

Data sheet for Load Cells

Shear Beam

Series KM801



- Compact shear beam
- 2 Measuring ranges: up to 2 kN, 5 kN
- Force transmission via M8-thread
- Strain gauge full bridge
- Test protocol included

Series KM801 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 medical systems.

Data Load Cell

Rated force ($F_{nom.}$)	2KN, 5KN
Maximum operating force	$\leq 150\%$ of rated force ($F_{nom.}$)
Rated characteristic value	2.0 ± 0.2 mV/V @ $F_{nom.}$
Rated excitation voltage	10 V DC / AC
Operating range of excitation voltage	≤ 15 V DC / AC
Relative linearity error	$\pm 0.05\%$ $F_{nom.}$
Hysteresis	$\pm 0.05\%$ $F_{nom.}$
Relative repeatability error	$\pm 0.05\%$ $F_{nom.}$
Relative deviation of zero signal	$\pm 1\%$ $F_{nom.}$
Relative creep (30 min.)	$\pm 0.05\%$ $F_{nom.}$
Rated displacement	± 0.3 mm @ $F_{nom.}$
Temperature effect on characteristic value	$\pm 0.05\%$ $F_{nom.}$ / 10 K
Temperature effect on zero signal	$\pm 0.05\%$ $F_{nom.}$ / 10 K
Rated temperature range	-10 °C up to +40 °C
Operating temperature range	-10 °C up to +70 °C
Input resistance	$387 \pm 20\Omega$
Output resistance	$350 \pm 3\Omega$
Insulation resistance	≥ 5 G Ω @ 50 V DC
Protection	IP40
Cable, -length / -dimension	ca. 1,75 m / \varnothing 4,6 mm
Electrical connection	4 x AWG26
Material, - body / - housing	Nickel-plated steel alloy / Steel with paint finish
Mass	ca. 390 g

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Order code

Description	Selection: standard=black/bold , possible <i>options=grey/italic</i>			
Series:	KM801			
Connecting cable: Cable length 1,75 m		K		
Rated force: 2 kN 5 kN			2kN 5kN	
Test protocol:				P

Accessories (not included)

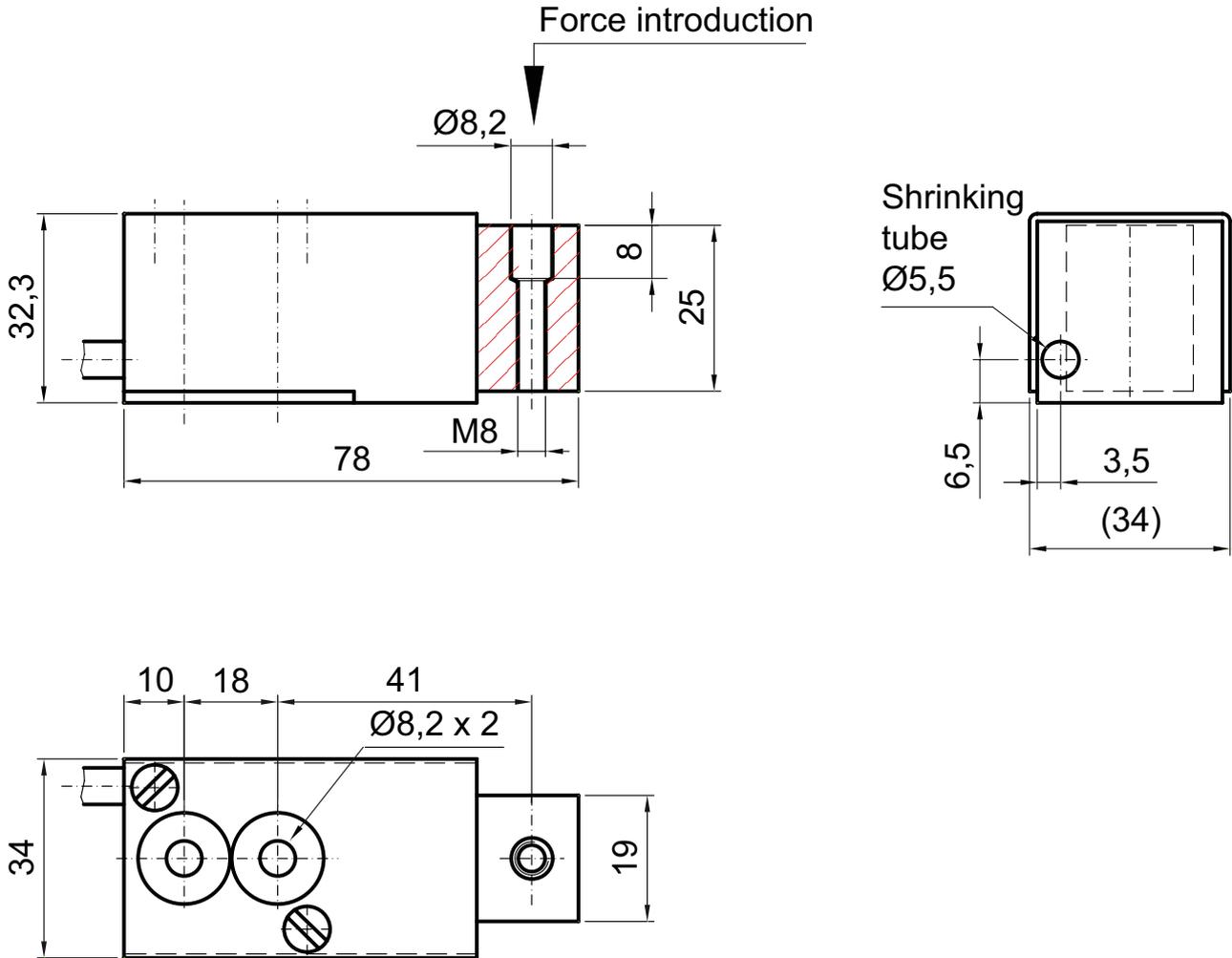
Measuring amplifier	IMA2 DMS
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For higher quantities or on-going demand, additional options are available as described below on request

For Example:

- modified cable with or without connectors
- modified mounting holes or threads
- 6-wire connection

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

