

S-Beam Load Cells with Electronics

Series KT1503



- S-beam with integrated digital transducer
- Strain gauge principle
- Aluminium alloy
- Output 0..10 V, 4..20 mA @24 VSUP
- Force transmission via M12-thread for 1 kN .. 10 kN
- Easy to install, stable and reliable

Series KT1503 force transducer is a all-purpose S-beam load cell. Suitable for batching systems, package systems, etc.

**Data Load Cell**

Rated force	1 kN, 2 kN, 5 kN, 10 kN
Rated characteristic value 2410 / 2442	10 V / 20 mA @ rated force
Relative error of characteristic value	≤ 10 % of rated output
Relative repeatability error	≤ 0.03 % of rated output
Relative reversibility error	≤ 0.03 % of rated output
Relative linearity error	≤ 0.1 % of rated output
Reference straight line	≤ 0.03 % of rated output
Relative deviation of zero signal	≤ 3 % of rated output
Rated displacement	≤ 0.3 mm
Insulation resistance	≥ 5 GΩ @ 50 VDC
Maximum operating force	≤ 150 % of rated force
Rated range of excitation voltage	24 VDC
Operating range of excitation voltage	12 - 36 VDC
Rated temperature range	-10 °C..+50 °C
Operating temperature range	-10 °C..+70 °C
Protection	IP40
Temperature effect on characteristic value	≤ 0.02 % of output / 10 K
Temperature effect on zero signal	≤ 0.02 % of rated output / 10 K
Creep under load	≤ 0.03 % of rated output
Cable dimension	3 x AWG28; shielded
Cable length from body	ca. 2.75 m
Body material	Aluminium alloy

Terms according to guideline VDI / VDE / DKD 2638

**S-Beam Load Cells with Electronics**
**Series KT1503**
**Order code**
**Description**

Selection: standard=black/bold, possible options=grey/cursive

<b>Series:</b>	<b>KT1503</b>				
<b>Connecting cable:</b> Cable length ca. 2.75 m		<b>K</b>			
<b>Rated force:</b> <i>Option 1 kN</i> <i>Option 2 kN</i> <b>5 kN</b> <i>Option 10 kN</i>			<i>1kN</i> <i>2kN</i> <b>5kN</b> <i>10kN</i>		
<b>Electronics:</b> <b>24 VSUP 0..10 V Output</b> <b>24 VSUP 4..20 mA Output</b>				<b>2410</b> <b>2442</b>	
<b>Direction of force:</b> Tension Pressure					<b>Z</b> <b>D</b>

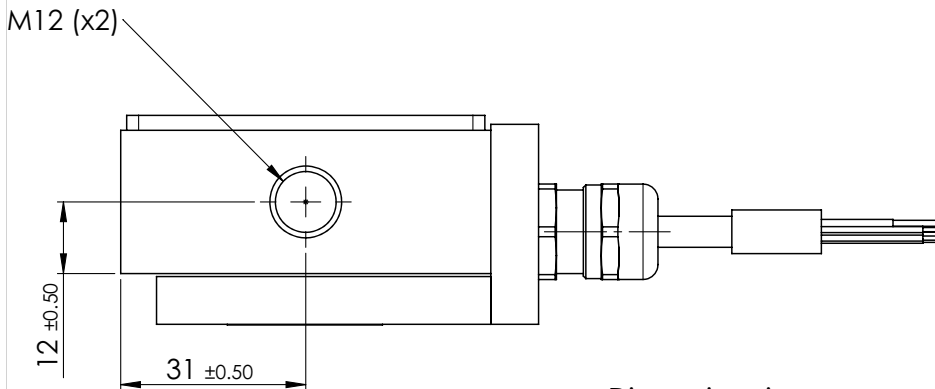
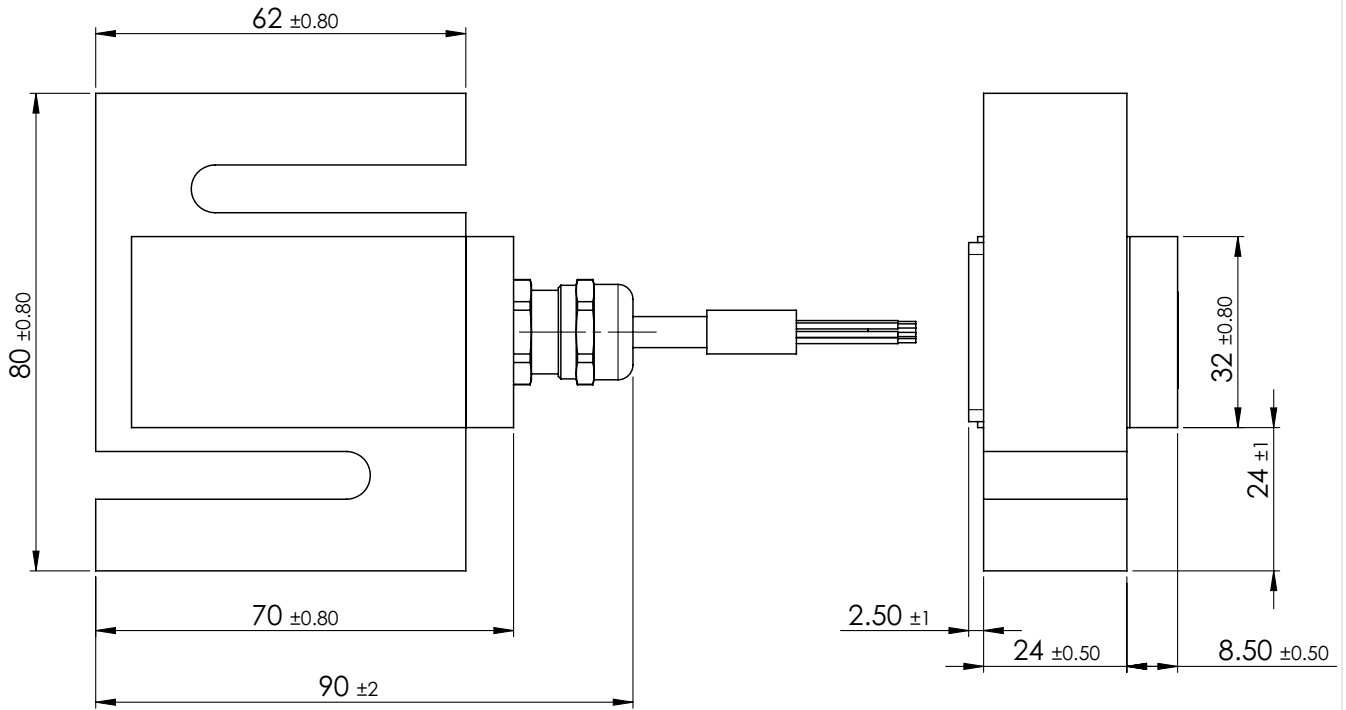
**For higher quantities or on-going demand, additional options are available as described below on request**

For Example: Attach cable assemblies with or without connectors, output signals with PWM or SPI and much more.

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Drawing



Dimensions in mm

Terminal assignment for 10 V (2410)	
Black	GND
Red	VSUP
Brown	(+) OUT
Shield	on housing

Terminal assignment for 4..20 mA (2442)	
Black	GND
Red	VSUP
Orange	(+) OUT
Shield	on housing