

# Data sheet for Load Cells

Shear Beam with Electronics

Series KT703



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

Series KT703 force sensors are easy to install. They 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 handling systems.

## Data Load Cell

Rated force ( $F_{nom.}$ )	200 N, 500 N, 1000 N	
Maximum operation force	$\leq 150 \% F_{nom.}$	
Output without load (zero signal)	0 V	4 mA
Output at rated force ( $F_{nom.}$ )	10 V	20 mA
Rated supply voltage	24 VDC	
Operating range of supply voltage	12 - 36 VDC	
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	$\leq 0.2 \% F_{nom.}$	
Relative creep (30min.)	$\leq 0.05 \% F_{nom.}$	
Rated displacement	$\leq 0.3 \text{ mm @ } F_{nom.}$	
Rated temperature range	-10 °C..+40 °C	
Operating temperature range	-10 °C..+70 °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 / $\varnothing 5,6 \text{ mm}$	
Electrical connection	3 x AWG28; shielded (shield connected to body)	
Material, -body / -housing	Aluminium / Steel with paint finish	
Mass	180 g	

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Order code					
<b>Description</b>					
<b>Series:</b>	KT703				
<b>Connecting cable: Cable length 2.75 m</b>		K			
<b>Rated force: 200 N 500 N 1 kN</b>			200N 500N 1kN		
<b>Electronics: 24 VSUP 0..10 V Output 24 VSUP 4..20 mA Output</b>				2410 2442	
<b>Direction of force: Tension Pressure</b>					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
- customer specific output signals
- modified mounting holes or threads
- calibration record

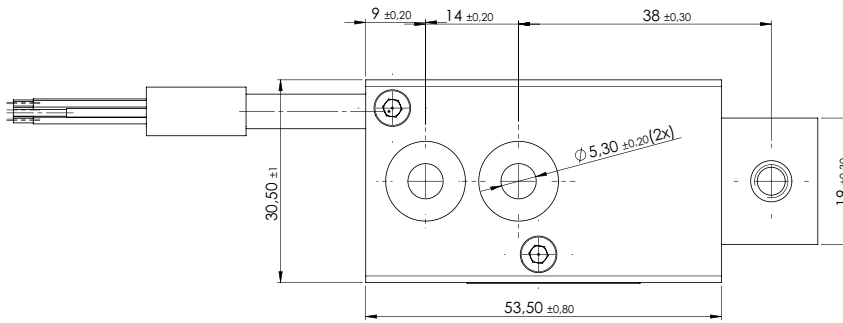
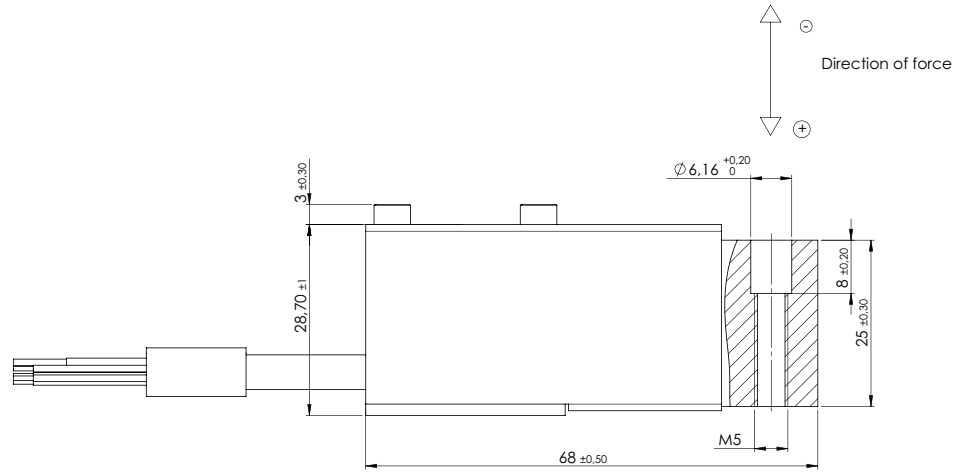
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## Drawing



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