

ACCELEROMETER TRANSDUCER

TA-18/H TA-18/HD

The TA-18/H and TA-18/HD 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/H and TA-18/HD 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 -18/H	TA -18/HD (high temperature)
GENERAL		
Type of measurement	■ seismic (absolute vibration) piezoelectric	■ seismic (absolute vibration) piezoelectric
Sensitivity	■ 100 mV/g	■ 100 mV/g
Response in frequency	■ ± 3 dB 0,5 ÷ 10000 Hz ■ ± 10 % 2 ÷ 7000 Hz	■ ± 3 dB 0,5 ÷ 11000 Hz ■ ± 10 % 2 ÷ 3000 Hz
Vibration direction	■ any	■ any
Dynamic range	■ ± 50 g pk	■ ± 80 g pk
Transverse sensitivity	■ < 5 %	■ < 5 %
ELECTRICAL		
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 ⁹ ohm	■ > 10 ⁹ ohm
Settling time	■ < 2,5 sec.	■ < 2,5 sec.
AMBIENT		
Temperature range	■ -50°C ÷ +121°C	■ -50°C ÷ +162°C
Protection against shocks	■ 5000 g pk	■ 5000 g pk
Protection against external agents	■ IP68	■ IP68
PHYSICAL		
Weight	■ 145 g	■ 145 g
Resonance frequency	■ 22 kHz	■ 20 kHz
Outer casing material	■ AISI 316-L stainless steel	■ AISI 316-L stainless steel
Retaining screw threading	■ 1/4" 28 UNF	■ M6x1
Connection	■ MIL-C-5015 2-pin connector provided	■ MIL-C-5015 2-pin connector provided
Tightening torque	■ 2.7 to 6.8 Nm	■ 2.7 to 6.8 Nm

TA-18/H TA-18/HD

INFORMATION FOR THE ORDER:

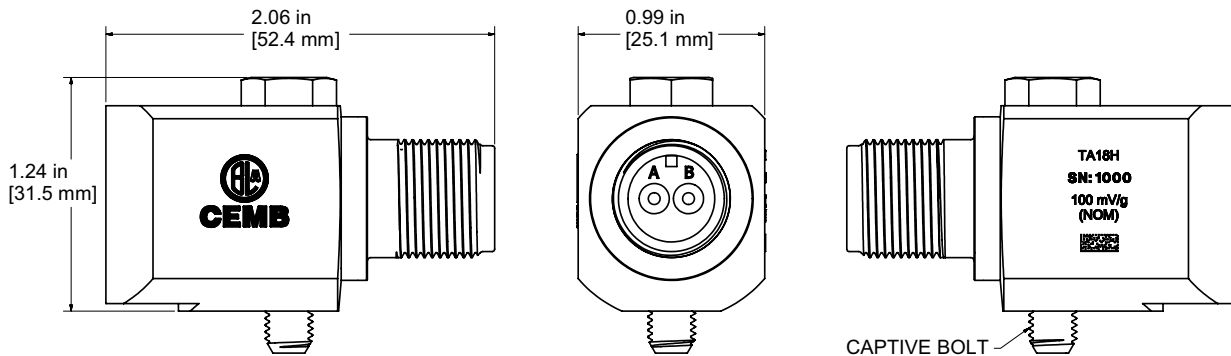
TA-18/H

retaining screw 1/4" – 28 UNF

TA-18/HD

retaining screw M6x1

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:

B5MAG10 CY002

PLASTIC TAG

040STR000

B5MAG10 CY002

STAINLESS STEEL TAG

980710835



CEMB
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