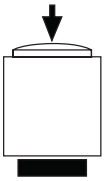
Revere Transducers Europe

Model CSP-M
Compression Load Cell

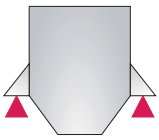
APPROVALS

OIML	C4 $n_{lc} \leq 4000$, Y ≤ 17500, Z ≤ 7500
VTEP	B10 $n_{lc} \leq 10000$
ATEX Ex	II2G EEx ib IIC T6/T4 or II1D T70°C II3G EEx nA II T6/T4 or II3D T70°C
FM APPROVED	Factory Mutual System



APPLICATIONS

Weighbridges



Silo/Hopper Weighing

DESCRIPTION

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

This product is, without doubt, one of the most successful compression cells ever produced and 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.

FEATURES

- Low profile, multi column stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d
- Multi-interval and multiple range versions available
- Built-in surge protection tubes (GDTs)
- ATEX certified versions are available for use in potentially explosive atmospheres
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Digital version available (model SCC)
- Capacities: **10 ➔ 100 t**

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CSP-M SPECIFICATIONS

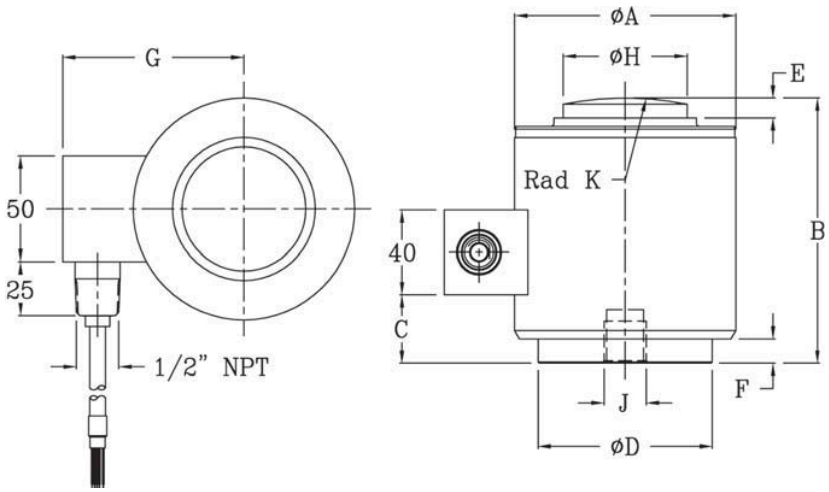
PARAMETER	VALUE					UNIT
Standard Capacities (E_{max})	10, 25, 40, 60, 100					t
Accuracy Class According to OIML R-60 / NTEP	Non-Approved	**NTEP IIIL**	**C3**	**C3MI7.53****	**C4**	
Max. Number of Verification Intervals (n_{lc})		10000	3000	3000	4000	
Minimum Verification Interval ($V_{min}=E_{max}/Y$)		--	E_{max}/12500	E_{max}/12500	E_{max}/12500	
Minimum Verification Interval type MR		--	E_{max}/17500	E_{max}/17500	E_{max}/17500	
Minimum Dead Load Output Return (DR)		--	--	E_{max}/7500	--	
Combined Error	0.0500	0.0200	0.0200	0.0200	0.0170	±% FSO
Non-Repeatability	0.0200	0.0100	0.0100	0.0100	0.0090	±% FSO
Minimum Dead Load Output Return*	0.0500	0.0250	0.0167	0.0067	0.0125	±% applied load
Creep Error (30 Minutes)*	0.0600	0.0250	0.0245	0.0245	0.0184	±% applied load
Creep Error (20-30 Minutes)*	0.0200	0.0030	0.0053	0.0053	0.0039	±% applied load
Temp. Effect on Min. Dead Load Output	0.0250	(0.0010)	0.0056	0.0056	0.0056	±% FSO/5°C
Temp. Effect on Min. Dead Load Output MR			0.0040	0.0040	0.0040	±% FSO/5°C
Temperature Effect on Sensitivity	0.0250	(0.0008)	0.0050	0.0050	0.0035	±% applied load/5°C
Minimum Dead Load	0					$\%E_{max}$
Maximum Safe Over load	150					$\%E_{max}$
Ultimate Over Load	400					$\%E_{max}$
Maximum Safe Side load	10					$\%E_{max}$
Deflection at E_{max}	0.36 max.					mm
Excitation Voltage	5 to 20					V
Maximum Excitation Voltage	25					V
Rated Output (=S)	2					mV/ V
Tolerance on Rated Output	0.02					±mV/ V
Zero Balance	1.0					±% FSO
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	-40 to +90					°C
Element Material (DIN 1.4542 / EN 60.529)	Stainless Steel 1.4542					
Sealing (DIN 40.050)	IP66 and IP68					
SC-Version (Current Calibration)	Standard					

* Applies for the temperature range -10 to +40 °C

** Maximum application range 0.8×E_{max}

FSO: Full Scale Output

OUTLINE DIMENSIONS



Capacity (t)	10,25 t	40,60 t	100 t
A	73.0	105.0	152.4
B	82.5	127.0	184.2
C	12.0	34.0	72.3
D	58.0	82.5	123.8
E	6.5	8.0	23.6
F	1.8	11.0	21.8
G	64.0	87.0	108.2
H	31.8	58.7	79.2
J	M12x1.75 (11 Deep)	M20x2.5 (20 Deep)	M20x2.5 (20 Deep)
K Rad	152.0	152.0	432.0

Note: Dimensions in millimeters

Cable specifications:

Cable length:	3m
Excitation +	Red
Excitation -	Black
Output +	Green
Output -	White
Shield	Transparent

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

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