

VIBRATION TRANSMITTER

TR-27

The integrated transmitter TR-27 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 steel body with machine connection thread; the connection to the acquisition system is effected by means of an integral cable. It is available both a standard version (PVC shielded cable and nickel-plated brass cable gland) and a special version for aggressive environment (EFTE shielded armoured cable and AISI 316L steel cable gland).

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

The transmitter is certified for application in classified area as:

Ex II 1 G Ex ia IIC T6, T5, T4 Ga (ATEX)

Ex ia IIC T6, T5, T4 Ga (IECEX)

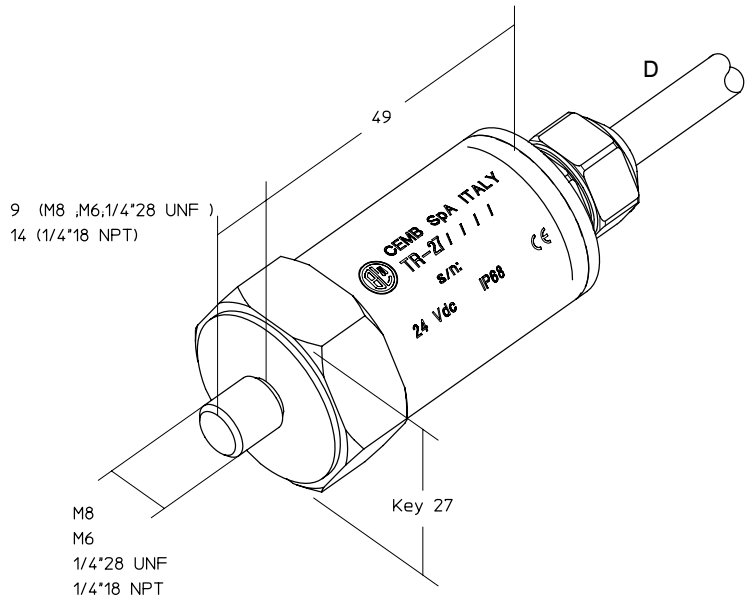
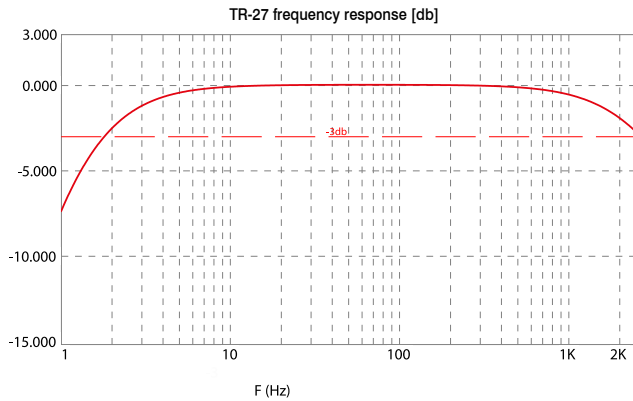
The transmitter is certificate SIL 2 for functional safety



TECHNICAL CHARACTERISTICS

Composition	<ul style="list-style-type: none"> ■ AISI 316L stainless steel integrated transmitter body
Power supply	<ul style="list-style-type: none"> ■ 24 Vdc (10 ÷ 35 Vdc) current loop 4 ÷ 20 mA (2 wires)
External connections	<ul style="list-style-type: none"> ■ MIL-C-5015 2 poles connector (conductors max section 2,5 mm²) ■ 4 poles M12 connector
Environmental	<ul style="list-style-type: none"> ■ - 60°C ÷ + 120°C ■ IP 65 EN 60529/10.91 standards
Measure type	<ul style="list-style-type: none"> ■ omnidirectional seismic (absolute vibration)
Application axis	<ul style="list-style-type: none"> ■ any
Dynamic field	<ul style="list-style-type: none"> ■ ± 18 g
Transverse sensitivity	<ul style="list-style-type: none"> ■ < 5 %
Linearity	<ul style="list-style-type: none"> ■ ± 3% - 75 Hz
Dynamic performances	<ul style="list-style-type: none"> ■ ±5% / 10Hz-1kHz ■ -3db / 1,5Hz - 2kHz
Insulation	<ul style="list-style-type: none"> ■ ≥ 10⁸ Ω between signal and case
Standard machine connection thread	<ul style="list-style-type: none"> ■ see tables "MACHINE CONNECTION THREAD"
Maintenance	<ul style="list-style-type: none"> ■ no maintenance is needed
Electrical connections	<ul style="list-style-type: none"> ■ bipolar shielded cable
Mounting torque	<ul style="list-style-type: none"> ■ 5 ÷ 10 N-m

TR-27



ORDER INFORMATION

TR - 27 / / / / /

A: MEASURING FIELD

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

B: MACHINE CONNECTION THREAD

0	M8x1,25
1	1/4" - 18NPT
2	1/4" - 28UNF
3	M6x1 (only for non certificate version)

C: VERSION

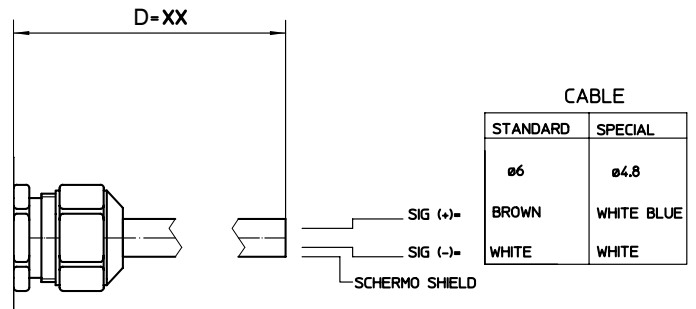
0	Standard
1	Special

D: CABLE LENGTH

	pitch 1m
XX	length in meters

E: CERTIFICATIONS

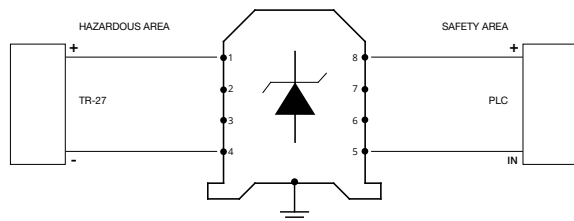
0	standard
8	II 1 G Ex ia IIC T6, T5, T4 Ga (ATEX)
B	Ex ia IIC T6, T5, T4 Ga (IECEx)



OPTIONAL ACCESSORIES

ZENER BARRIER Z787 (for hazardous area)

800208787



B5MAG10 CY002

PLASTIC TAG

040STR000

B5MAG10 CY002

STAINLESS STEEL TAG

980710835

All the data and features mentioned in this catalogue are purely for information and do not constitute any commitment on the part of our company, which reserves the right to make any and all alterations it may consider suitable without notice.



CEMB S.p.A.

Via Risorgimento, 9
23826 MANDELLO DEL LARIO (LC) Italy
www.cemb.com



Vibration analysis division:

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

