Data sheet for Load Cells

Button Load Cell (Pancake) — Series KMC180

- Measuring range 0…300 kN
- Force transmission via through hole
- With large contact surface
- Strain gauge
- Steel alloy
- Degree of protection IP66
- Test protocol available

Series KMC180 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 ($F_{nom.}$)	300kN
Output signal @ F_{nom} (Rated characteristic value)	3.0 mV/V ± 0.25%
Relative repeatability error	≤ 0.03 % F_{nom}
Relative reversibility error	≤ 0.03 % F_{nom}
Relative linearity error	≤ 0.03 % F_{nom}
Relative deviation of zero signal	≤ 1 % F_{nom}
Rated displacement @ F_{nom}	≤ 0.5 mm
Input resistance	775 ± 20 Ω
Output resistance	700 ± 5 Ω
Insulation resistance	≥ 5 GΩ @ 50 V DC
Maximum operating force	≤ 150 % F_{nom}
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 % F_{nom} / 10 K
Temperature effect on zero signal	≤ 0.02 % F_{nom} / 10 K
Creep under load	≤ 0.5 % F_{nom}
Cable dimension	4 x AWG24. PTFE isolated. shielded
Cable length from body	ca. 6 m
Body material	Alloy steel
Mass	ca. 10.8 kg

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

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Order code				
Description	Selection: **standard=black/bold**, possible *options=grey/italic*			
Series:	**KMC180**			
Connecting cable: **Cable length 6 m**		**K**		
Rated force: **300 kN**			**300kN**	
Test protocol				**P**

Accessories (not included in delivery)	
Measuring amplifier	IMA2DMS

Specifications are subject to change without notice

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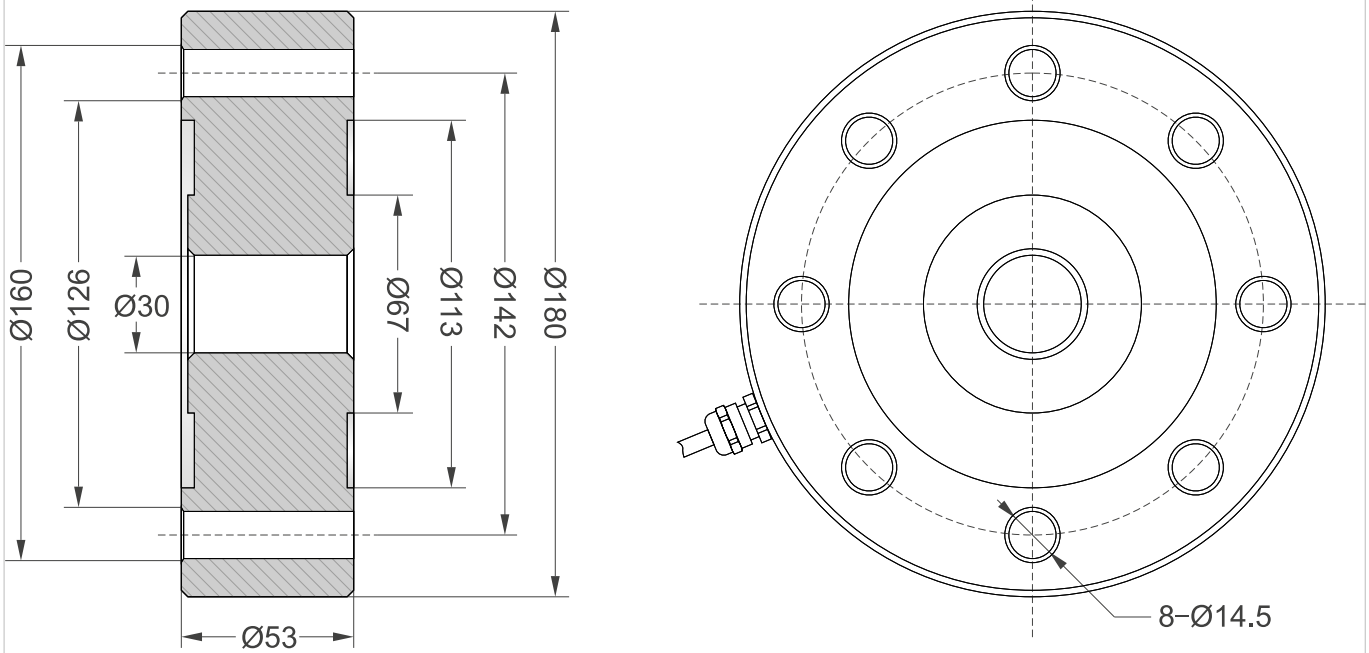
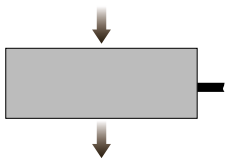
Drawing



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



Dimensions in mm