

Force Sensor KM115e 50kN/010

Item number: 5365

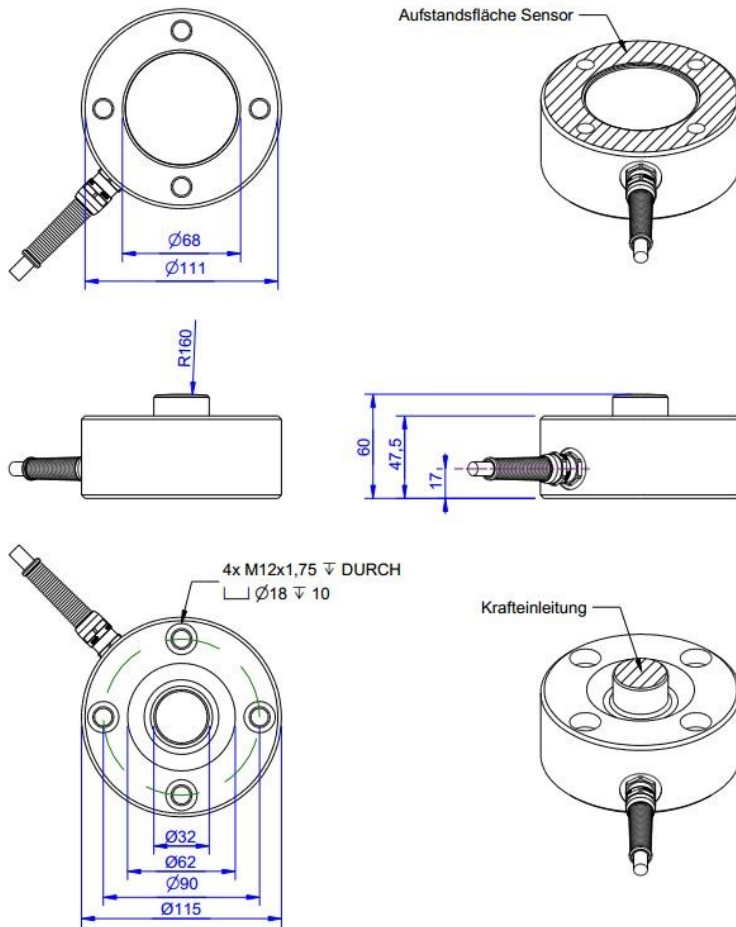


The force sensor KM 115 is a membrane force sensor for measuring compressive forces. It is fastened to an even surface with four screws M12. A spherical cap with a radius of 160 mm is provided for the force transmission.

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.

Technical Drawing



Technical Data

Basic Data		Unit
Type	Force load cell	
Force direction	Compression	
Rated force Fx	50	kN
Force introduction	Load button	
Dimension 1	Ø32	
Sensor Fastening	Circular ring	
Dimension 2	Ø111x21,5	
Operating force	150	%FS
Rated displacement	0.08	mm
Lateral force limit	50	%FS
Material	Stainless steel	
Dimensions	Ø115 mm x 60 mm	
Height	60	mm
Length or Diameter	115	mm
Variants	50kN...200kN	

Electrical Data		Unit
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Accuracy Data		Unit
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
Analog Output		Unit
Voltage output from	0	V
Voltage output to	10	V
Zero adjustment to	0	V
Supply		Unit
Supply voltage from	14	V
Supply voltage to	30	V
Environmental Data		Unit
Rated temperature range from	-10	°C
Rated temperature range to	70	°C
Operating temperature range from	-10	°C
Operating temperature range to	85	°C
Storage temperature range from	-10	°C
Storage temperature range to	85	°C
Environmental protection	IP67	

Abbreviation: RD: „Reading“; FS: „Full Scale“;1) The exact nominal sensitivity is indicated in the test report;

Pin Assignment

Channel	Symbol	Description	Wire color	PIN
	Ub	Supply voltage (depends on variant)	brown	
	GND	Ground power supply	white	
	Ua (Out)	Output signal 4... 20mA / 0... 10V / 0... 5V	green	
	Tara (Ta)	Control input for zero balance	yellow	
	Scale (Sc)	Control input for amplification factor	grey	
	GND	Ground, signal	pink	
		Shield	transparent	