

Data sheet for Load Cells

Mini- S-Beam

Series KM019



- Mini - S-Beam
- 3 measuring ranges: 0.. 10N, 20N, 45N
- Dimensions 19.0 x 17.5 mm
- Force transmission via 4-40UNC
- Full bridge strain gauge
- Aluminium body

The KM019 series force sensors are easy to install. Their compact design makes them a ideal for applications in confined spaces where precise measurement of small forces is required.

Application examples: Measurement of small forces in production, dosing and assembly processes in automation and robotics.

Data Load Cell	
Rated force (F _{nom.})	10 N, 20 N, 45 N
Safe Overload	≤ 1000 % F _{nom.}
Rated characteristic value	2,0 mV/V @ F _{nom.}
Excitation voltage	10 V DC/AC (max 20 V DC/AC)
Relative linearity error	≤ 0.2 % F _{nom.}
Hysteresis	≤ 0,2 % F _{nom.}
Relative repeatability error	≤ 0.1 % F _{nom.}
Relative deviation of zero signal	≤ 0,1 % F _{nom.}
Rated temperature range	15 °C up to +70 °C
Operating temperature range	-30 °C up to +85 °C
Temperature effect on characteristic value	≤ 0.04 % F _{nom.} / K
Temperature effect on zero signal	≤ 0.02 % F _{nom.} / K
Input resistance	387 ± 50 Ω
Output resistance	350 ± 5 Ω
Insulation resistance	≥ 5 GΩ @ 50 V DC
Protection	IP40
Cable, lenght / diameter	ca. 1.5 m / 2,3 mm
Connection	4 x AWG28
Material Body	Aluminium
Mass	ca. 20g

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Order code

Description			
Series:	KM019		
Connecting cable: Cable length 1,5 m		K	
Rated force:			
10 N			10N
20 N			20N
45 kN			45N

Accessories (not included)

IMA2 DMS	External measuring amplifier with analogue output (0..10V, 4.. 20 mA , etc.)
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For higher quantities or ongoing demand, additional options as described below are available on request.

For example:

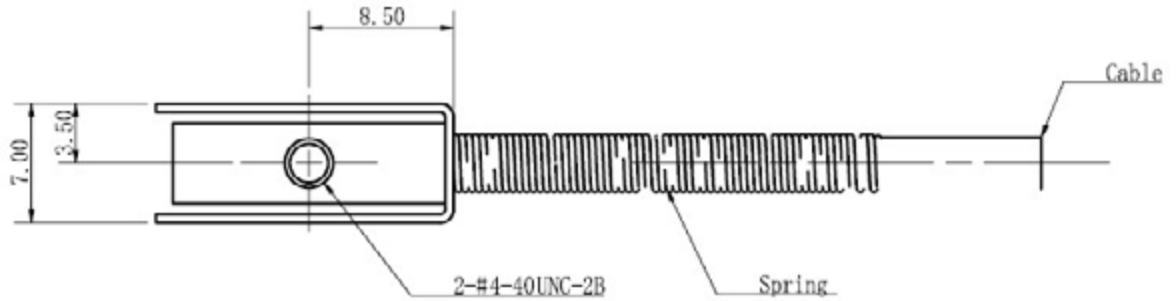
- Modified cables with or without connectors
- Modified mounting threads
- 6-wire connection
- Higher rated force up to 450 N with stainless steel construction

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Drawing



Red : + input
 Black : - input
 Green : + output
 White : - output

