

Load cell KM115

Variant: 50kN, 100kN, 200kN



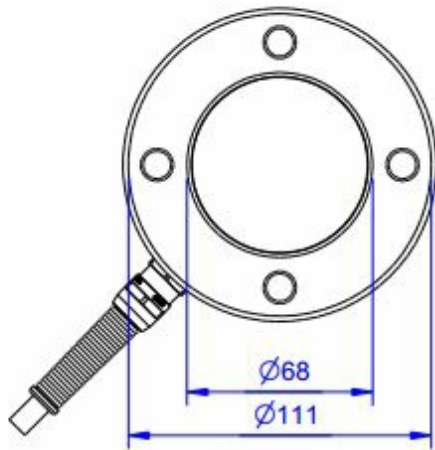
Description

The force sensor KM 115 is a membrane force sensor for measuring compressive forces. It is fastened to an even surface with four screws M12. A spherical cap with a radius of 160 mm is provided for the force transmission.

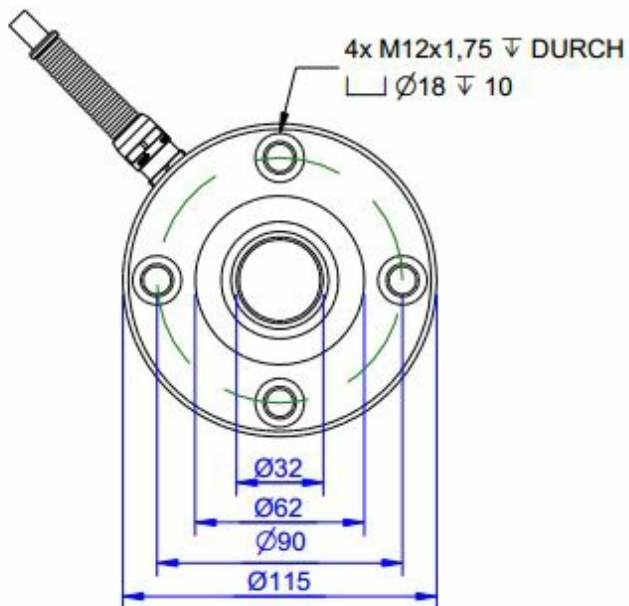
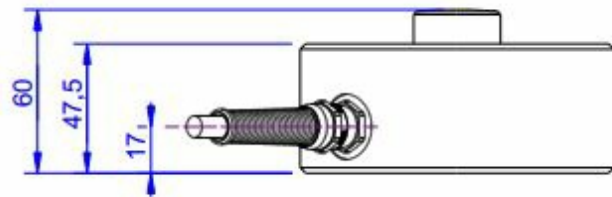
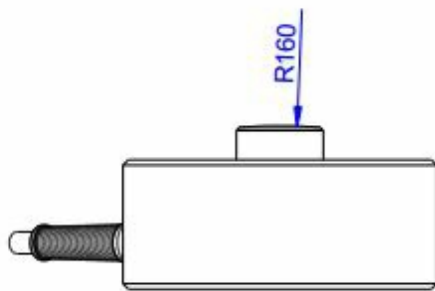
The force sensor KM115e is a membrane-type force sensor for measurement of compressive forces. The integrated electronic GSV-15L provides an output signal 0...10 Volt or 4...20mA proportional to the applied force on the constructional element. The electronic GSV-15L offers a digital input for automatic zero adjustment, a digital input for autoscale and a digital output as threshold switch.

Environmental protection is IP 67.

Dimensions



Aufstandsfläche Sensor



Krafteinleitung





Technical Data

Kraftsensoren

Type	Load cell
Force introduction	Load button
Dimension 1	Ø32
Sensor Fastening	Circular ring
Dimension 2	Ø111x21,5
Operating force	150 %FS
Rated displacement	0.08 mm
Material	Stainless steel
Height	60 mm
Length or Diameter	115 mm

Elektrische Daten

Input resistance	850 Ohm
Tolerance input resistance	100 ±
Output resistance	700 Ohm
Tolerance output resistance	10 ±
Insulation resistance	5x10 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

Accuracy class	0,5%
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	SUPER-PAAR-TRONIC-C /2x2x0,25



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 IP67

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

1) The exact nominal sensitivity is indicated in the test report;



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	

Screen - transparent.

Pressure load : positive output signal



accessories

Description Description



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.
