

# Data sheet for Load Cells

Shear Beam with Electronics

Series KT803



- Compact shear beam with integrated amplifier
- Analogue output 0..10 V, 4..20 mA
- Force transmission via M5-thread
- Strain gauge full bridge

Series KT803 force sensors are easy to install. It can be fixed with 2 screws at any flat and stable ground. Thanks to their compact dimensions, the force sensors are a good choice even in tight installation conditions.

Application examples: Measurement of forces in assembly processes in automation, control of motion sequences in medical systems.

## Data Load Cell

Rated force (F <sub>nom.</sub> )	2 kN, 5 kN	
Maximum operation force	≤ 150 % F <sub>nom.</sub>	
Output without load (zero signal)	0 V	4 mA
Output at rated force (F <sub>nom.</sub> )	10 V	20 mA
Rated supply voltage	24 VDC	
Operating range of supply voltage	12 - 36 VDC	
Relative linearity error	≤ 0.2 % F <sub>nom.</sub>	
Hysteresis	≤ 0.05 % F <sub>nom.</sub>	
Relative repeatability error	≤ 0.05 % F <sub>nom.</sub>	
Relative deviation of zero signal	≤ 1,0 % F <sub>nom.</sub>	
Relative creep (30 min.)	≤ 0.05 % F <sub>nom.</sub>	
Rated displacement	≤ 0.3 mm @ F <sub>nom.</sub>	
Rated temperature range	-10 °C..+40 °C	
Operating temperature range	-10 °C..+70 °C	
Temperature effect on output	≤ 0.05 % F <sub>nom.</sub> / 10 K	
Temperature effect on zero signal	≤ 0.05 % F <sub>nom.</sub> / 10 K	
Insulation resistance	≥ 5 GΩ @ 50 VDC	
Protection	IP40	
Cable, - length / -diameter	2,75 m / 5,6 mm	
Electrical connection	3 x AWG28; shielded (shield connected to body)	
Material, -body / -housing	Nickel-plated alloy steel / Steel with paint finish	
Mass	400 g	

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## Order code

<b>Description</b>					
<b>Series:</b>	KT803				
<b>Connecting cable:</b> Cable length 2.75 m		K			
<b>Rated force:</b> 2 kN 5 kN			2kN 5kN		
<b>Electronics:</b> 24 VSUP 0..10 V Output 24 VSUP 4..20 mA Output				2410 2442	
<b>Direction of force:</b> Tension Pressure					Z D

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

For Example:

- modified cable with or without connectors
- output signals with PWM or SPI and more
- modified mounting holes or threads
- calibration record

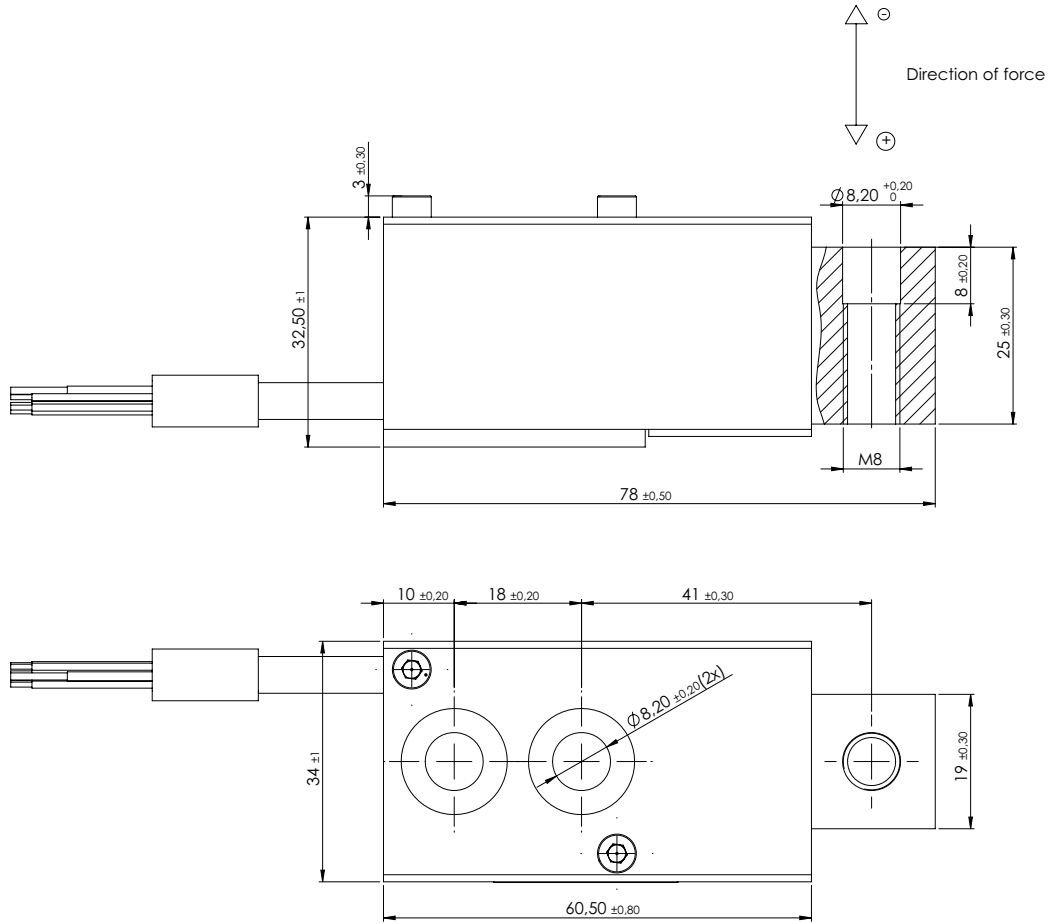
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## Drawing



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