

## Product Information

Load cell for tensile and compression from 1000 kN to 2000 kN

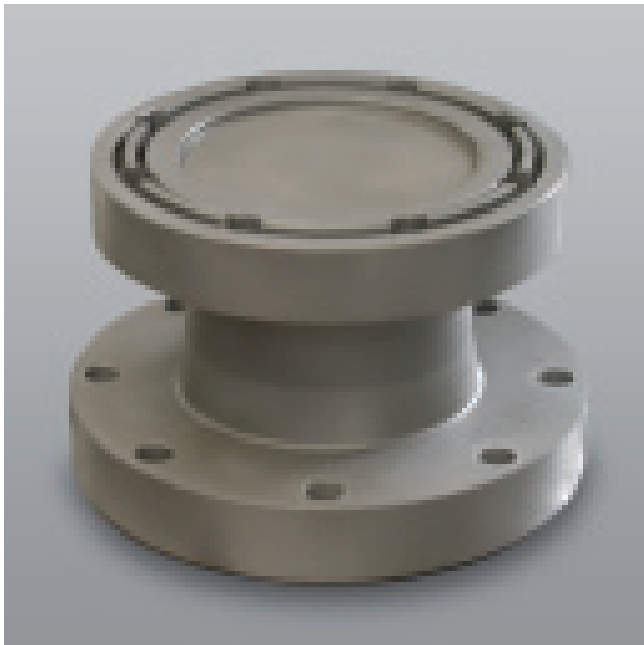


Figure: Load cell 1000 kN

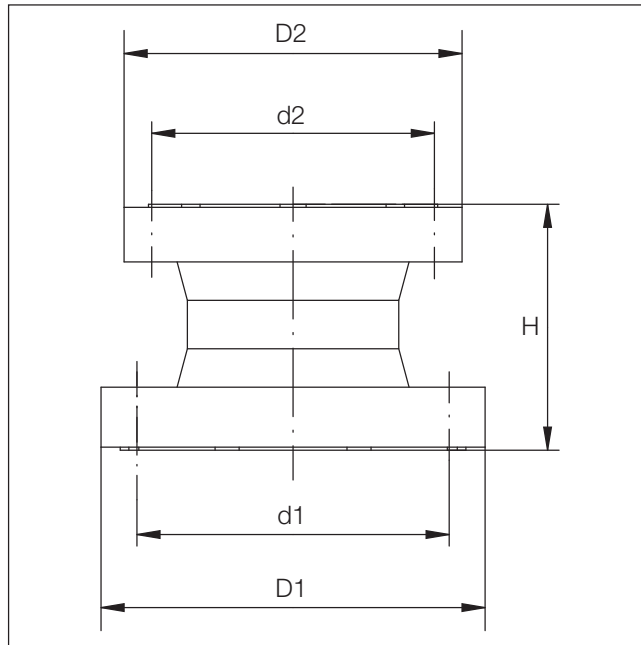


Figure: Drawing of load cell with dimensions

### Key Benefits

- through holes for mounting bolts simplify installation and allow a wide range of testing situations to be accommodated
- hermetically sealed, corrosion-resistant design for high long-term reliability

### Further advantages und features

- Rotational symmetrical measurement body (computer optimised), thus measurement properties are independent of the mounting location
- Independent of the stiffness (and so deflection) of the force transmission
- Insensitive to eccentric force transmission and lateral forces

- No influence through torsional moments
- Low creep error even at abrupt load removal (specimen break)
- The inside of the extensometer is filled with protective gas, so no reaction with oxygen (from air or moisture) is possible
- All hollows are laser welded, and so a long-time stable and very high consistency will be reached towards the environment
- In fatigue tests controlled firmness means quasi-unlimited life of the materials testing machine
- High static overloading gives more protection to the user (tensile strength 300% nominal force)

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<b>Fmax (tensile/compression) [kN]<sup>1</sup></b>	<b>1000</b>	<b>1200</b>	<b>1500</b>	<b>1600</b>	<b>2000</b>
Accuracy grade 1 from ... on [kN]	2.0	2.4	3.0	3.2	4.0
Accuracy grade 0.5 from ... on [kN]	10.0	12.0	15.0	16.0	20.0
Nominal measurement path [mm]	0.41	0.49	0.40	0.40	0.39
Dimensions					
H – Height [mm]	326	326	326	326	326
D1 – Upper mounting stud diameter [mm]	305	305	305	305	305
d1 – Upper mounting stud diameter [mm]	250	250	250	250	250
D2 – Lower mounting stud diameter [mm]	305	305	305	305	305
d2 – Lower mounting stud diameter [mm]	250	250	250	250	250
Eccentricity influence / mm	0.02 %	0.02 %	0.02 %	0.02 %	0.02 %
Lateral force influence at 0.1 x F <sub>nom</sub> on the load cell upper side	0.02 %	0.02 %	0.02 %	0.02 %	0.02 %
Reference temperature [°C]	22 (±1)	22 (±1)	22 (±1)	22 (±1)	22 (±1)
Nominal temperature range [°C]	+10 ... +60	+10 ... +60	+10 ... +60	+10 ... +60	+10 ... +60
Use temperature range [°C]	-30 ... +85	-30 ... +85	-30 ... +85	-30 ... +85	-30 ... +85
Storage temperature range [°C]	-50 ... +85	-50 ... +85	-50 ... +85	-50 ... +85	-50 ... +85
Limit force	150 %	150 %	150 %	150 %	150 %
Static limit lateral force	100 %	100 %	100 %	100 %	100 %
Tensile force	300 %	300 %	300 %	300 %	300 %
Protection system to DIN 40050 part 1	IP67	IP67	IP67	IP67	IP67
<b>Item no.</b>	<b>• 358456</b>	<b>• 358457</b>	<b>• 630382</b>	<b>• 643070</b>	<b>• 011275</b>
	(BPC-L1000KN.G03)	(BPC-L1200KN.G03)	(BPC-L1500KN.G03)	(BPC-L1600KN.G03)	(BPC-L2000KN.G03)

<sup>1</sup> with calibration certificate according to DIN EN ISO 7500-1