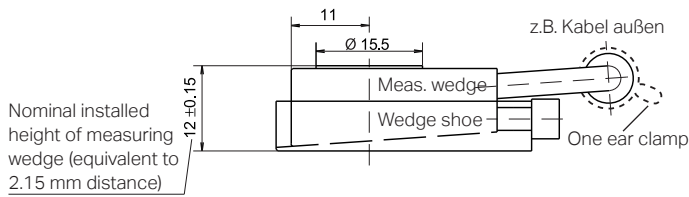


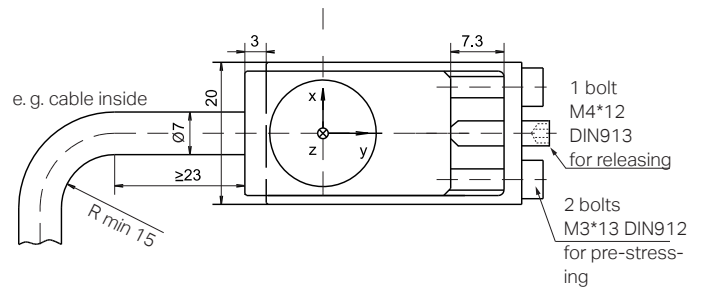
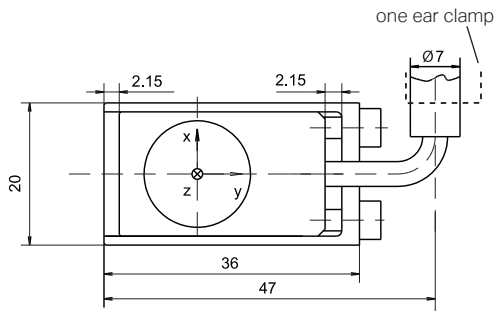
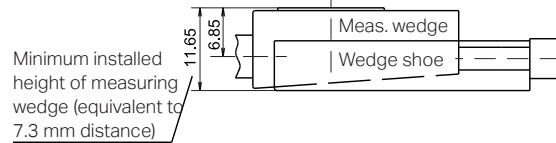
Measuring Wedge

Piezoelectric force sensor technology

Standard setting



Maximum extended wedge



(All dimensions in mm)

Technical data

All technical data apply to the fitting location at 100% force transmission. The measuring wedges are corrosion-resistant.

Performance

| | |
|---|---|
| Sensitivity | -4.2 pC/N |
| Measurement range | -7.5 bis +7.5 kN (pre-load: 10 kN)* 0 bis 15 kN (pre-load: 3 kN) |
| Response threshold | < 0.01N \cong 0.01nm \cong 0.0012 μ e |
| Fastening torque (pre-stress screws) | ca. 1.7 Nm* (allowed max. 1.9 Nm) |

Environmental conditions

| | |
|-------------------|---------------------------------|
| Enclosure rating | IP 68 oil- and coolant-proof |
| Temperature range | -50 bis 80 °C -58 to 176 °F |

Physical connectors

| | |
|-------------------|-------------------------|
| Cable | Coaxial, shielded cable |
| Protective sleeve | PU, Ø 7 mm |
| Bending radius | 15 mm |

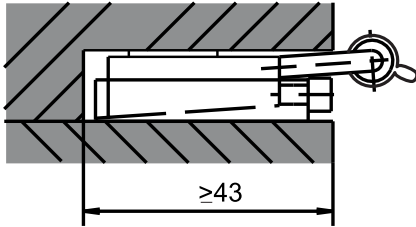
* Recommended, because with this pre-stress torque the wedge measures stress as well as relief of the appropriate machine part.

Installation examples in the force bypass

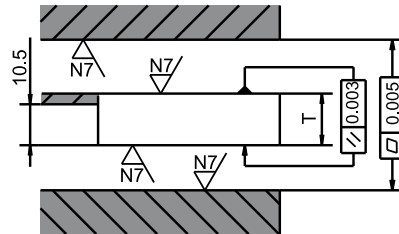
Owing to the force bypass measuring principle, forces acting on the structure of the machine or fixture can be much larger than forces acting or measured on the sensor fitting point.

We are glad to offer advice or analysis to determine the fitting locations and number of sensors free of charge. Just send us your blueprints, which we will treat confidentially..

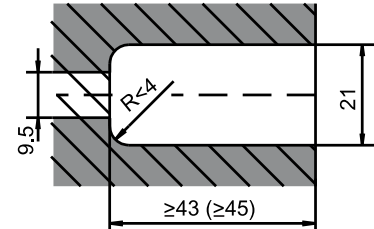
Meas. wedge (cable outside, left):



Tolerance I:



Tolerance II:



(All dimensions in mm.
All dimensions given in brackets () refer to a measuring element projecting the maximum distance.)

Part number

1D measuring wedge, Size 20

Cable outside, straight
Part No.: 0.11.032.1DKMAG

Cable outside, left
Part No.: 0.11.032.1DKMAL

Cable outside, right
Part No.: 0.11.032.1DKMAR

Cable inside
Part No.: 0.11.033.1DKMIG

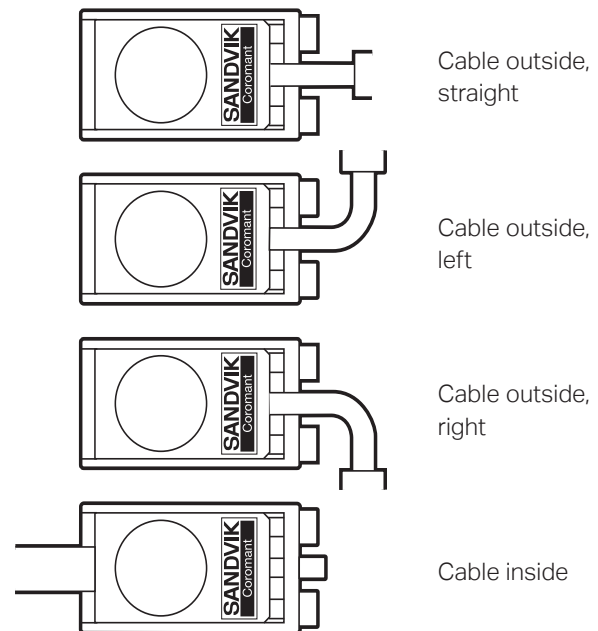
Cable configuration

- PU-protective sleeve, $\varnothing 7$ mm
- Minimum bending radius $R = 15$ mm
- Standard length $L = 2$ m, can be cut to length (longer cables on request)
- Alternative PX 4 metal braided protective sleeve

Sleeve contains: 1 coaxial cable $\varnothing 2$ mm

In case of high mechanical stress in the working chamber (e.g. due to hot chips), an additional metal protection hose for the sensor cable with a length of 1.3 m is recommended.

Part No.: 0.20.805.PHPU4M



Scope of delivery

- Measuring wedge
- Fitting set for cable input at the charge amplifier