

## ACCELEROMETER TRANSDUCER

# TA-8 TA-28

The TA-8, TA-28 transducers seismically measure absolute machine vibrations by directly fastening the vibrating part on the supports. They provide an output signal directly proportional to the vibration of the point on which they are fastened. This signal can subsequently be processed by a measuring channel of a CEMB "T" or "N" series device.

The TA-8, TA-28 transducers exploit the piezoelectric effect, i.e. the capability of a material to provide a difference of potential when mechanically stressed. In this application, a ceramic material subjected to acceleration generates an electrical signal proportional to the stress



TECHNICAL CHARACTERISTICS	TA-8	TA-28
<b>GENERAL</b>		
Type of measurement	■ seismic (absolute vibration) piezoelectric	■ seismic (absolute vibration) piezoelectric
Sensitivity	■ 10 mV/g	■ 500 mV/g
Response in frequency	■ ± 3 dB 0,5 ÷ 15000 Hz ■ ± 10 % 2 ÷ 10000 Hz	■ ± 3 dB 0,5 ÷ 15000 Hz ■ ± 10 % 2 ÷ 10000 Hz
Vibration direction	■ any	■ any
Dynamic range	■ ± 500 g pk	■ ± 10 g pk
Transverse sensitivity	■ < 5 %	■ < 5 %
<b>ELECTRICAL</b>		
Power supply	■ 2÷10 mA - 18÷30 Vdc	■ 2÷10 mA - 18÷30 Vdc
Output polarization voltage	■ 10-14 Vdc	■ 10-14 Vdc
Output impedance	■ < 100 ohm	■ < 100 ohm
Outer casing insulation	■ > 10 <sup>8</sup> ohm	■ > 10 <sup>8</sup> ohm
Settling time	■ < 2 sec.	■ < 5 sec.
<b>AMBIENT</b>		
Temperature range	■ -50°C ÷ +121°C	■ -50°C ÷ +121°C
Protection against shocks	■ 5000 g pk	■ 5000 g pk
Electromagnetic sensitivity	■ CE	■ CE
Protection against external agents	■ IP68	■ IP68
<b>PHYSICAL</b>		
Weight	■ 90 g	■ 95 g
Resonance frequency	■ 23 kHz	■ 16 kHz
Outer casing material	■ AISI 316-L stainless steel	■ AISI 316-L stainless steel
Retaining screw threading	■ see "dimensions and threads"	■ see "dimensions and threads"
Connection	■ 2 pin MIL-C-5015 connector provided	■ 2 pin MIL-C-5015 connector provided
Tightening torque	■ da 2,7 a 6,8 Nm	■ da 2,7 a 6,8 Nm

# TA-8 TA-28

## INFORMATION FOR THE ORDER:

A  
TA-8 /

A: RETAINING SCREW

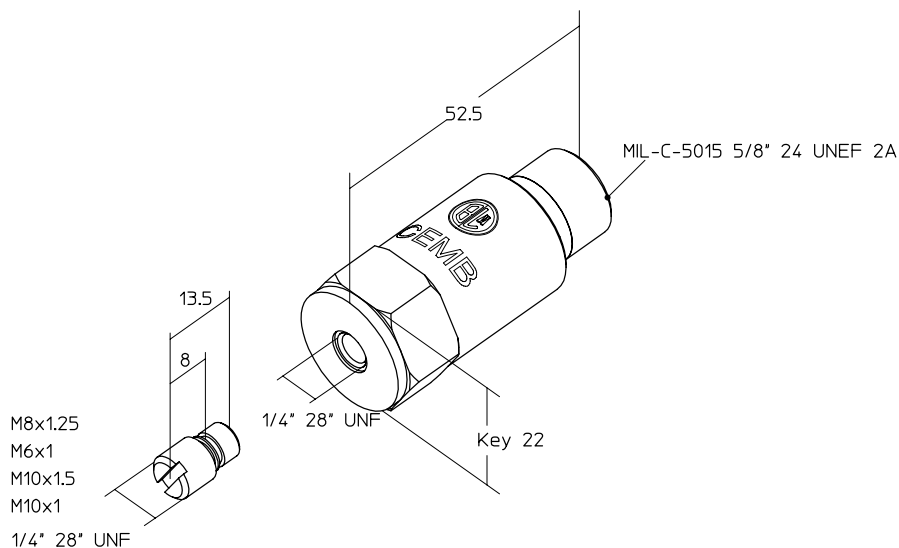
0	1/4" - 28 UNF
1	M8 X 1,25
2	M6 X 1
3	M10 X 1,5
4	M10 X 1

A  
TA-28 /

A: RETAINING SCREW

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## DIMENSIONS AND THREADS



## CABLES AND OPTIONAL ACCESSORIES

### CABLES:



**SHIELDED CABLE 2X1 STANDARD**  
C-TA-18 / S / 0 / XX (length in meters)

80419-P



**SHIELDED CABLE ARMORED IN ETFE**  
C-TA-18 / E / 0 / XX (length in meters)

87SEA7952



**SHIELDED CABLE 2X1 WITH METAL JACKET COVERED BY PVC**  
C-TA-18 / A / 0 / XX (length in meters)

95743-P



**SHIELDED CABLE ARMORED IN ETFE WITH SILICON BUMP**  
C-TA-18 / E / 2 / XX (length in meters)

### ONLY CONNECTORS:



**2 PINS STRAIGHT (standard)**

597023104



**2 PINS 90°**

597023108 + 59070352

### TAGS:

B5MAG10 CY002

**PLASTIC TAG**

040STR000

B5MAG10 CY002

**STAINLESS STEEL TAG**

980710835



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