

Single Ended Beam Load Cell



FEATURES

- Capacities: 250 - 5000kg
- Low profile, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d
- 1000Ω bridge impedance
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells

OPTIONAL FEATURE

- ATEX versions are available for use in potentially explosive atmospheres, caused by gas or dust

DESCRIPTION

The HCB is a high performance stainless steel beam type load cell. An integral mounting step removes the need for spacer plates and ensures optimum "bolt down" conditions.

This product is suitable for small and medium platform scales, hybrid scales, pallet weighers and process weighing.

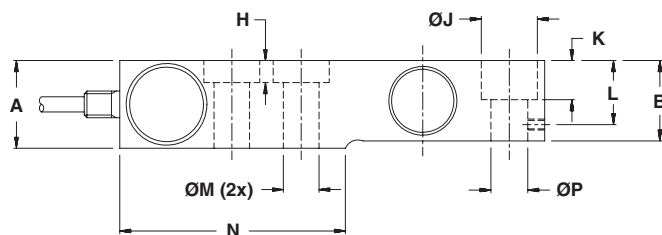
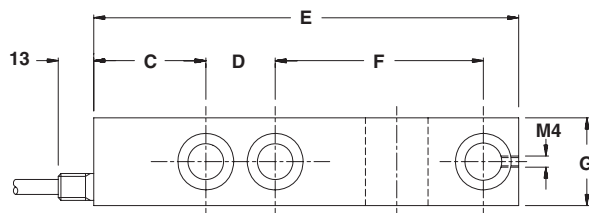
The fully welded construction and waterblock cable-entry ensure that this product can be used successfully in harsh environments found in the food, chemical and allied process industries.

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

APPLICATIONS

- Floor scales
- Tank weighing
- Bin and hopper weighing

OUTLINE DIMENSIONS in mm



Cable specifications:

Cable length: 3 m

Excitation + Green

Excitation - Black

Output + White

Output - Red

Sense + Yellow

Sense - Blue

Screen Orange

Six-wire standard, four wire optional. Cable screen is not connected to load cell body.

Capacity (kg)	250	500	1000	2000	5000
A	31.8	31.80	31.80	35.80	44.0
B	25.2	26.10	29.15	34.00	40.0
C	41.0	41.0	41.0	41.0	19.1
D	25.4	25.4	25.4	25.4	38.1
E	155.5	155.5	155.5	155.5	172.0
F	76.2	76.2	76.2	76.2	95.3
G	31.8	31.8	31.8	31.8	38.0
H	8.0(2x)	8.0(2x)	8.0(2x)	8.0(2x)	-
J	20.5(3x)	20.5(3x)	20.5(3x)	20.5(3x)	30.2
K	13.2	14.2	14.2	14.2	20.0
L	23.2	23.2	23.2	23.2	30.0
M	13.0	13.0	13.0	13.0	20.5
N	82.6	82.6	82.6	82.6	76.2
P	13.5	13.5	13.5	13.5	17.5

SPECIFICATIONS

PARAMETER	VALUE				UNIT
Standard capacities (E_{max})	250, 500, 1000, 2000, 5000				kg
Accuracy class according to OIML R-60	Non-Approved	C3	C4	C3MI6*	
Max. no. of verification intervals		3000	4000	3000	
Min. verification interval (V_{min})		$E_{max}/10000$	$E_{max}/13500^{**}$	$E_{max}/15000$	
MDLOR ($Z=E_{max}/2 \cdot DR$)		--	--	6000	
Min. verification interval, type MR*		$E_{max}/20000$	$E_{max}/20000$	--	
Rated output (=S)	2				mV/V
Rated output tolerance	0.02				±mV/V
Zero balance	1.0				±% FSO
Combined error	0.0500	0.0200	0.0170	0.0200	±% FSO
Non-repeatability	0.0200	0.0100	0.0090	0.0100	±% FSO
Minimum dead load output return*	0.0500	0.0167	0.0125	0.0083	±% applied load
Creep error (30 minutes)	0.0600	0.0245	0.0184	0.0245	±% applied load
Temp. effect on min. dead load output	0.0250	0.0070	0.0050	0.0070	±% FSO/5°C
Temp. effect on min. dead load output MR*		0.0035	0.0035	0.0035	±% FSO/5°C
Temperature effect on sensitivity	0.0250	0.0045	0.0035	0.0035	±% applied load/5°C
Minimum dead load	0				% E_{max}
Maximum safe over load	150				% E_{max}
Ultimate over load	300				% E_{max}
Maximum safe side load	100				% E_{max}
Deflection at E_{max}	0.25 / 0.20 / 0.22 / 0.25 / 1.0				mm
Excitation voltage	5 to 12				V
Maximum excitation voltage	15				V
Input resistance	1000±10				Ω
Output resistance	1000±10				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)	Stainless steel 1.4542				
Sealing (DIN 40.050 / EN60.529)	IP66 and IP68				
SC-Version (current calibration)	Standard				
Recommended torque on fixation bolts	50 - 75 (550 for 5t version)				N*m

* Not applicable for 5t version

** 12500 for 5t version

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.