

## Force Sensor KM26z

Nominal force ranges: 20N; 50N; 100N, 200N, 500N, 1kN, 2kN, 5kN

The force sensor KM26z is a membrane-type force sensor with small dimensions. It is suitable for measuring compressive and tensile forces. For force transmission there exist two threads M6. Environmental protection rating is IP 67. Force transmission must be free of lateral forces.

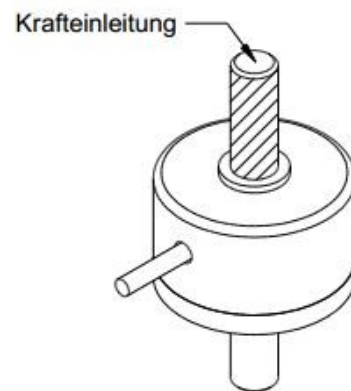
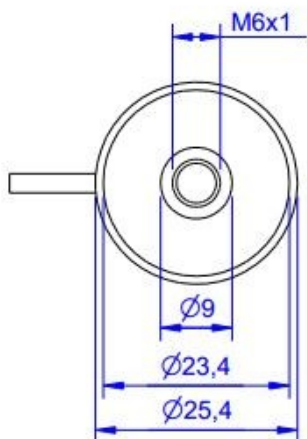
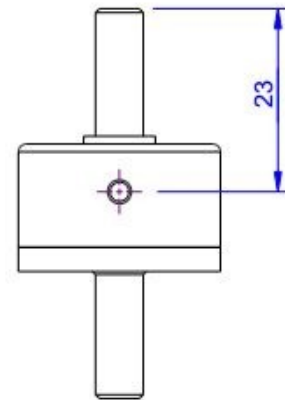
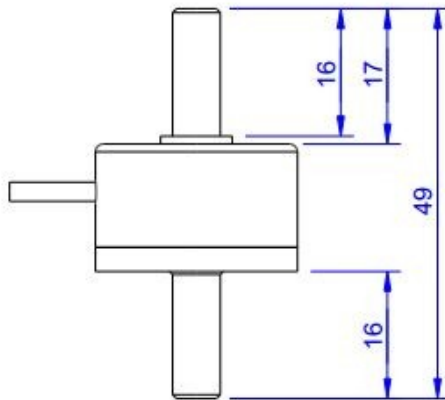
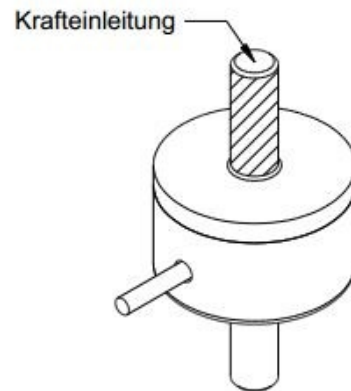
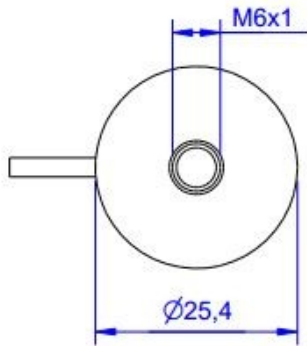


## Pin Configuration

+Us	positive bridge supply	red
-Us	negative bridge supply	black
+UD	positive bridge output	green
-UD	negative bridge output	white
Shield		transparent

Pressure load : positive output signal

## Dimensions



## Technical Data

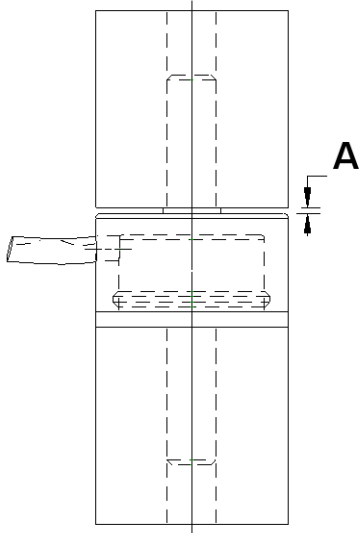
Measurement / Material		
Design		Membrane force sensor
Material		Aluminium-Alloy Stainless steel from 100N
Dimensions	mm x mm	Ø25,4 x 49
Force transmission / Thread		M6
Mechanical Data		
Nominal Force (FS)		20N ... 5kN
ration force	%FS	150
Break load	%FS	300
Deflection by FS	mm	0,08
Electrical Data		
Nominal output 1)	mV/V @ FS	1
Zero balance	mV/V	0,05
max. supply voltage	V	10
Input resistance	Ohm	390 ±40
Output resistance	Ohm	350
Insulation resistance	Ohm	>2 10 <sup>9</sup>
Connection STC-31V-4	m	3
Accuracy		
Nominal output 2)	%	1
rel. linearity deviation	%FS	0,1
rel. reversal error 2)	%FS	0,05 (0,2)
Temperature coefficient of the zero signal	%FS/K	0,02
Temperature coefficient of the parameter	%RD/K	0,02
Creep Error (30 min)	%FS	0,1
Temperature		
Nominal temperature range	°C	-10 ... +70
Working temperature range	°C	-10 ... +85
Storage temperature range	°C	-10 ... +85
Environmental protection		IP67

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

- 1) The exact nominal sensitivity is indicated in the test report;  
till nominal output 50N: ca 0,5 ... 1,0mV/V

Installation instructions: When assembling attachment parts, hold the sensor in place on the installation side / do not guide any tensioning torque through the sensor. Attachment parts may be supported on adjustable feet on the end faces, if preferred.

## Installation



Gap "A" may not be closed. Gap "A" is necessary for the function of the force sensor.