

Data sheet for Load Cells

S-Beam Load Cells

Series KM1401



- Strain gauge principle
- Aluminium alloy
- Force transmission via M8-thread for 50N..1kN
- Protection grade IP40
- Easy to install, stable and reliable

Series KM1401 force transducer is a all-purpose S-beam load cell. Suitable for batching systems, package systems, etc.

Data Load Cell

Rated force	50N, 100N, 200N, 500N, 1kN
Rated characteristic value	2,0 mV/V @ rated force
Relative error of characteristic value	≤ 1 % of F.S.
Relative repeatability error	≤ 0,03 % of F.S.
Relative reversibility error	≤ 0,03 % of F.S.
Relative linearity error	≤ 0,03 % of F.S.
Relative deviation of zero signal	≤ 3 % of F.S.
Rated displacement	≤ 0,3 mm
Input resistance	410 ±5 Ω
Output resistance	350 ±3 Ω
Insulation resistance	≥ 5 GΩ @ 50 VDC
Maximum operating force	≤ 150% of rated force
Rated range of excitation voltage	≤ 10 V DC/AC
Operating range of excitation voltage	≤ 15 V DC/AC
Rated temperature range	-10 °C..+40 °C
Operating temperature range	-10 °C..+70 °C
Protection	IP40
Temperature effect on characteristic value	≤ 0,02 % / 10 K of F.S.
Temperature effect on zero signal	≤ 0,02 % / 10 K of F.S.
Creep under load	≤ 0,03% of F.S. after 0,5 h @ rated force
Cable dimension	4xAWG26; jacket Ø4,8 mm; screened
Cable length from body	ca. 2 m
Body material	Aluminium alloy

Terms according to guideline VDI / VDE / DKD 2638

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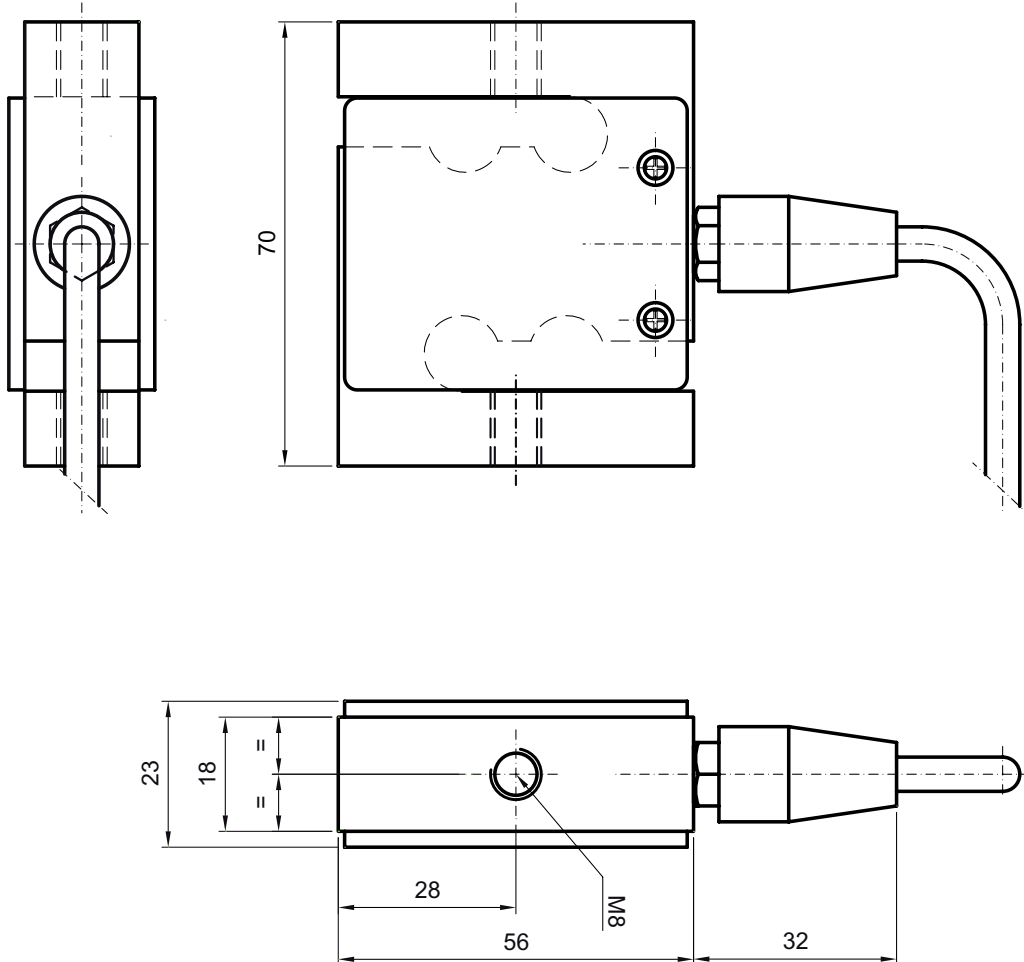
Order code

Description	Selection: standard=black/bold, possible options=grey/cursive		
Series:	KM1401		
Connecting cable: Cable length 2 m		K	
Rated force: <i>Option 50 N</i> <i>Option 100 N</i> 200 N <i>Option 500 N</i> <i>Option 1kN</i>			<i>50N</i> <i>100N</i> 200N <i>500N</i> <i>1kN</i>

Accessories

Measuring amplifier	IMA2 DMS
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Drawing



Dimensions in mm

Cable assignment

For tension:

Red: +input
 Black: -input
 Brown: -output
 Yellow: +output
 Orange: n.c.

For pressure:

Red: +input
 Black: -input
 Brown: +output
 Yellow: -output
 Orange: n.c.

Connection diagram tension

