

Data sheet for Load Cells

S-Beam Load Cells

Series KM1503



- Strain gauge principle
- Aluminium alloy
- Force transmission via M12-thread for 1kN..10kN
- Protection grade IP54
- Easy to install, stable and reliable

Series KM1503 force transducer is a all-purpose S-beam load cell. Suitable for batching systems, industrial scales and package systems, etc.

Data Load Cell

Rated force	1kN, 2kN, 5kN, 10kN
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	IP54
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	4xAWG24; jacket Ø4,8 mm; screened
Cable length from body	ca. 6 m
Body material / cable material	Aluminium alloy / UL-PVC

Terms according to guideline VDI / VDE / DKD 2638

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Order code

Description	Selection: standard=black/bold, possible options=grey/cursive		
Series:	KM1503		
Connecting cable: Cable length 6 m		K	
Rated force:			
<i>Option 1kN</i>			<i>1kN</i>
<i>Option 2kN</i>			<i>2kN</i>
<i>Option 5 kN</i>			<i>5kN</i>
10 kN			10kN

Accessories (not included)

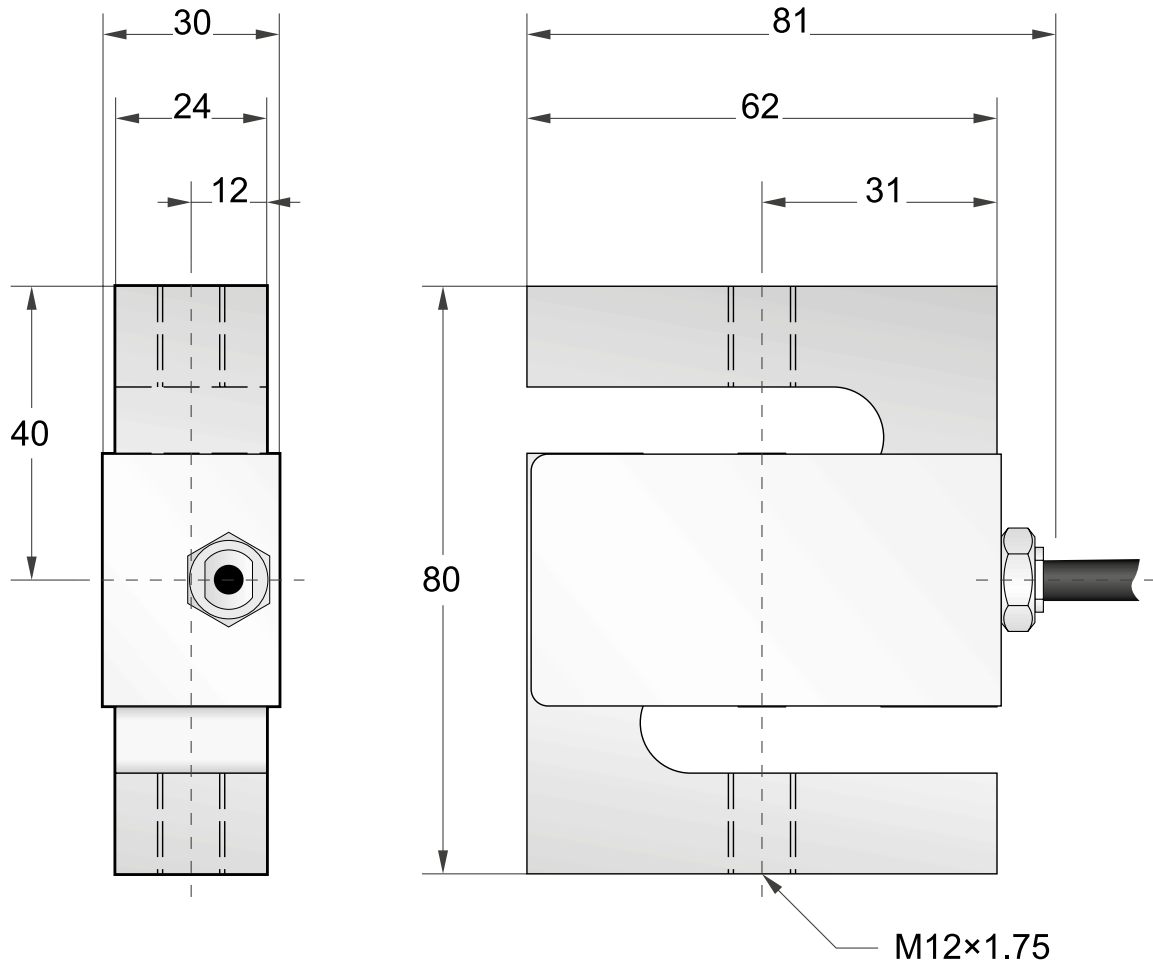
Measuring amplifier	IMA2 DMS
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Drawing



Dimensions in mm

Cable assignment

For tension:

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

For pressure:

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

Connection diagram tension

