

Data sheet for Load Cells

Shear Beam

Series KM801



- Compact shear beam
- Force transmission via M8-thread for 2kN..5kN
- Strain gauge
- Measuring body steel
- Calibration including measurement data

Series KM801 force sensors are double bending beam sensors and characterized by its tight shape and its easy way of fastening. It could be fixed with 2 screws at any flat and stable ground. Force application is vertical to sensor-axis.

Data Load Cell

Rated force	2KN; 3,5KN; 5KN
Rated characteristic value	2,0 mV/V of rated output
Relative error of characteristic value	≤ 10 % of rated output
Relative repeatability error	≤ 0,05 % of rated output
Relative reversibility error	≤ 0,05 % of rated output
Relative linearity error	≤ 0,05 % of rated output
Reference straight line	≤ 0,05 % of rated output
Relative deviation of zero signal	≤ 1 % of rated output
Input resistance	387 ±20Ω
Output resistance	350 ±3Ω
Insulation resistance	≥ 5 GΩ @ 50 V DC
Maximum operating force	≤ 150 % of rated force
Rated range of excitation voltage	10 V DC / AC
Operating range of excitation voltage	≤ 15 V DC / AC
Rated temperature range	-10 °C .. +70 °C
Operating temperature range	-10 °C .. +40 °C
Protection	IP40
Temperature effect on characteristic value	≤ 0,05 % of rated output / 10 K
Temperature effect on zero signal	≤ 0,05 % of rated output / 10 K
Creep under load	≤ 0,05 % of rated output
Cable dimension	4 x AWG26 Ø4,6 mm
Cable length from body	ca. 1,75 m
Body material	Nickel-plated steel alloy
Mass	ca. 390 g

Terms according to guideline VDI / VDE / DKD 2638

Data sheet for Load Cells

Shear Beam

Series KM801

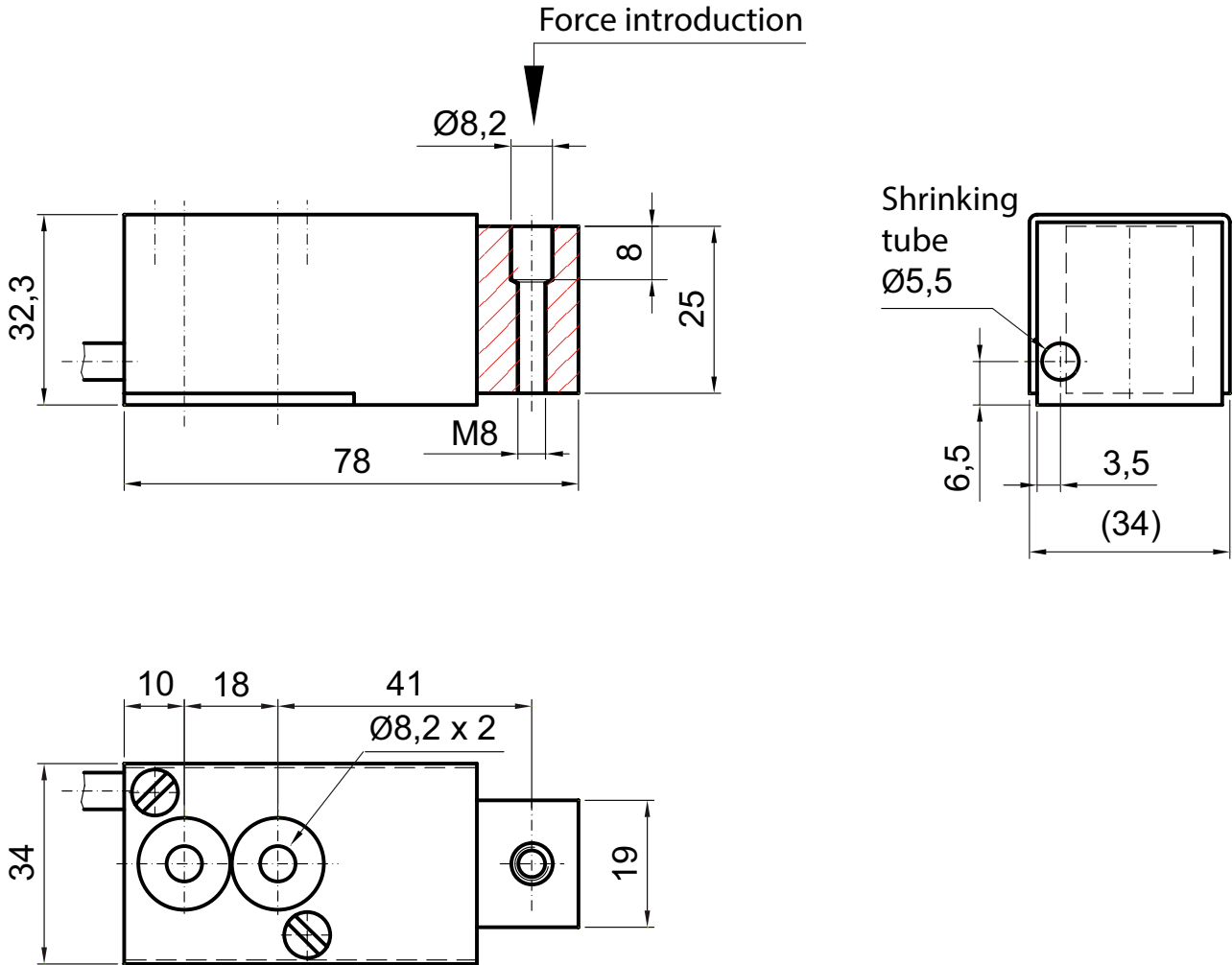
Order code

Description	Selection: standard=black/bold, possible options=grey/cursive		
Series:	KM801		
Connecting cable: Cable length 1,75 m		K	
Rated force: 2 kN 5 kN			2kN 5kN

Accessories (not included)

Measuring amplifier	IMA2 DMS
---------------------	----------

Drawing



Dimensions in mm

Cable assignment

For pressure:

- Brown: +input
- Yellow: -input
- Green: +output
- White: -output

For tension:

- Brown: +input
- Yellow: -input
- Green: -output
- White: +output

Connection diagram pressure

