

Shear Beam with integrated amplifier electronics

Series KT703



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

The KT703 force sensors are easy to install. They can be mounted with 2 screws to any flat and stable surface. Their compact size makes them a good choice even where space is at a premium.

Application examples: Force measurement in assembly processes in automation, motion control in handling systems.

Data Load Cell	
Rated force (F <sub>nom.</sub> )	200 N, 500 N, 1000 N
Maximum operation force	≤ 150 % F <sub>nom.</sub>
Output signal options	0...10 V   4..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 Deviation of signal @ F <sub>nom.</sub>	≤ 1,0 %
Relative creep (30min.)	≤ 0.05 % F <sub>nom.</sub>
Rated displacement	≤ 0.3 mm @ F <sub>nom.</sub>
Rated temperature range	-10 °C up to +40 °C
Operating temperature range	-10 °C up to +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
Protection	IP40
Insulation resistance	≥ 5 GΩ @ 50 VDC
Cable, -length / -diameter	2,75 m / Ø 5,6 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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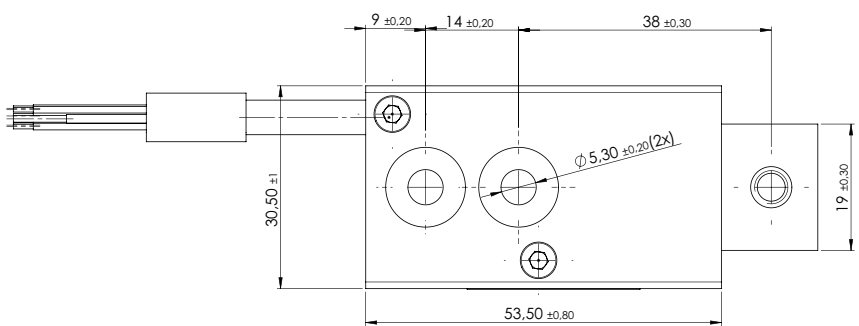
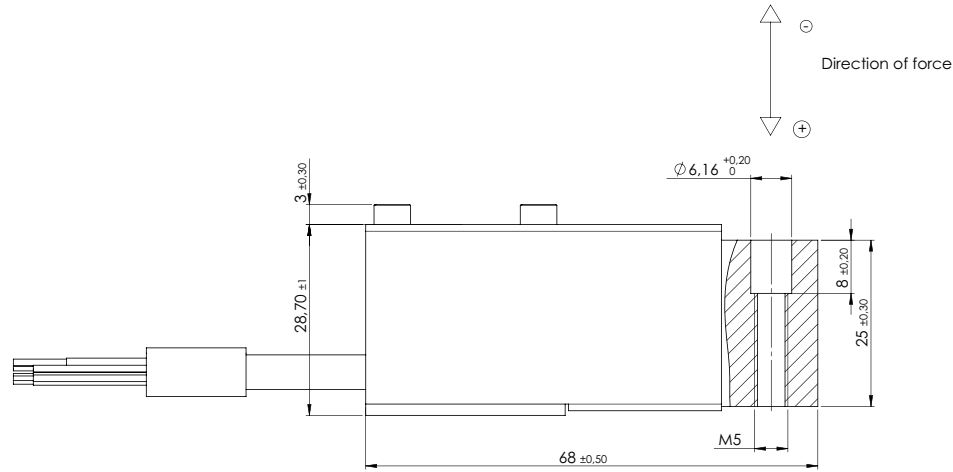
**Series KT703**

Order code						
<b>Description</b>						
<b>Series</b>	<b>KT703</b>					
<b>Connecting cable: Cable length 2.75 m</b>		<b>K</b>				
<b>Rated force: 200 N 500 N 1000 N</b>			<b>200N 500N 1kN</b>			
<b>Output signal: 0..10 V 4..20 mA</b>				<b>2410 2442</b>		
<b>Direction of force: Tension Pressure</b>					<b>Z D</b>	
<b>Test protocol</b>						<b>P</b>
Order code example: KT703 K 200N 2410 Z						

**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 calibration range
  - modified mounting holes or threads

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