



μ-bridge Sensor

We developed the »μ-bridge« sensor to capture sound waves and flexural vibrations in machines and plants (e.g. on components, solid bodies). The structure-borne sound waves emitted by machine parts are characteristic for the wear status of a part.

For the μ-bridge sensor the force of the sound wave is converted to a measurement voltage without a detour through a spring mass damper system. This even makes it possible to detect structure-borne sound waves and flexural vibrations at frequencies from 10 kHz to under 1 Hz with high resolution and bandwidth; this means that the sensor is particularly well suited for measurements on slowly rotating or vibrating parts.

Item	Item-No.
μ-bridge	00019918-00

μ-bridge	
Technical data	
Operating mode	IEPE standard
Operating current	4 to 10 mA
Output voltage (offset)	11 ±0.5 V
Max. saturation degree	8 V
Sensitivity	0.7 V/N
Signal-to-noise ratio	-83 dB
Carrier-to-interference ratio	-79 dB
Low limit frequency	High pass 1st order, $f_g = 1.6$ Hz
High limit frequency	$f_g > 10$ kHz