

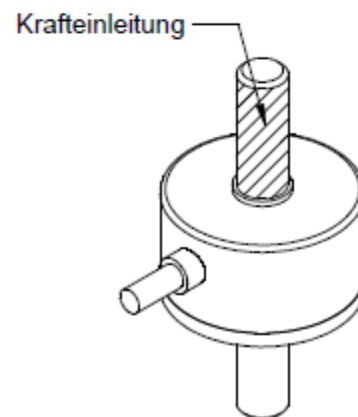
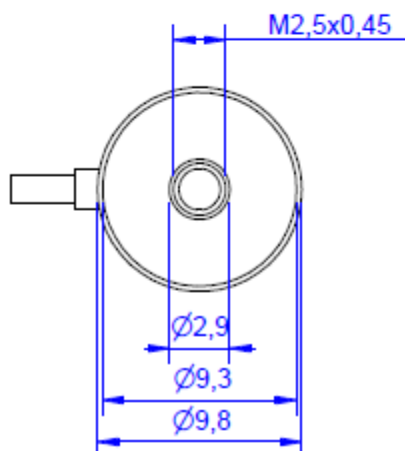
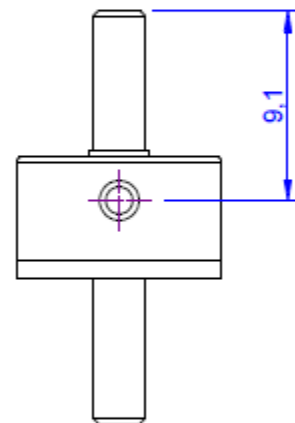
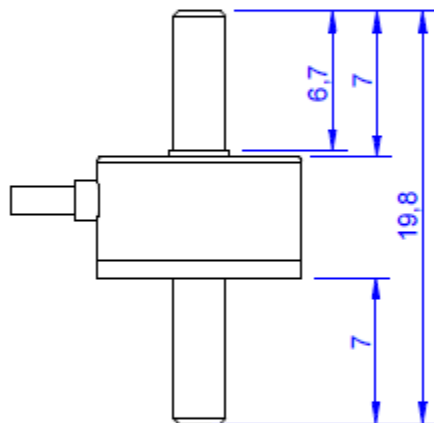
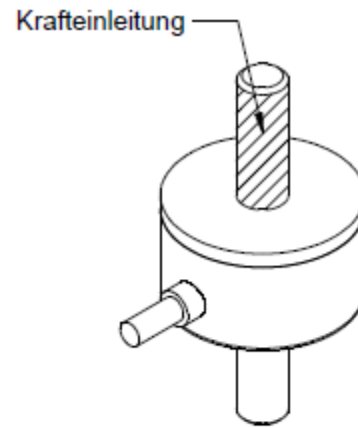
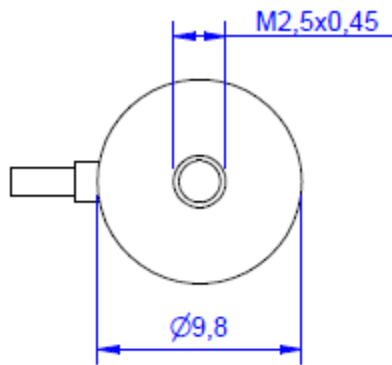
## KM10z 25N, 50N, 100N, 200N



### Description

The KM10z membrane force sensor is ultra-miniature sensor for force and pressure measurement. The force is applied on two M2.5 thread. In the application of force is necessary to ensure that no bending moments greater than 0.1 Nm be initiated.

## Dimensions





## Technical Data

### Kraftsensoren

Type	Load cell
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
Material	Stainless steel
Height	19.8 mm
Length or Diameter	9.8 mm

### Elektrische Daten

Input resistance	390 Ohm
Tolerance input resistance	40 ±
Output resistance	350 Ohm
Insulation resistance	2x10 <sup>9</sup> 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
Operating temperature range f	-10 ... 85 °C
Storage temperature range f	-10 ... 85 °C
Environmental protection	IP67

Abbreviation : RD: „Reading“; FS: „Full Scale“;

1. The exact nominal sensitivity is indicated in the test report.
2. Values in () for compression and tension fluctuating measurement values



## Pin Configuration

Channel	Symbol	Description	Wire colour	PIN
	+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*



## accessories

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### Description Description

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Calibration  
Certificate  
kn/20/5

Factory calibration certificate for force to 20 kN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.

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