

KA105 10t, 25t, 40t, 60t, 100t



Description

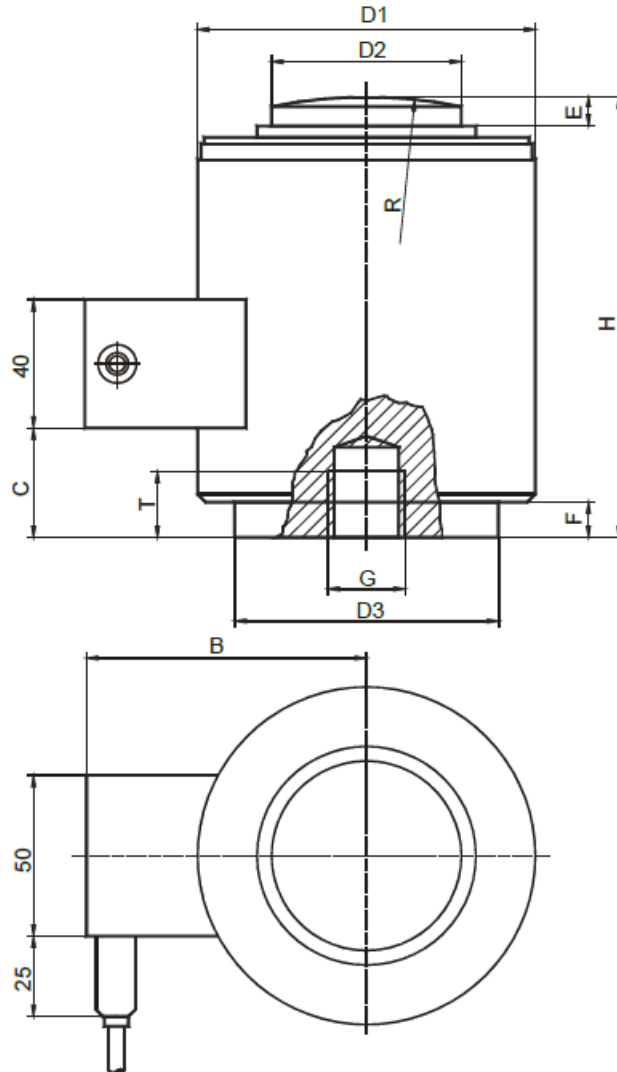
The pressure force load cell KA105 with a welded case is hermetically proof and a 4 column construction. So it is almost unsusceptible against exzentric force.

Even though the cell is able to carry 100t its hight is just 185mm.

On the basis of the geometry of a spherical cap and an even pressing surface, the load cell can also be used to calibrate high pressure compactors or to construct vehicles and track scales as well.

A central winding and a spigot on the underside make it possible to install the sensor easiely.

Dimensions



Nennlast	10t, 25t	40t, 60t	100t
D1	73	105	152,4
D2	31,8	58,7	79,2
D3	58	82,5	123,8
H	82,5	127	184,2
R	152	152	432
C	12	34	72,3
E	6,5	8	23,6
F	1,8	11	21,8
G	M12 x 1,75	M20x2,5	M20x2,5
T	11	20	20

Technical Data

Force sensor

Type	load cell
Force direction	Compression
Operating force	150 %Fs
Rated displacement	0.36 mm
Lateral force limit	10 %Fs
Material	Stainless steel
Breaking force	400 %Fs

Electrical Data

Input resistance	450 Ohm
Tolerance input resistance	5 Ohm
Output resistance	480 Ohm
Tolerance output resistance	5 Ohm
Insulation resistance	5 GOhm
Rated range of excitation voltage f	2.5 ... 5 V
Operating range of excitation voltage f	1 ... 10 V
Zero signal	2 %Fn
Rated output	2 mV/V
relative error of characteristic value	0.02 mV/V

Precision

Accuracy class	0,02%
Relative zero signal hysteresis	0.0167 %Fs
Temperature effect on zero signal	0.0056 %Fs / 5°C
Temperature effect on characteristic value	0.005 %Rd / 5°C
Relative creep	0.0245 %Fs
Relative repeatability error	0.01 %Fs

Temperature

Rated temperature range f	-10 ... 40 °C
Operating temperature range f	-40 ... 80 °C
Storage temperature range f	-40 ... 90 °C





Pin Configuration

Symbol	Description	Wire colour
+Us	positive bridge supply	green
-Us	negative bridge supply	black
+Ud	positive bridge output	white
-Ud	negative bridge output	red

Screen - transparent/orange

accessories

Description	Description
	Calibration Certificate kn/200/5 Factory calibration certificate for force to 200 kN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.
	Calibration Certificate kn/1000/5 Factory calibration certificate for force to 1 MN in accordance with DIN EN ISO / IEC 17025 for test materials monitoring according to DIN ISO 9001: 2008 with 5 load levels and 3 series of measurements.