TEKEMAS

Model CSP
Revere

Compression Load Cell

FEATURES

- Capacities: 10–100 t
- Low profile, multi-column stainless steel construction
- Hermetically sealed, IP66, IP68, and IP69K
- Certified to OIML R-60, 4000d and NTEP class IIIL 10000 divisions
  - ❍ Model CSP offers klb capacity, imperial thread and NTEP approval
  - ❍ Model CSP-M offers metric capacity, thread and OIML approval
- Built-in surge protection tubes (GDTs)
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- **Optional**
  - ❍ ATEX and FM certified versions are available for use in potentially explosive atmospheres
  - ❍ Multi-interval and multiple range versions available
  - ❍ Imperial capacities (25k, 50k, 100k, 200k lbs) not OIML approved

APPLICATIONS

- Truck and rail weighbridges
- Silo and hopper weighing
- Process weighing

DESCRIPTION

The CSP is a multi-column, low profile, stainless steel compression load cell. The unique four column design offers excellent insensitivity to eccentric loads while maintaining accuracy.

This product is suitable for use in road and rail weighbridges and process weighing applications.

The fully leak-tested welded construction, advanced cable entry, and built-in surge protection tubes ensure that this product can be used successfully in harsh environments.

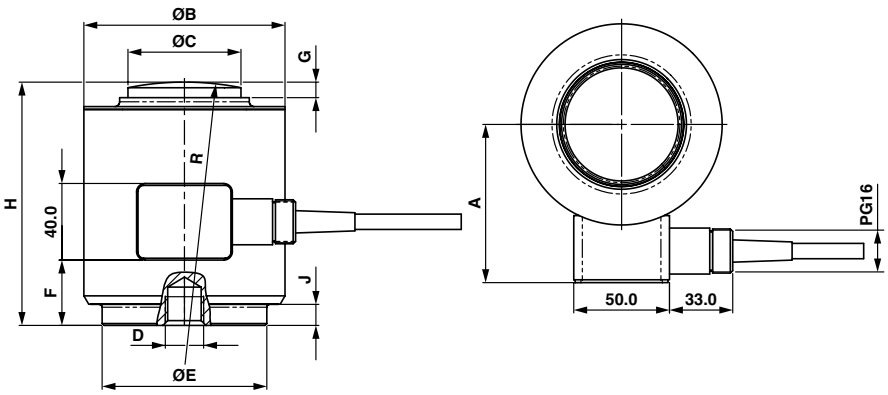
This product meets the stringent Weights and Measures requirements throughout Europe.

OUTLINE DIMENSIONS in millimeters

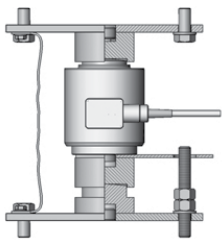
Cable specifications

Standard Cable length	20 m
Excitation +	Green
Excitation –	Black
Output +	White
Output –	Red
Shield	Transparent

Cable screen is not connected to load cell body. Performance may be affected if load cell cables are shortened.



Optional mounting kit—consult Sales Office



Capacity	A	B	C	D	E	F	G	H	I	J
CSP-M										
10–25 t	63	72	32	M12 x 8 Deep	57	13	7	83	2	150
40–60 t	83	105	59	M20 x 20 Deep	86	35	8	127	11	150
100 t	107	150	80	M20 x 20 Deep	124	70	22	185	20	430
CSP										
10–50 klb	63	72	32	1/2″ x 11 Deep	57	13	7	83	2	150
100 klb	83	105	59	3/4″ x 20 Deep	86	35	8	127	11	150
200–30 klb	107	150	80	3/4″ x 20 Deep	124	70	22	185	20	430
500 klb	122	167	94	3/4″ x 20 Deep	136	91	15	228	25	432

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Compression Load Cell

SPECIFICATIONS					
PARAMETER	**VALUE**				**UNIT**
Standard capacities (E_{max})	10, 25, 40, 60, 100[1] 10[2], 25, 40, 50, 60, 75, 100, 150, 200, 300[2], 500[2]				t klb
Accuracy class according to OIML R-60/NTEP	NTEP IIIL	NTEP IIIL	C3	C4	
Maximum no. of verification intervals	10000	3000	3000	4000	
Minimum verification interval ($V_{min}=E_{max}/Y$)[3]	E_{max}/5200	E_{max}/29000	E_{max}/12,500	E_{max}/12,500	
Minimum verification interval, type MR			E_{max}/17,500	E_{max}/17,500	
Rated output (=S)	2				±mV/V
Rated output tolerance	0.02				±mV/V
Zero balance	1.0				mV/V
Total error	0.02	0.05	0.023	0.017	±% FSO
Nonrepeatability	0.01	0.01	0.01	0.009	±% FSO
Zero return	0.015	0.0167	0.0167	0.0125	±% applied load
Creep error (30 minutes)	0.05	0.035	0.0245	0.0184	±% applied load
Temp. effect on min. dead load output	0.00144	0.0027	0.0011	0.0011	±% FSO/°C
Temp. effect on min. dead load output, type MR			0.0008	0.008	±% FSO/°C
Temperature effect on sensitivity	0.00144	0.00144	0.001	0.0007	±% applied load/5
Maximum safe static overload	150				% E_{max}
Ultimate static overload	400				% E_{max}
Maximum safe side load	10				% E_{max}
Excitation voltage	5 to 20				V
Excitation recommended	10				V
Input resistance	450 ±4.5				Ω
Output resistance	480 ±4.8				Ω
Insulation resistance	>5000				MΩ
Compensated temperature range	–10 to +40				°C
Operating temperature range	–40 to +80				°C
Storage temperature range	–50 to +90				°C
Element material	Stainless steel 1.4542				
Sealing (DIN 40.050 / EN60.529)	IP66 and IP68				

[1] 100 t only has C1 grade of OIML

[2] 10, 300, 500 klb are not NTEP approved

[3] Approval limit: Class III $V_{min}=E_{max}/10000$ (0.0014%Of FSO/°C); Class IIIL $V_{min}=E^{max}/30000$ (0.0014%Of FSO/°C)

FSO—Full Scale Output

SC-version: The rated output and the output resistance are balanced in such a way, that the output current is calibrated to within 0.05% of a reference value. This allows easy parallel connection of the load cells.

All specifications subject to change without notice.

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