

# Data sheet for Load Cells

Button Load Cell (Pancake)

Series KMC130



- Measuring range 0...300 kN
- Force transmission via through hole with groove
- 2 housing sizes
- Strain gauge
- Steel alloy
- Degree of protection IP66
- Calibration including measurement data

Series KMC130 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	≤ 0,25 % of rated output
Relative repeatability error	≤ 0,03 % of rated output
Relative reversibility error	≤ 0,03 % 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
Rated displacement	≤ 0,5 mm
Input resistance	385 ±5Ω
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	-20 °C .. +60 °C
Operating temperature range	-10 °C .. +40 °C
Protection	IP66
Temperature effect on characteristic value	≤ 0,015 % of rated output / 10 K
Temperature effect on zero signal	≤ 0,026 % of rated output / 10 K
Creep under load	≤ 0,03 % of rated output
Cable dimension	4 x AWG24, PTFE isolated, shielded
Cable length from body	ca. 3 m
Body material	Alloy steel
Mass	

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

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## Order code

Description	Selection: standard=black/bold, possible options=grey/cursive		
<b>Series:</b>	<b>KMC130</b>		
<b>Connecting cable: Cable length 3 m</b>		<b>K</b>	
<b>Rated force:</b>			
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)

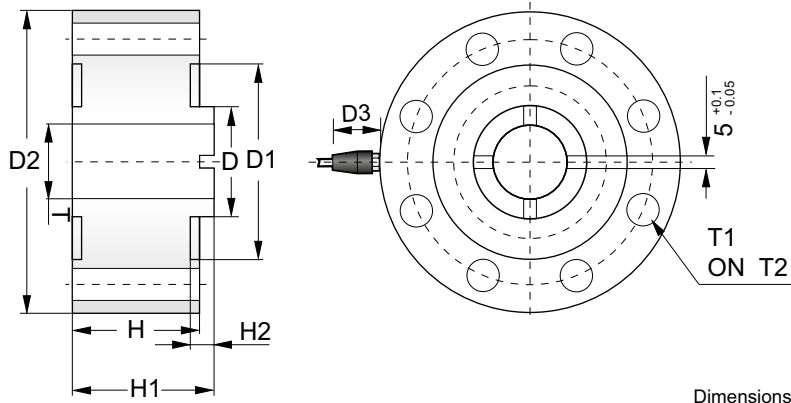
<b>Measuring amplifier</b>	IMA2DMS
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## Drawing



Dimensions in mm

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

Capacities		D	D1	D2	D3	H	H1	H2	T	T1	T2
50kN~100kN	mm	Ø48	Ø84	Ø130	32	55	61	4	Ø32	8×Ø14	8×Ø105
	inch	Ø1.89	Ø3.31	Ø5.12	1.26	2.17	2.4	0.16	Ø1.26	8×Ø0.43	8×Ø4.13
200kN~300kN	mm	Ø72	Ø130	Ø182	32	80	86	4	Ø39	8×Ø15	8×Ø154
	inch	Ø2.83	Ø5.12	Ø7.17	1.26	3.15	3.39	0.16	Ø1.54	8×Ø0.59	8×Ø6.06