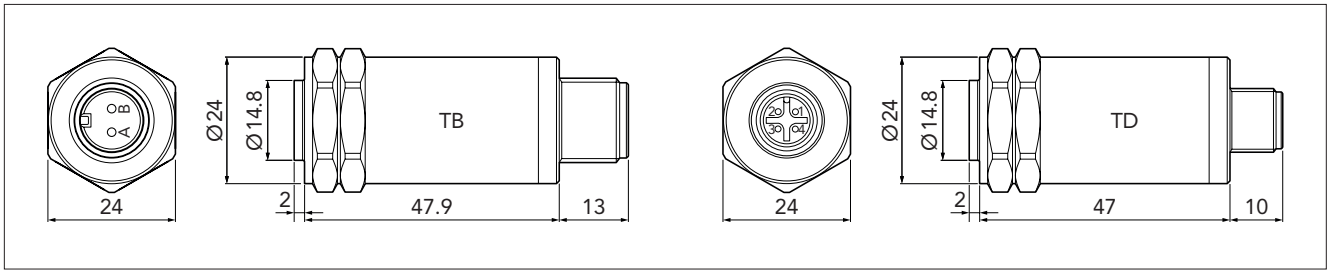
Vibration transducer, SLD144



The vibration transducer SLD144 is a piezo-electric accelerometer of compression type with built-in electronics, designed for vibration monitoring of industrial machinery. The electrical signal is isolated from the transducer housing.

The transducer is installed on a flat machine surface and connected via a twisted pair cable with a 2-pin or 4-pin connector. The connection of mounting studs (available as accessories) is made through a tapped hole with an M8 thread on the transducer. For vibration transducers with side entry, see TD-636.

In addition to acceleration measurement, temperature measurement is available as an option for SLD144. When used with the Intellinova Parallel EN online system (TD-562), the transducer can measure temperature in the –20° to +120 °C range. Temperature measurement is performed above 10 kHz, where it does not interfere with the acceleration signal.

Technical specifications

Transverse sensitivity:	max. 10 %
Base strain sensitivity:	0.01 m/s²/µ strain typical
Linear frequency range:	2 Hz to 10 kHz (±1 dB)
Max. peak acceleration:	600 m/s² = 60 g
Settling time:	3 sec
Operating temperature:	–40° to +125 °C (–40° to +257 °F)
Power requirements:	24 V, 2 to 5 mA
Casing:	stainless acid-proof steel, Sandvik 1802, EN:1.4523
Sealing:	IP66/67
Isolation:	case isolated, >10 Mohm
Cable length:	max. 100 m (328 ft)
Cable capacitance:	210 pF/m
Mounting thread:	M8, tapped hole
Torque limit:	10 Nm (7.4 lbf·ft)
Weight:	approx. 110 grams (4 oz)

ARTICLE NO: SLD144 | TX | - | X
A B C

A.	Part number	SLD144
B.	Connection	TB = 2-pin connector MIL-C-5015 TD = 4-pin M12 connector
C.	Temperature	T = temperature measurement (optional)

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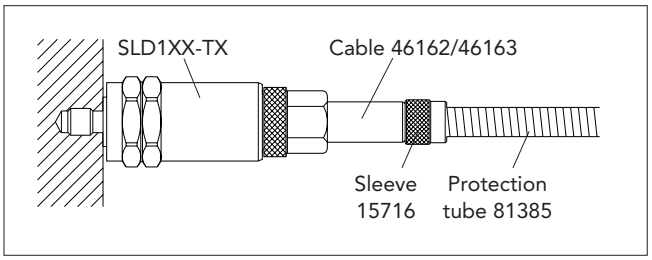
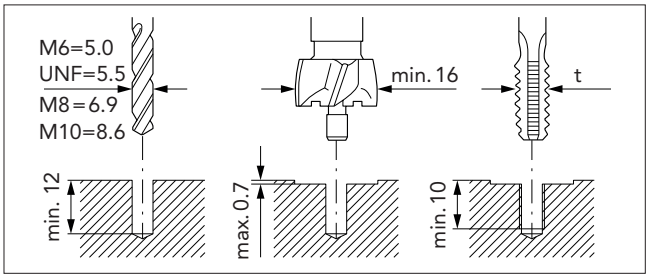
Installation example



Part number	Frequency range (±1 dB)	Sensitivity *	Bias (typical)
SLD144	2–10 000 Hz	10 mV/m/s² = 100 mV/g	10–13 V (12 V)

* Individual value given on the calibration chart.



Installation tools

81027	Holder for counterbore
81057	Counterbore, diameter 20 mm
81030	Pilot for M6 and UNF 1/4"-28
81031	Pilot for M8
81033	Pilot for M10

To drill the installation hole, use drill bit 6.9 mm (M8), 8.6 mm (M10), or 5.5 mm (M6 and UNF 1/4"-28). Tighten the transducer with a 24 mm torque wrench.

Accessories

18177	Mounting stud M8-M6 (TD-287)
18178	Mounting stud M8-M10 (TD-287)
18179	Mounting stud M8-UNF 1/4”x28 (TD-287)
18180	Mounting stud M8-M8 (TD-287)

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