

Single-Ended Beam Load Cell

FEATURES

- Capacities: 500 kg, 1 t, 2 t, and 5 t
- Low profile, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R60, 6000d
- 1000 Ω bridge impedance
- Current calibration output (SC) ensures easy and accurate connection of multiple load cells
- Integral mounting step
- Optional
 - ATEX versions are available for use in potentially explosive atmospheres, caused by gas or dust

APPLICATIONS

- Platform scales
- Belt scales
- Overhead track scales
- Silo hopper weighing



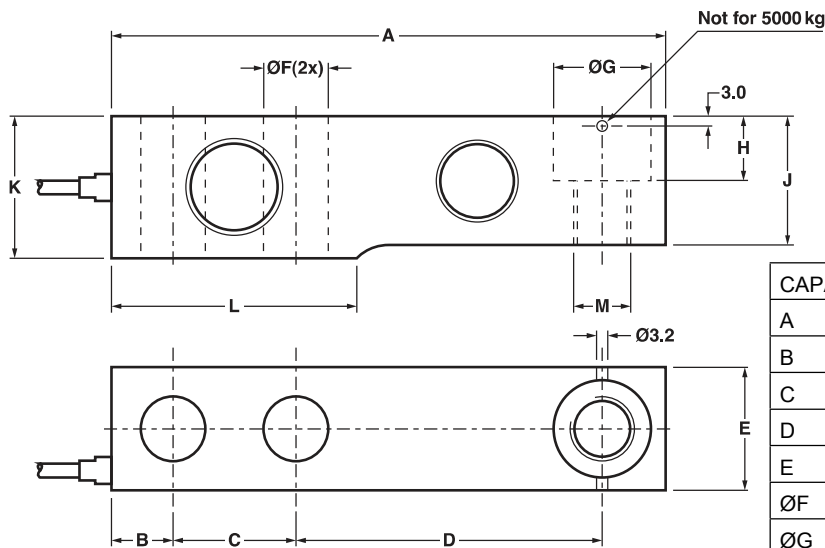
DESCRIPTION

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

OUTLINE DIMENSIONS in millimeters



Cable specifications:

Cable length: 3 m for 500 kg, 1 t
6 m for 2 t, 5 t

Excitation + Green
Excitation - Black
Sense + Yellow
Sense - Blue
Output + White
Output - Red
Shield Transparent

CAPACITY	500 kg	1000 kg	2000 kg	5000 kg
A	130.0	130.0	130.0	172.0
B	15.5	15.5	15.5	19.1
C	25.4	25.4	25.4	38.1
D	76.2	76.2	76.2	95.3
E	31.8	31.8	31.8	38.0
ØF	13.0	13.0	13.0	20.5
ØG	20.5	20.5	20.5	30.2
H	14.2	14.2	14.2	20.0
J	26.0	27.95	31.95	40.0
K	31.8	31.8	35.8	44.0
L	57.1	57.1	57.1	76.2
M	M12	M12	M12	M20

Single-Ended Beam Load Cell

SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Standard capacities (E_{max})	500, 1000, 2000, 5000			kg
Accuracy class according to OIML R-60	Non-Approved	C3	C6 ⁽¹⁾	
Maximum no. of verification intervals (n)		3000	6000	
Minimum verification interval, ($V_{min} E_{max}/Y$)		$E_{max}/6000$	$E_{max}/12,000$	
Minimum verification interval, Type MR		$E_{max}/15,000$	$E_{max}/20,000$	
Rated output (=S)	2			mV/V
Tolerance on rated output	0.02			±mV/V
Zero balance	1.0			±% FSO
Combined error	0.0500	0.0230	0.0120	±% FSO
Non-repeatability	0.070	0.035	0.018	±% FSO
Minimum dead load output return	0.0500	0.017	0.008	±% of applied load
Creep error (30 minutes)	0.0600	0.0245	0.012	±% of applied load
Temperature effect on minimum dead load	0.0250	0.0117	0.0058	±% FSO/5°C
Temperature effect on sensitivity	0.0250	0.0088	0.0045	±% applied load/5°C
Maximum safe over load	150			% E_{max}
Ultimate over load	300			% E_{max}
Maximum safe side load	100			% E_{max}
Deflection at E_{max}	0.20, 0.20, 0.22, 0.31			mm
Excitation voltage	5 to 12			V
Maximum excitation voltage	15			V
Input resistance	1000±50			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	150			N*m

⁽¹⁾500 kg is approved to C3 only

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.

ACB Self-Aligning Mount

ACB-SAM

FEATURES

- Capacities: 250–2000 kg
- Hardened components at all bearing surfaces
- Rocker pin load introduction
- Mechanical protection of the critical load introduction area
- Built-in horizontal movement control and lift-off protection
- Load cell (re)placement after installation of the mount
- Optional
 - Stainless steel or nickel-plated steel versions available
 - Stay rod assembly
 - Can be used also for ACB 0.5–2 ton

APPLICATIONS

- Process control
- Batch weighing
- Silo/hopper weighing
- Belt scale weighing

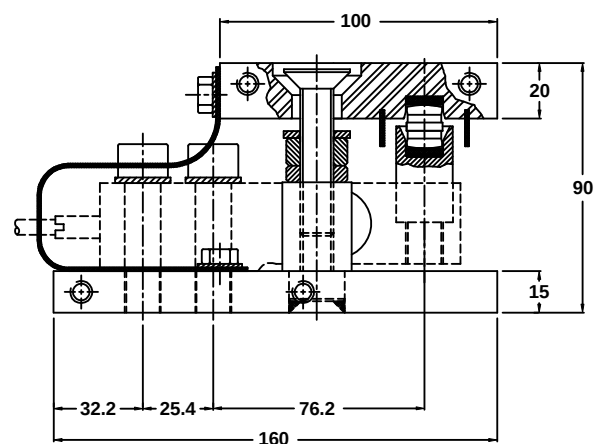
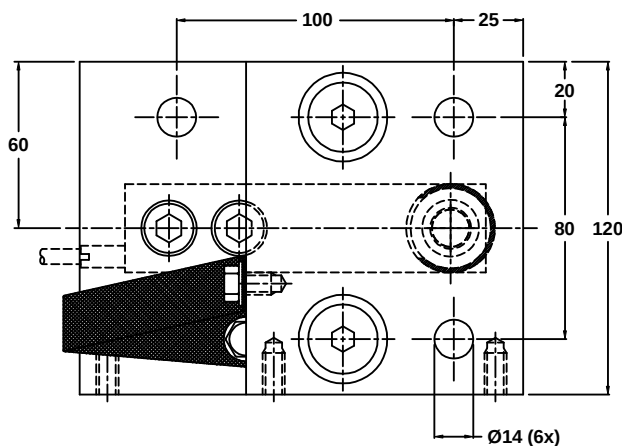


DESCRIPTION

The ACB self-aligning silo mount, combined with the ACB load cell family, provides an ideal solution for process control, batch weighing, silo/hoppers, and belt scale applications.

The ACB mount permits controlled movement in all directions. The design allows the cell to be fitted after installation of the mount.

OUTLINE DIMENSIONS in millimeters



ACB-SRA

STAY ROD ASSEMBLY

Unless major load movement is anticipated, the ACB mount eliminates the need for stay rods. An optional stay rod assembly, which can be bolted to the mount when required, is available.



ACB Self-Aligning Mount

Self-Aligning Mount	
Height, ACB + assembly (mm)	90
Outline drawing—stainless steel	499085-10
Outline drawing—nickel-plated	499085-00
Assembly guidelines	AG 10/06-109/02
Stay Rod Assembly	
Height, ACB + assembly (mm)	90
Outline drawing—stainless steel	499068-10
Outline drawing—nickel-plated	499068-00
Assembly guidelines	AG 10/06-200/02

ACB Foot Assembly

- Capacities: 250–2000 kg
- Hardened components at all bearing surfaces
- Self-aligning, rocker pin load introduction
- Stainless steel construction, suitable for harsh environments

The ACB foot assemblies, together with the ACB load cell family, are an ideal solution for medium capacity belt, pallet and platform scales.

The stainless steel height adjustable and non-adjustable foot assemblies provide excellent load introduction to the load cell while maintaining an overall low profile. The rocker pin based design allows flexibility in platform design without compromising overall system performance.

The rubber foot assembly provides a high performance, shock absorbing, load introduction. The foot is made of yellow passivated ST37 and uses hardened components at all bearing surfaces.



FOOT-A2	
Height Adjustable Foot for ACB	250–2000 kg
Height, ACB + assembly (mm)	63+3/67+3 (2T)
Outline drawing—stainless steel	499134
FOOT-A5	
Height Adjustable Foot for ACB	5 T
Height, ACB + assembly (mm)	72+3
Outline drawing—stainless steel	499135
RUBBER FOOT-R2	
Height, ACB + assembly (mm) for ACB max 2 t	60/64 (2T)
Outline drawing—nickel-plated	499133-00