area as

ATEX:	IECEX:	CSA/UL HazLoc:	
II 2G Ex ia IIC T6/T5/T4 Gb	Ex ia IIC T6/T5/T4 Gb	Class 1 Division 1 Groups A,B,C,D T6...T4	Class 1 Division 2 Groups A,B,C,D T6...T4
II 2D Ex ia IIIC T85°C/T100°C/135°C Db	Ex ia IIIC T85°C/T100°C/135°C Db	Class 2 Division 1 Groups E, F, G T85°C...135°C	Class 2 Division 2 Groups E, F, G T85°C...135°C
II 3G Ex ec IIC T6/T5/T4 Gc	Ex ec IIC T6/T5/T4 Gc	Class III, Division 1, T85°C...135°C	Class III, Division 2, T85°C...135°C
II 3D Ex tc IIIC T85°C/T100°C/135°C Dc	Ex tc IIIC T85°C/T100°C/135°C Dc	Ex ia IIC T6...T4 Gb	Ex ec IIC T6...T4 Gc
		Ex ia IIIC T85°C...135°C Db	Ex tc IIIC T85°C...135°C Dc
		AEx ia IIC T6...T4 Gb	AEx ec IIC T6...T4 Gc
		AEx ia IIIC T85°C...135°C Db	AEx tc IIIC T85°C...135°C Dc

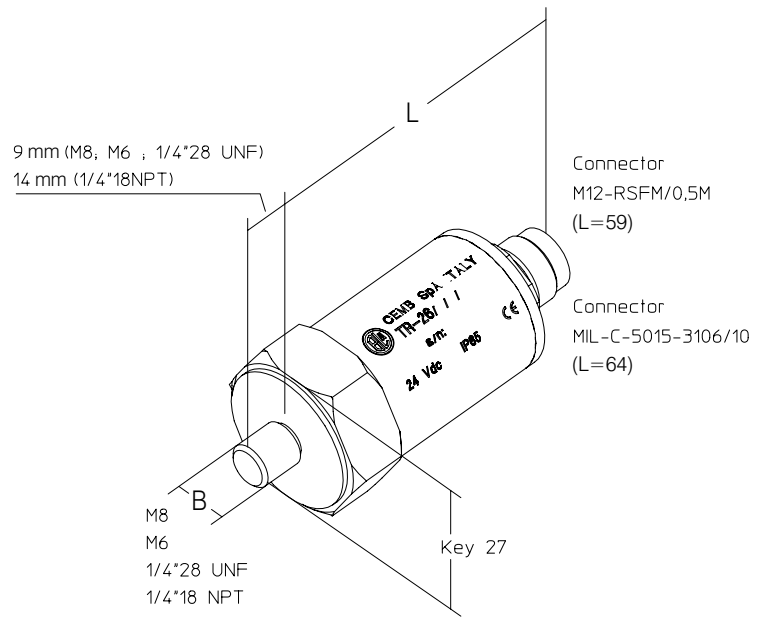
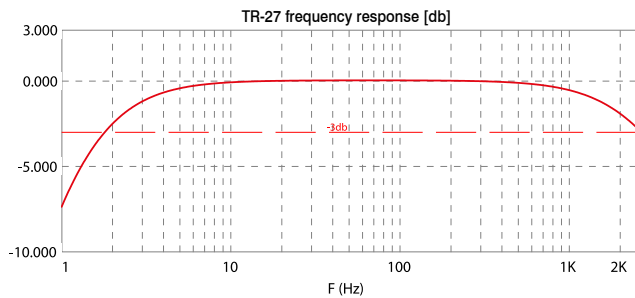


## TECHNICAL CHARACTERISTICS

Composition	■ AISI 316L stainless steel body
Power supply	■ 24 Vdc (10 ÷ 35 Vdc) current loop 4 ÷ 20 mA (2 wires)
External connections	■ MIL-C-5015 2 poles connector (conductors max section 2,5 mm²) ■ 4 poles M12 connector
Environmental	■ - 60°C ÷ + 120°C ■ IP 65 EN 60529/10.91 standards
Measure type	■ omnidirectional seismic (absolute vibration)
Application axis	■ any
Dynamic field	■ ± 18 g
Transverse sensitivity	■ < 5 %
Linearity	■ ± 2% - 75 Hz
Dynamic performances	■ ±3% / 10Hz-1kHz ■ -3db / 1,5Hz - 2kHz
Insulation	■ ≥10 <sup>8</sup> Ω between signal and container
Standard machine connection thread	■ see tables ■ "MACHINE CONNECTION THREAD"
Maintenance	■ no maintenance is needed
Electrical connections	■ bipolar shielded cable
Mounting torque	■ 5÷ 10 N-m



# TR-26



## ORDER INFORMATION

TR - 26 /  /  /  /

### A: MEASURING FIELD [RMS]

0	0 ÷ 10 mm/s
1	0 ÷ 20 mm/s
2	0 ÷ 50 mm/s
3	0 ÷ 100 mm/s
4	0 ÷ 1 g
5	0 ÷ 5 g
6	0 ÷ 10 g
7	0 ÷ 25,4 mm/s (0 ÷ 1 in/s)
8	0 ÷ 12,7 mm/s (0 ÷ 0,5 in/s)
S	special to be defined

### B: MACHINE CONNECTION THREAD

0	M8x1,25
1	1/4" - 18NPT
2	1/4" - 28UNF
3	M6x1
4	M8x1

### C: CERTIFICATIONS

0	Safe area
2	ATEX
4	CSA/UL HazLoc
5	IECEX

### D: CONNECTION

0	MIL-C-5015 2 pins
1	M12 4 pins (only for safe area)

## CABLES AND OPTIONAL ACCESSORIES



**SHIELDED CABLE 2X1 STANDARD** 80419-P  
CBL/TR-26 / S / 0 / XX (length in meters)



**SHIELDED CABLE ARMoured IN ETFE** 87SEA7952  
CBL/TR-26 / E / 0 / XX (length in meters)



**SHIELDED CABLE 2X1 WITH METAL JACKET COVERED BY PVC** 95743-P  
CBL/TR-26 / A / 0 / XX (length in meters)



**2 PINS STRAIGHT (standard)** 597023104



**2 PINS 90°** 597023108 + 590703052



**4 PINS M12** 593121013

**ZENER BARRIER Z787 (for hazardous area)** 800208787

**B5MAG10 CY002 PLASTIC TAG** 040STR000

**B5MAG10 CY002 STAINLESS STEEL TAG** 980710835



**CEMB**  
BALANCING MACHINES

CEMB S.p.A.  
Via Risorgimento, 9  
23826 MANDELLO DELLARIO (LC) Italy  
www.cemb.com

**Vibration analysis division:**  
phone +39 0341 706111  
fax +39 0341 706299  
e-mail: stm@cemb.com