Model CP-M

Revere

VPG force sensors

Celtron • Revere • Sensortronics • Tedea-Huntleigh

Compression Load Cell

FEATURES

- Capacities: 5 – 100 t
- Low profile, multi-column stainless steel construction
- Hermetic welded seal, IP66/IP68
- cFMus Approved
- EEx(i) and EEx(d) versions are available for use in hazardous areas
- Current Calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- High temperature versions available
- cFMus Approved



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APPLICATIONS

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

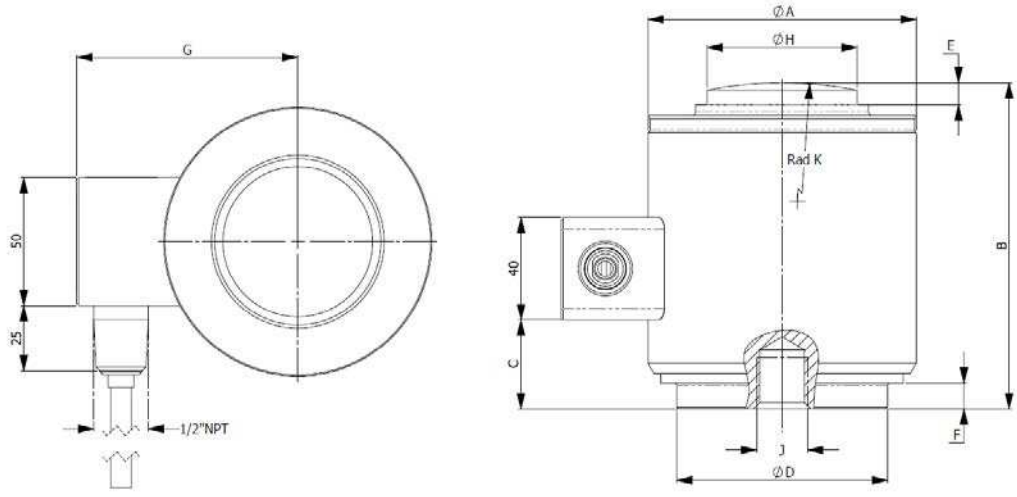
DESCRIPTION

The CP-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 a wide range of truck scales, rail scales and general process weighing applications.

The fully leak-tested welded construction ensures that this product can be used successfully in harshest of environments.

OUTLINE DIMENSIONS in mm



CAPACITY	A	B	C	D	E	F	G	H	J	K Rad
5, 10, 25	Ø73.0	82.5	12.0	Ø58.0	6.5	1.8	64.0	Ø31.8	M12x1.75 (11 Deep)	152.0
40, 60	Ø105.0	127.0	34.0	Ø82.5	8.0	11.0	87.0	Ø58.7	M20x2.5 (20 Deep)	152.0
100	Ø152.4	184.2	72.3	Ø123.8	23.6	21.8	108.2	Ø79.2		432.0

Dimensions: mm. All dimension tolerances according to DIN 7168; middle accuracy unless otherwise specified

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Compression Load Cell

SPECIFICATIONS		
PARAMETER	**VALUE**	**UNIT**
Standard capacities (Emax)	5, 10, 25, 40, 60, 100	t
Accuracy According to Type Designation	D1	
Rated output (=S)	2.00	±mV/V
Rated output tolerance	0.02	±mV/V
Zero balance	2.0	±% S
Combined Error	0.15	±% S
Non-repeatability	0.03	±% S
Minimum Dead Load Output Return[1]	0.06	±% S
Creep Error (30 Minutes)[1]	0.05	±% S
Temp. Effect on Min. Dead Load Output	0.045	±% S/5°C
Temp. Effect on Sensitivity	0.045	±% S/5°C
Minimum Dead Load	0	% Emax
Maximum Safe Static Overload	150	% Emax
Ultimate Overload	400	% Emax
Maximum Safe Side Load	10	% Emax
Deflection at Emax	0.36 max.	mm
Excitation Voltage	5 to 20	VDC
Maximum Excitation Voltage	25	VDC
Input resistance	450 ±4.5	Ω
Output resistance	480 ±4.8	Ω
Insulation resistance	5000	MΩ
Operating temperature range	–18 to +65	°C
Compensated temperature range	–10 to +40	°C
Storage temperature range	–40 to +90	°C
Element material (DIN)	Top & Bottom Stainless Steel 1.4542	
Sealing (DIN 40.050)	IP66 & IP68	
SC-version (Current Calibration)	Standard	
EEx(d) Certification	EEx d IIC T6	
EEx(i) Certification	EEx ib IIC T6 / EEx ib IIC T4	
Cable Length **5 - 10 t** **25 -100 t**	10 20	m
Cable Color Code	Ex+: Green, Ex-: Black, Sig+: White, Sig-: Red, Shield Orange	

[1]Applies for the temperature range -10 to +40 °C

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.

The correct mounting of the load cells is essential to ensure optimum performance.

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

Further information is available on request.

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