

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
- Test report included

The KT803 series force sensor is easy to install. They can be fixed with 2 screws on any flat and stable surface. 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 ($F_{nom.}$)	2 kN	5 kN
Sensitivity voltage output	200 N/V	500 N/V
Sensitivity current output	125 N/mA	312.5 N/mA
Output signal options	0..10 V / 4... 20 mA	
Rated supply voltage	24 VDC	
Operating range of supply voltage	12 - 36 VDC	
Cut of frequency	500 Hz	
Relative linearity error	$\leq 0.2 \% F_{nom.}$	
Hysteresis	$\leq 0.05 \% F_{nom.}$	
Relative repeatability error	$\leq 0.05 \% F_{nom.}$	
Relative deviation of zero signal	$\leq 1,0 \% F_{nom.}$	
Relative creep (30 min.)	$\leq 0.05 \% F_{nom.}$	
Maximum operation force	$\leq 150 \% F_{nom.}$	
Rated displacement	$\leq 0.3 \text{ mm @ } F_{nom.}$	
Operating temperature range	$-10^{\circ}\text{C}..+70^{\circ}\text{C}$	
Temperature effect on output	$\leq 0.05 \% F_{nom.} / 10 \text{ K}$	
Temperature effect on zero signal	$\leq 0.05 \% F_{nom.} / 10 \text{ K}$	
Protection	IP40	
Insulation resistance	$\geq 5 \text{ G}\Omega @ 50 \text{ VDC}$	
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	

Data sheet for Load Cells



Shear Beam with Electronics

Series KT803

Order code					
Description	Selection: standard=black/bold , possible <i>options=grey/italic</i>				
Series:	KT803				
Connecting cable: Cable length 2.75 m		K			
Rated force: 2 kN 5 kN			2kN 5kN		
Electronics: 24 VSUP 0..10 V Output 24 VSUP 4..20 mA Output				2410 2442	
Direction of force 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
- optionally with test report

Data sheet for Load Cells



Shear Beam with Electronics

Series KT803

Drawing

