

## ACCELEROMETER TRANSDUCER

# TA-18/S

The TA-18/S 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-18/S 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

#### GENERAL

Type of measurement	■ seismic (absolute vibration) piezoelectric
Sensitivity	■ 100 mV/g
Response in frequency	■ $\pm 3$ dB 0,5 ÷ 15000 Hz ■ $\pm 10$ % 2 ÷ 10000 Hz
Vibration direction	■ any
Dynamic range	■ $\pm 50$ g pk
Transverse sensitivity	■ < 5 %

#### ELECTRICAL

Power supply	■ 2 ÷ 10 mA - 18 ÷ 30 Vdc
Output polarization voltage	■ 10-14 Vdc
Output impedance	■ < 100 ohm
Outer casing insulation	■ > $10^8$ ohm
Settling time	■ < 2,5 sec.

#### AMBIENT

Protection against shocks	■ 5000 g pk
Protection against external agents	■ IP68

#### PHYSICAL

Weight	■ 90 grammi
Resonance frequency	■ 23 kHz
Outer casing material	■ AISI 316-L stainless steel
Retaining screw threading	■ see "dimensions and threads"
Connection	■ MIL-C-5015 2-pin connector provided
Tightening torque	■ 2.7 to 6.8 Nm



# TA-18/S

## INFORMATION FOR THE ORDER:

A B  
TA-18/S / ☐ / ☐

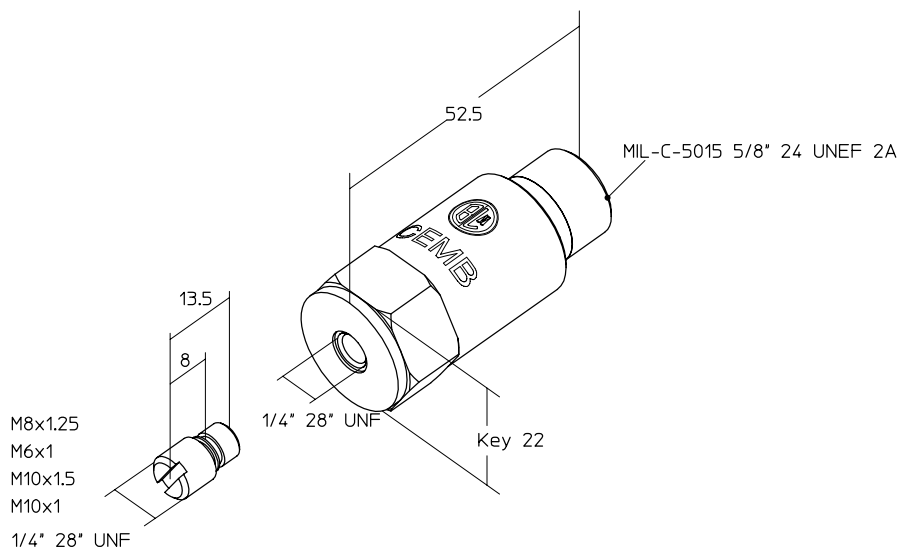
### A: RETAINING SCREW

0	1/4" - 28 UNF
1	M8 X 1,25
2	M6 X 1
3	M10 X 1,5
4	M10 X 1
9	MULTI THREAD KIT (1/4"-28 UNF - M8X1,25 - M6X1 - M10X1,5)

### B: TEMPERATURE RANGE

0	STANDARD	-50°C	+121°C
1	HIGH TEMPERATURE	-50°C	+150°C

## DIMENSIONS AND THREADS



## CABLES AND OPTIONAL ACCESSORIES

### CABLES:



**SHIELDED CABLE 2X1 STANDARD** 80419-P  
CBL / TA-18 / S / 0 / XX (length in meters)



**SHIELDED CABLE ARMoured IN ETFE** 87SEA7952  
CBL / TA-18 / E / 0 / XX (length in meters)



**SHIELDED CABLE 2X1  
WITH METAL JACKET COVERED BY PVC** 95743-P  
CBL / TA-18 / A / 0 / XX (length in meters)

### ONLY CONNECTORS:

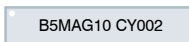


**2 PINS STRAIGHT (standard)** 597023104



**2 PINS 90°** 597023108 + 59070352

### TAGS:



**PLASTIC TAG** 040STR000



**STAINLESS STEEL TAG** 980710835



**CEMB**  
BALANCING MACHINES

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