KST94C-xN – Probe Accelerometer

The Probe Accelerometers of the series KST94C-xN have been designed for the end-of-line vibration monitoring within the production line.

These accelerometers secure a definite vibration coupling and repeatable results in a wide frequency range and come with a long live expectancy.

The end-of line vibration monitoring delivers all information needed for prediction of correct product function. It is an important part of product quality management.

Mode of Operation

In case of measurement the probe accelerometer is moved in position by a linear guide unit. The product is coupled and the probe moves into the sensor cylinder by the deflection x.

The probe deflection x is in the range of 2..4 mm for optimal vibration coupling.

The coupling force is produced by a spring element inside the sensor cylinder
The sensor name includes the coupling force. Model KST94C-9N comes with a coupling force of 9 N, for example.

The sensor system itself is decoupled from the sensor cylinder by elastic elements to ensure repeatable measurement.
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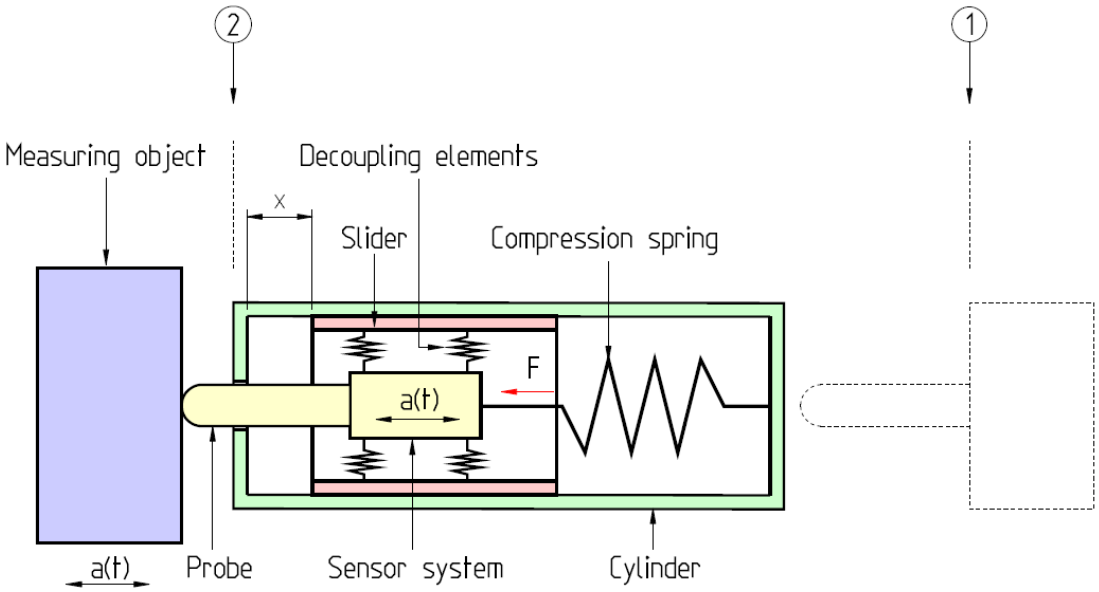

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Ausgabe / Edition: 01/26

Mounting Instructions

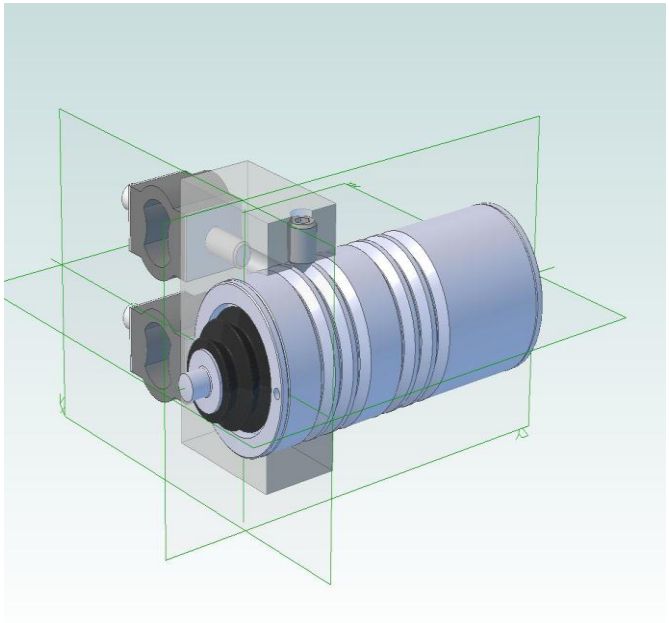
The cylinder-shaped body of the accelerometer can be clamped in a cylindrical hole ∅ 25 mm by one or two headless screws DIN 914 M5x8 (included in delivery). The maximum clamping torque of the screws is 1 Nm.

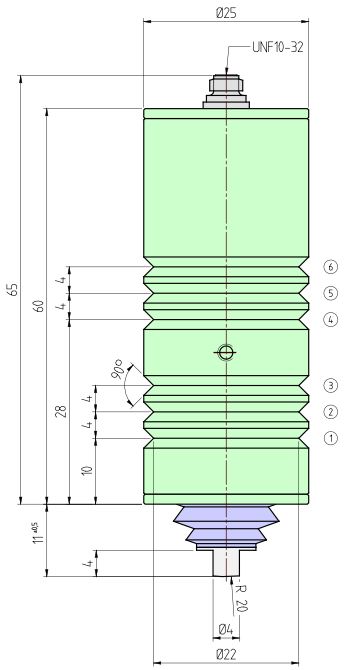
ATTENTION
A higher clamping torque than 1 Nm can affect correct function or damage the sensor.

In case a higher clamping force is needed use more than one headless screws or half-shell parts to fix the sensor.

On the sensor body are several notches to adjust the position of the probe related to the test object.
In test position the probe must cave in 3 mm ± 1mm to ensure good coupling

To protect the sensor from environmental vibration we recommend the use of elastic vibration absorbers for the sensor attachment.





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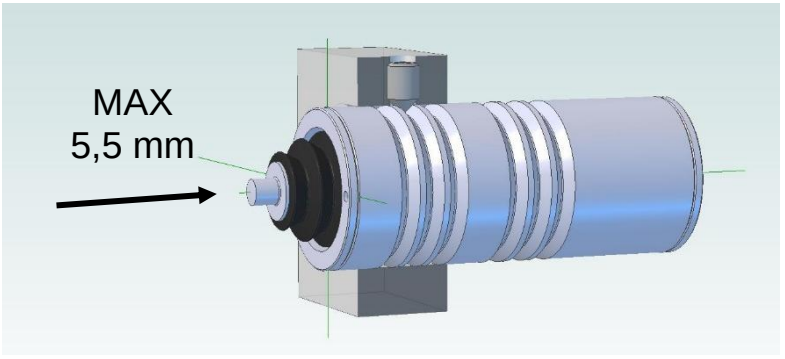
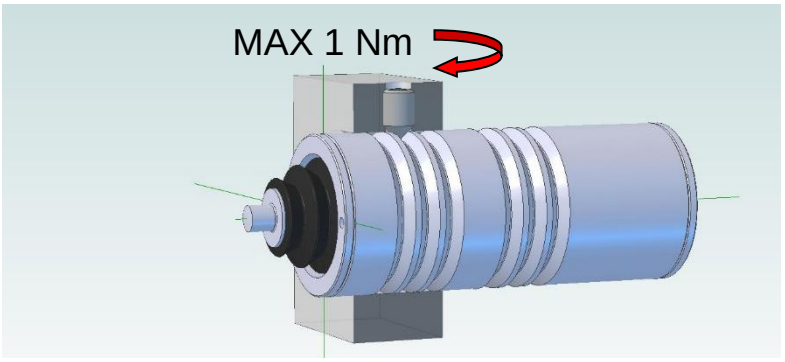
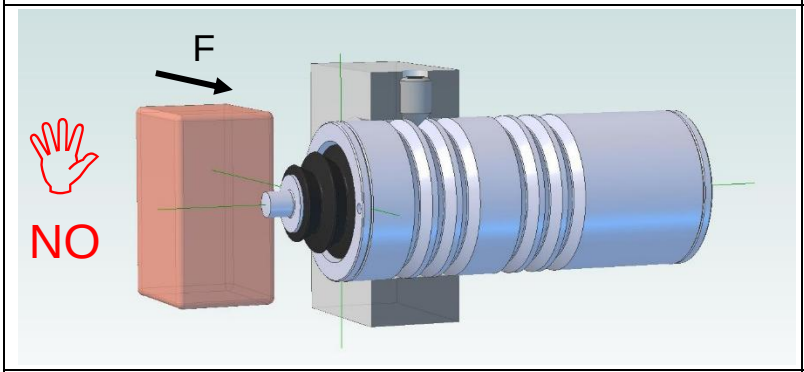
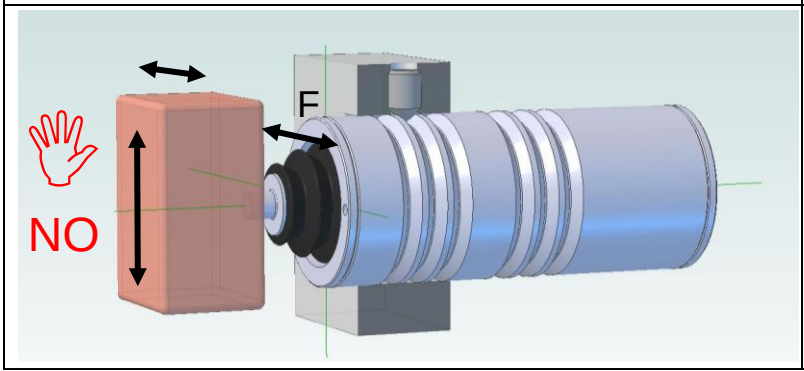
Important Notes

To avoid damages take care to the following points:

	The maximum probe deflection should be less than 5,5 mm.
	The maximum clamping torque should be 1 Nm.
	Don't move an object against the probe in lateral direction. Avoid any lateral forces against the probe.
	Don't move the object while it is in contact with the probe. Avoid any lateral forces against the probe.

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