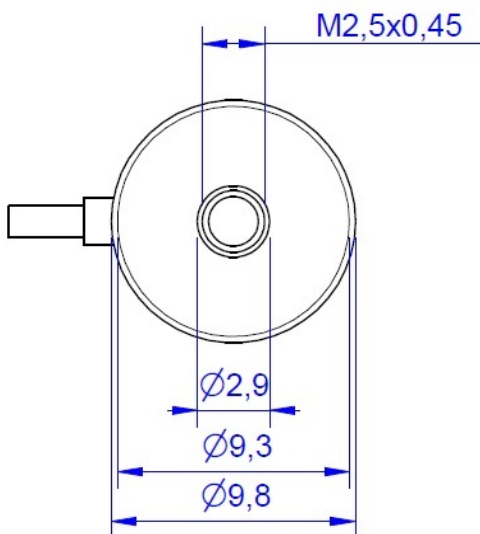
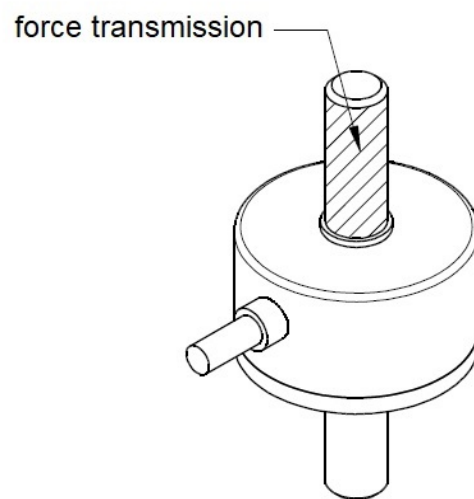
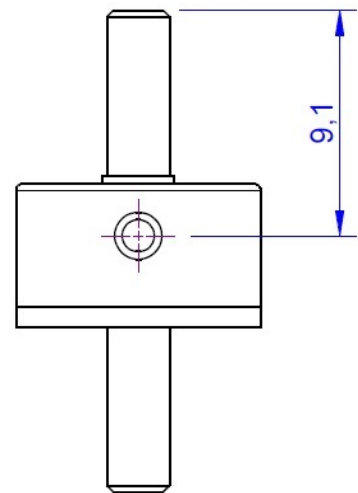
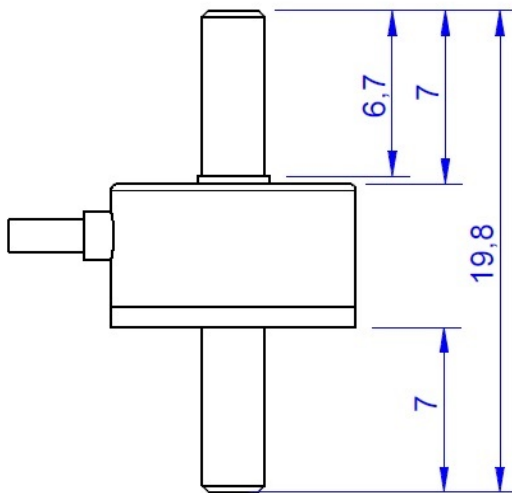
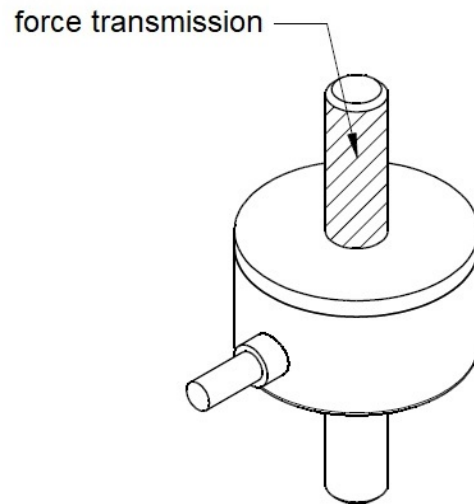
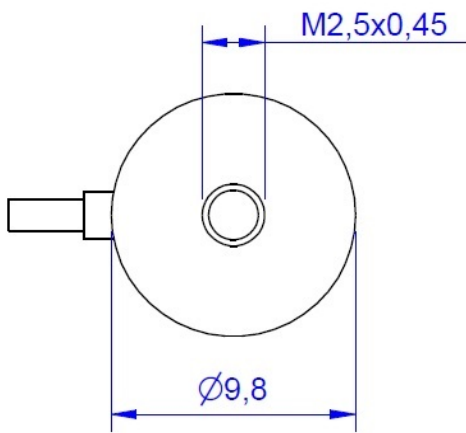


K1-M10Z

miniature compression-tension force sensor

measuring range: +/- 25 N, 50N, 100N, 200N





Technical Data

Force sensor

Type	Load cell
Force direction	Tension / Compression
Rated force Fx	25, 50, 100, 200 N
Force introduction	Außengewinde
Dimension 1	M2,5x0,45
Sensor Fastening	Außengewinde
Dimension 2	M2,5x0,45
Operating force	150 %FS
Rated displacement	0.04 mm
Lateral force limit	10 %FS
Material	Stainless steel
Natural frequency	5 kHz
Height	19.8 mm
Length or Diameter	9.8 mm
Torque limit	5 Nm
Bending moment limit	0.2 Nm

Electrical Data

Input resistance	390 Ohm
Tolerance input resistance	40 ±
Output resistance	350 Ohm
Insulation resistance	2x10 ⁹ Ohm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 5 V
Zero signal	0.05 mV/V
characteristic value range min	0.5 mV/V / FS
characteristic value range max	1 mV/V / FS

Precision

Accuracy class	1%
Relative linearity error	0.1 %FS
Relative zero signal hysteresis	0.05 %FS
Temperature effect on zero signal	0.02 %FS/K
Temperature effect on characteristic value	0.02 %RD/K
Relative creep	0.1 %FS

Connection Data

Connection type	4 conductor open
Name of the connection	STC-36T-4
Cable length	3 m

Temperature

Rated temperature range f	-10 ... 70 °C
Environmental protection	IP67

Pin Configuration (possible variations)

Symbol	Description	Wire colour
+Us	positive bridge supply	red
-Us	negative bridge supply	black
+Ud	positive bridge output	green
-Ud	negative bridge output	white

Screen - transparent.

Pressure load : positive output signal