

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:

ATEX:

- II 1G Ex ia IIC T6/T5/T4 Ga
- II 1D Ex ia IIIC T85°C/T100°C/135°C Da
- I M1 Ex ia I Ma
- II 3G Ex ec IIC T6/T5/T4 Gc
- II 3D Ex tc IIIC T85°C/T100°C/135°C Dc

IECEx:

- Ex ia IIC T6/T5/T4 Ga
- Ex ia IIIC T85°C/T100°C/135°C Da
- Ex ia I Ma
- Ex ec IIC T6/T5/T4 Gc
- Ex tc IIIC T85°C/T100°C/135°C Dc

The transmitter is certificate SIL 2 for functional safety.



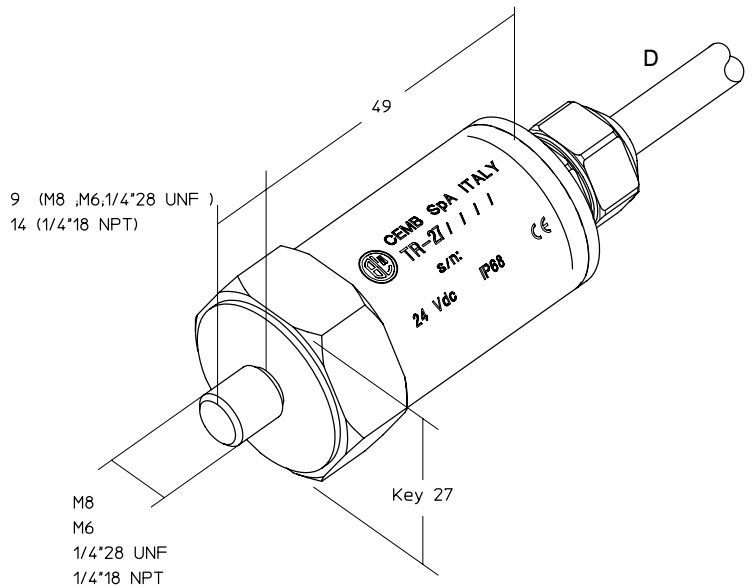
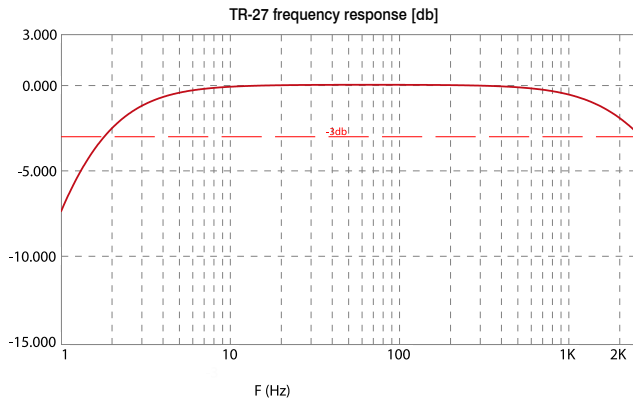
TECHNICAL CHARACTERISTICS

Composition	■ AISI 316L stainless steel integrated transmitter 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 mm ²) ■ 4 poles M12 connector
Environmental	■ - 60°C ÷ + 120°C ■ IP68 EN 60529/10.91 standards
Measure type	■ omnidirectional seismic (absolute vibration)
Application axis	■ any
Dynamic field	■ ± 18 g
Transverse sensitivity	■ < 5 %
Linearity	■ ± 3% - 75 Hz
Dynamic performances	■ ±5% / 10Hz-1kHz ■ -3db / 1,5Hz - 2kHz
Insulation	■ ≥10 ⁸ Ω between signal and case
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



CEMB
BALANCING MACHINES

TR-27



ORDER INFORMATION

TR - 27 / / / / /

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 (only for Safe area version)

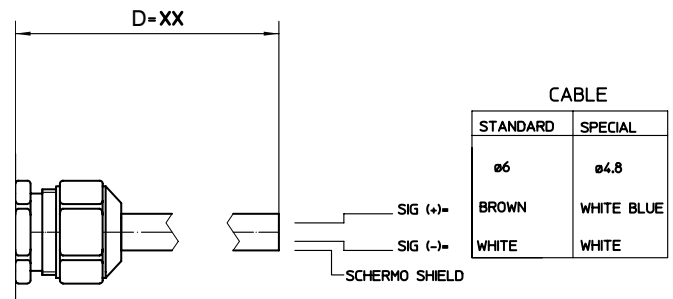
C: VERSION

0	Safe area (PVC Cable)
1	Special - compulsory for ATEX (ETFE cable, INOX cable-gland)

D: CABLE LENGTH

pitch 1m

XX	length in meters
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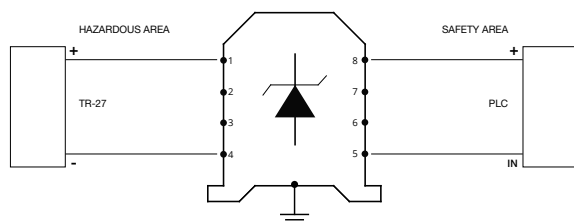
E: CERTIFICATIONS

0	Safe area
8	Ex II 1G Ex ia IIC T6/T5/T4 Ga
	Ex II 1D Ex ia IIIC T85°C/T100°C/135°C Da
	Ex I M1 Ex ia I Ma
	Ex II 3G Ex ec IIC T6/T5/T4 Gc
	Ex II 3D Ex tc IIIC T85°C/T100°C/135°C Dc
B	Ex ia IIC T6/T5/T4 Ga
	Ex ia IIIC T85°C/T100°C/135°C Da
	Ex ia I Ma
	Ex ec IIC T6/T5/T4 Gc
	Ex tc IIIC T85°C/T100°C/135°C Dc

OPTIONAL ACCESSORIES

ZENER BARRIER Z787 (for hazardous area)

800208787



B5MAG10 CY002

PLASTIC TAG

040STR000

B5MAG10 CY002

STAINLESS STEEL TAG

980710835