

# Data sheet for Load Cells

Button Load Cell (Pancake)

Series KMC100



- Measuring range 0...300 kN
- Force transmission via metric thread
- 3 housing sizes
- Strain gauge
- Steel alloy
- Degree of protection IP66
- Calibration including measurement data

Series KMC100 force transducer is a all-purpose load cell (pancake). The sensor is often used in presses, testing machines, truck scales and large container and hopper scales.

## Data load cell

Rated force	50kN, 100kN, 200kN, 300kN
Rated characteristic value	3,0 mV / V of rated output
Relative error of characteristic value	≤ 1 % of rated output
Relative repeatability error	≤ 0,25 % of rated output
Relative reversibility error	≤ 0,03 % of rated output
Relative linearity error	≤ 0,03 % of rated output
Reference straight line	≤ 0,03 % of rated output
Relative deviation of zero signal	≤ 1 % of rated output
Rated displacement	≤ 0,5 mm
Input resistance	775 ±20Ω/ 387 ±20Ω (<200kN)
Output resistance	700 ±5Ω/ 350 ±5Ω (<200kN)
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	IP66
Temperature effect on characteristic value	≤ 0,02 % of rated output / 10 K
Temperature effect on zero signal	≤ 0,02 % of rated output / 10 K
Creep under load	≤ 0,5 % of rated output
Cable dimension	4 x AWG24, PTFE isolated, shielded
Cable length from body	ca. 6 m
Body material	Alloy steel
Mass	

1.) Terms and definitions acc. directive VDI/VDE/DKD 2638

# Data sheet for Load Cells

Button Load Cell (Pancake)

Series KMC100

Order code			
Description	Selection: standard=black/bold, possible options=grey/cursive		
Series:	<b>KMC100</b>		
Connecting cable: Cable length 6 m		<b>K</b>	
Rated force:			
50 kN			<b>50kN</b>
100 kN			<b>100kN</b>
200 kN			<b>200kN</b>
300 kN			<b>300kN</b>

## Accessories (not included in delivery)

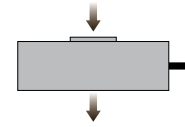
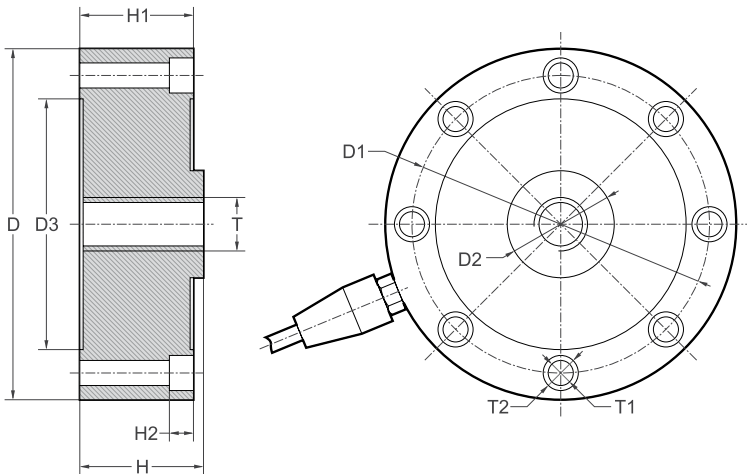
Measuring amplifier	IMA2DMS
---------------------	---------

# Data sheet for Load Cells

Button Load Cell (Pancake)

Series KMC100

## Drawing



Terminal assignment	
Black	- Supply
Red	+ Supply
Green	+ Output
White	- Output

Dimensions in mm

Capacities		D	D1	D2	D3	H	H1	H2	T	T1	T2
50kN	mm	Ø105	Ø89	Ø32	75	37	34	7.2	M16X1.5	8XØ7.5	8XØ10.5
100kN, 200kN	mm	Ø120.6	Ø101.8	Ø39	83	53.5	41	10.5	M32x1.5	8XØ8.5	8XØ14
300kN	mm	Ø141	Ø116.8	Ø50.4	96.9	57.2	50.8	11	M40x1.5	8XØ11	8XØ18