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
- Test protocol available

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
Mass	Ca.0.47 kg

Terms according to guideline VDI / VDE / DKD 2638

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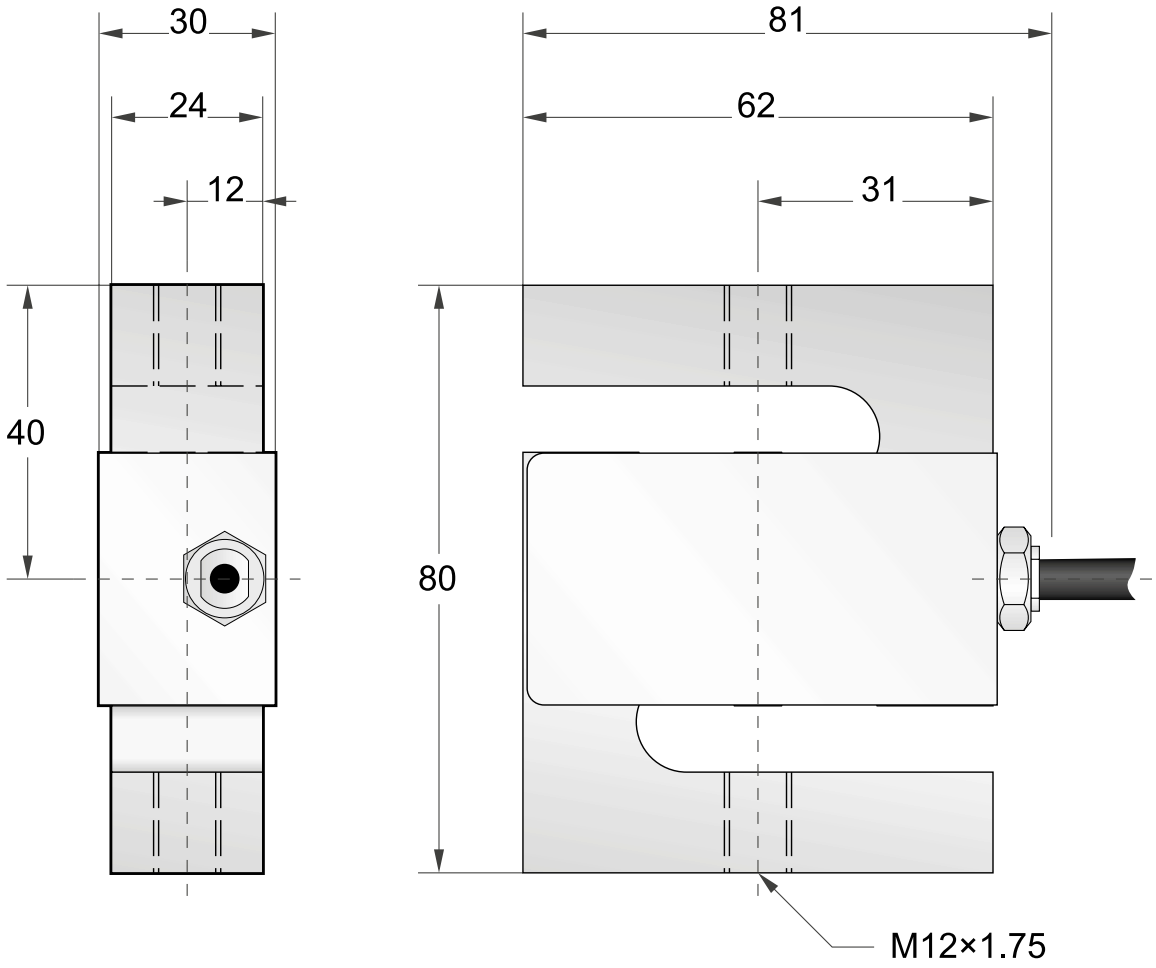
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Order code				
Description	Selection: **standard=black/bold**, possible *options=grey/italic*			
Series:	**KM1503**			
Connecting cable: **Cable length 6 m**		**K**		
Rated force: *Option 1kN* *Option 2kN* *Option 5 kN* **10 kN**			*1kN* *2kN* *5kN* **10kN**	
Test protocol				**P**

Accessories (not included)	
Measuring amplifier	IMA2 DMS

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Drawing



Dimensions in mm

Cable assignment

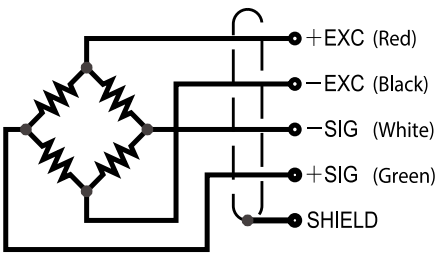
For tension:

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

For pressure:

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

Connection diagram tension



Specifications are subject to change without notice