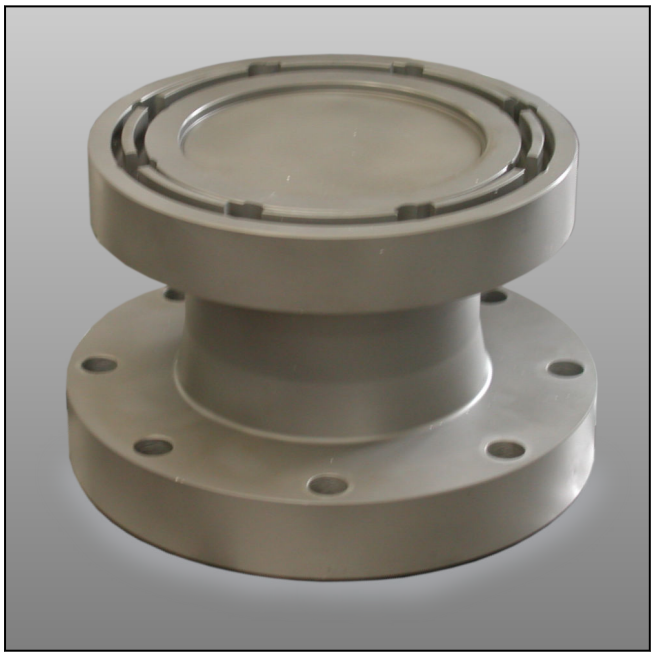
Zwick / Roell

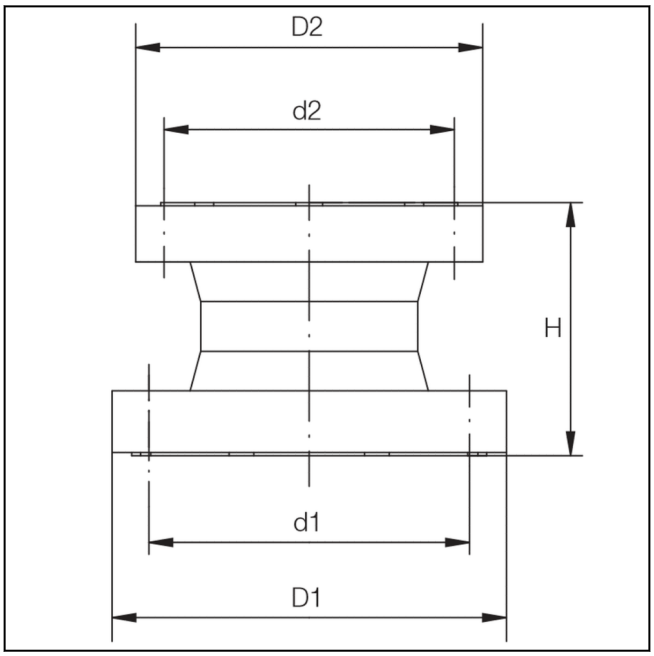
Product Information

Load cell for tensile and compression from 330 kN to 2500 kN

CTA: 11485 92843



Load cell 600 kN



Drawing of load cell with dimenions

Key advantages

- Easy to mount and adapt to measuring requirements, with through hole for mounting-screws.
- Hermetically sealed and corrosion-resistant for high long-term stability.

Additional advantages and features

- Strictly rotationally symmetrical (computer-optimized) - measurement characteristics unaffected by mounting position.
- Uninfluenced by stiffness (and possible deflection) of force application elements.
- Resistant to eccentric force application and transverse forces.
- Unaffected by torques.
- Low creep error, even with abrupt unloading (specimen break).
- Interior of load cell is filled with inert gas to prevent reaction with oxygen (from air or humidity).
- All cavities are laser-welded, providing a high level of environmental sealing with long-term stability.
- Strength monitored in fatigue tests for virtually unlimited service life in the materials testing machine.
- High static overload capacity for increased operator safety (load to failure 300% of nominal force).

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Technical data

Fmax (tensile/compression)	**330[1)]**	**330[1)2)]**	**400[1)]**	**400[1)2)]**	**600[1)]**	**600[1)2)]**	**kN**
Item No.	**630383**	**089308**	**358453**	**358454**	**358455**	**628347**	
Accuracy Class 1 from ...	0.66	0.66	0.8	0.8	1.2	1.2	kN
Accuracy Class 0.5 from ...	3.3	3.3	4.0	4.0	6.0	6.0	kN
Nominal measurement travel	0.17	0.17	0.17	0.17	0.17	0.17	mm
Dimensions							
H – height	160	160	160	160	160	160	mm
D1 – connection Ø top	250	250	250	250	250	250	mm
d1 – connection Ø top	220	220	220	220	220	220	mm
D2 – connection Ø bottom	220	220	220	220	220	220	mm
d2 – connection Ø bottom	184	184	184	184	184	184	mm
Eccentricity influence / mm	0.02	0.02	0.02	0.02	0.02	0.02	%
Transverse force effect at 0.1 x Fnom on the load cell upper side	0.02	0.02	0.02	0.02	0.02	0.02	%
Reference temperature	22 (±1)	22 (±1)	22 (±1)	22 (±1)	22 (±1)	22 (±1)	°C
Nominal temperature range	+10 to +60	+10 to +60	+10 to +60	+10 to +60	+10 to +60	+10 to +60	°C
Service temperature range	-30 to +85	-30 to +85	-30 to +85	-30 to +85	-30 to +85	-30 to +85	°C
Storage temperature range	-50 to +85	-50 to +85	-50 to +85	-50 to +85	-50 to +85	-50 to +85	°C
Limit force	150	150	150	150	150	150	%
Static limiting transverse force	100	100	100	100	100	100	%
Load to failure	300	300	300	300	300	300	%
Protection level as per DIN 40050-1	IP67	IP67	IP67	IP67	IP67	IP67	

1) with calibration certificate according to DIN EN ISO 7500-1

2) with additional mounting stud M 52 x 1.5 for second test area

Fmax (tensile/compression)[1)]	**1000**	**1200**	**1600**	**2000**	**2500**	**kN**
Item No.	**358456**	**358457**	**643070**	**011275**	**061744**	
Accuracy Class 1 from ...	2.0	2.4	3.2	4	5	kN
Accuracy Class 0.5 from ...	10.0	12	16	20	25	kN
Nominal measurement travel	0.41	0.49	0.40	0.39	0.49	mm
Dimensions						
H – height	326	326	326	326	326	mm
D1 – connection diameter top	305	305	305	305	305	mm
d1 – connection diameter top	250	250	250	250	250	mm
D2 – connection diameter bottom	305	305	305	305	305	mm
d2 – connection diameter bottom	250	250	250	250	250	mm
Eccentricity influence / mm	0.02	0.02	0.02	0.02	0.02	%
Transverse force effect at 0.1 x Fnom on the load cell upper side	0.02	0.02	0.02	0.02	0.02	%
Reference temperature	22 (±1)	22 (±1)	22 (±1)	22 (±1)	22 (±1)	°C

All data at ambient temperature.

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Fmax (tensile/compression)[1)] **Item No.**	**1000** **358456**	**1200** **358457**	**1600** **643070**	**2000** **011275**	**2500** **061744**	**kN**
Nominal temperature range	+10 to +60	+10 to +60	+10 to +60	+10 to +60	+10 to +60	°C
Service temperature range	-30 to +85	-30 to +85	-30 ... +85	-30 to +85	-30 to +85	°C
Storage temperature range	-50 to +85	-50 to +85	-50 to +85	-50 to +85	-50 to +85	°C
Limit force	150	150	150	150	150	%
Static limiting transverse force	100	100	100	100	100	%
Load to failure	300	300	300	300	300	%
Protection level as per DIN 40050 Part 1	IP67	IP67	IP67	IP67	IP67	

1) with calibration certificate according to DIN EN ISO 7500-1

All data at ambient temperature.