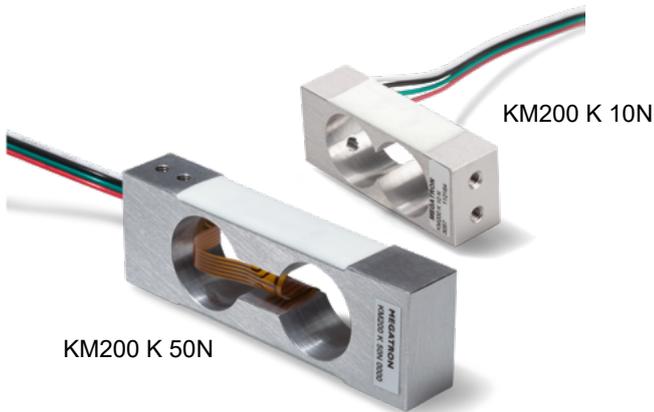


# Data sheet for Force Transducer

Single Point Force Transducer

Series KM200



- Small single point force transducer
- Strain gauge
- For non centric-applications with platform
- Suitable for platforms up to 150x150mm
- Measuring body aluminium
- IP65 protection

The KM200 series of force sensors, which have an aluminium body, work according to the shear beam principle. When used with platforms, they can be employed as load cells for non-legal trade traffic (customer calibration required).

## Data Load Cell

	10 N	50 N
Rated force ( $F_{nom.}$ ) <sup>1</sup>	10 N	50 N
Rated characteristic value @ $F_{nom.}$	0.6 ± 0.06 mV/V	1.2 ± 0.15 mV/V
Safe Overload	150% $F_{nom.}$	120% $F_{nom.}$
Relative linearity error	≤ 0.05 % $F_{nom.}$	≤ 0.03 % $F_{nom.}$
Hysteresis	≤ 0.05 % $F_{nom.}$	≤ 0.03 % $F_{nom.}$
Relative Repeatability error	≤ 0.05 % $F_{nom.}$	≤ 0.03 % $F_{nom.}$
Relative deviation of zero signal	≤ 3 % $F_{nom.}$	
Input resistance	350 ± 3Ω	410 ± 5Ω
Output resistance	350 ± 3Ω	
Insulation resistance	≥ 5 GΩ @ 50 V DC	
Rated range of excitation voltage	10 V DC / AC	
Operating range of excitation voltage	≤ 15 V DC / AC	
Rated temperature range	-10 °C up to +70 °C	
Operating temperature range	-10 °C up to +40 °C	
Protection	IP65	
Temperature effect on characteristic value	≤ 0.3 % $F_{nom.}$ / 10 K	≤ 0.03 % $F_{nom.}$ / 10 K
Temperature effect on zero signal	≤ 0.3 % $F_{nom.}$ / 10 K	≤ 0.03 % $F_{nom.}$ / 10 K
Creep under load	≤ 0.05 % $F_{nom.}$	≤ 0.03 % $F_{nom.}$
Cable dimension	4 x AWG30	4 x AWG28
Cable length from body	ca. 80 mm	
Body material	Aluminium	
Mass	ca. 15 g	ca. 40 g

<sup>1</sup> Maximum force for which the force sensor (force transducer) is nominally designed, i.e. up to which the measurement specifications (data sheet values) are maintained.

# Data sheet for Force Transducer

Single Point Force Transducer

Series KM200

## Order code

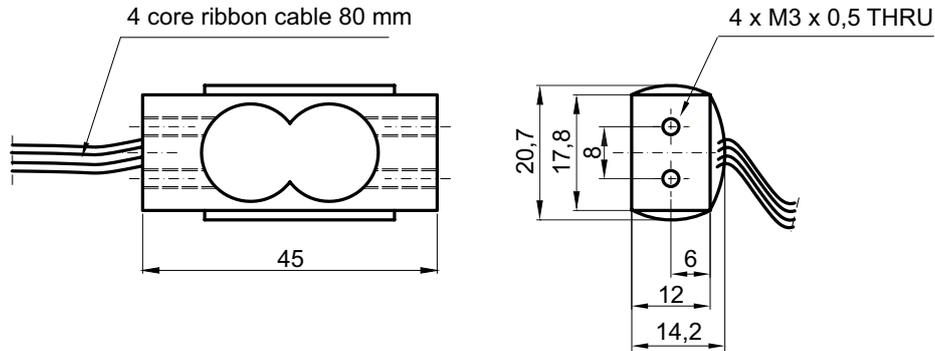
Description	Selection: <b>standard=black/bold</b> , possible <i>options=grey/italic</i>		
<b>Series:</b>	<b>KM200</b>		
<b>Connecting cable: Cable length 80 mm</b>		<b>K</b>	
<b>Rated force: 10 N 50 N</b>			<b>10N 50N</b>

## Accessories (not included)

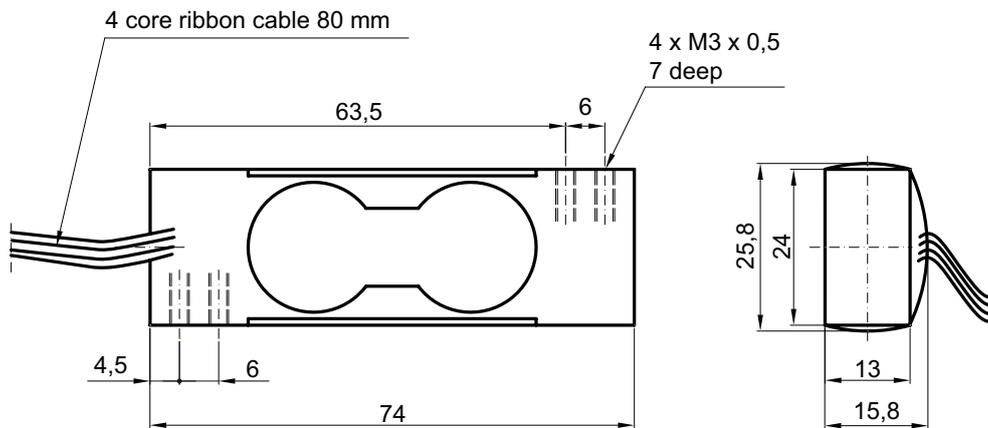
<b>Measuring amplifier</b>	IMA2 DMS
----------------------------	----------

Drawing

## KM200 10N



## KM200 50N



Dimensions in mm

### Cable assignment

For tension:

- Red: +input
- Black: -input
- Green: +output
- White: -output

For pressure:

- Red: +input
- Black: -input
- Green: -output
- White: +output

### Connection diagram tension

