

KM50z 100kN

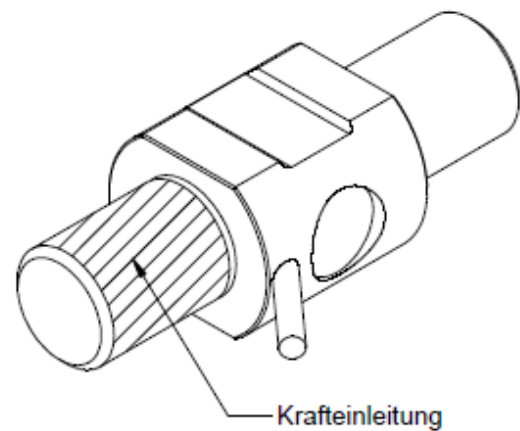
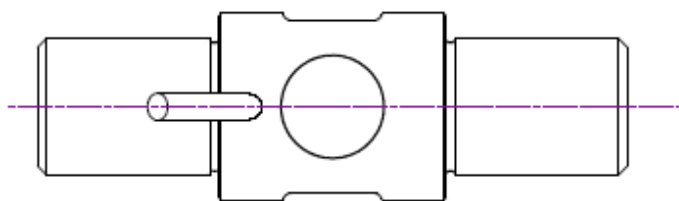
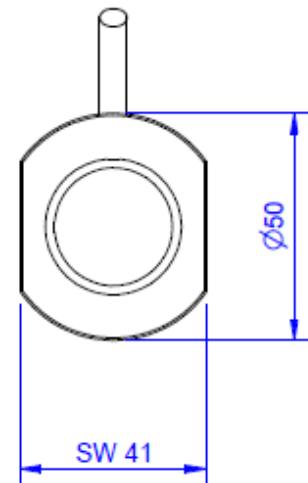
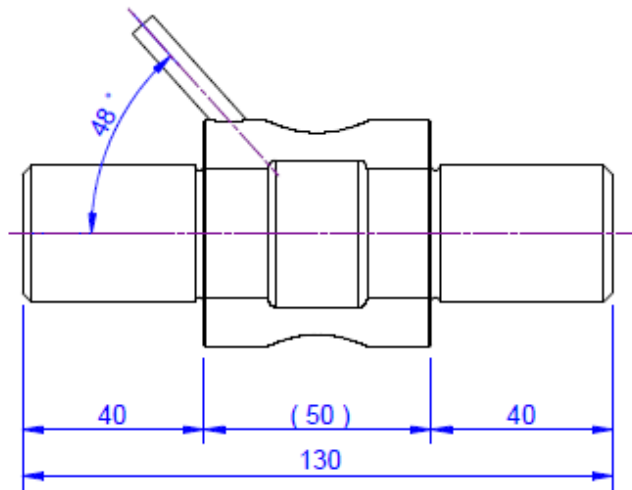
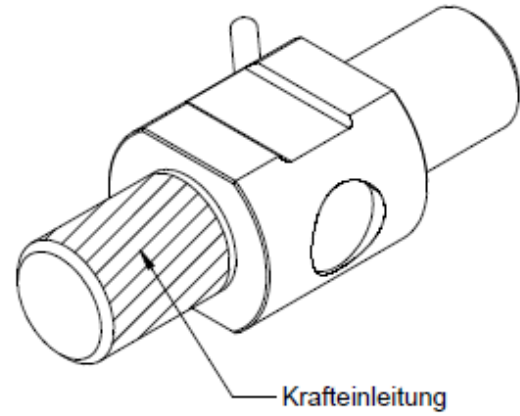
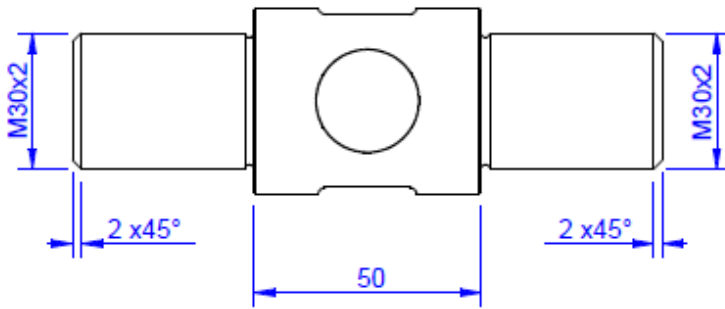


Description

The KM50z force sensor is a compact tension/compression force sensor. Two M30 coarse-feeding threads are provided for application of force.

The protection class is IP 67.

Dimensions





Technical Data

Kraftsensoren

Type	Force sensor
Rated force F _x	100 kN
Force introduction	Außengewinde
Dimension 1	M30x2
Sensor Fastening	Außengewinde
Dimension 2	M30x2
Operating force	150 %FS
Rated displacement	0.04 mm
Material	Stainless steel
Height	130 mm
Length or Diameter	50 mm

Elektrische Daten

Input resistance	390 Ohm
Tolerance input resistance	390 ±
Output resistance	40 Ohm
Tolerance output resistance	350 ±
Insulation resistance	2x10 ⁹ Ohm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 10 V
Zero signal	0.05 mV/V
Rated output	1 mV/V / FS

Precision

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	Unitronic FD CP Plus 4x0,14



Cable length 5 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 PI67

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	brown	
	-Us	negative bridge supply	white	
	+Ud	positive bridge output	green	
	-Ud	negative bridge output	yellow	

Pressure load : positive output signal



accessories

Description Description



Calibration
Certificate
kn/200/5

Factory calibration certificate for force to 200 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.
