ACB SINGLE ENDED BEAM LOAD CELL

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.

FEATURES:

- Low profile, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R60, **6000d**^{2}
- 1000 Ω bridge impedance
- Current calibration output (SC) ensures easy and accurate connection of multiple load cells
- Integral mounting step
- **CAPACITIES: 250 → 5000 kg**

Revere Transducers

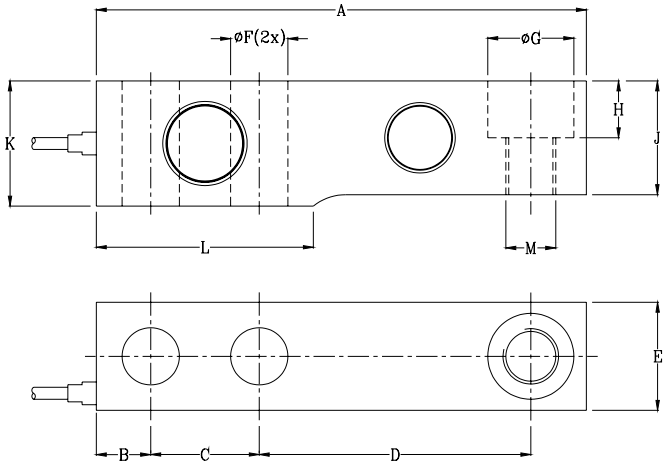
ACB: SPECIFICATIONS

Capacity	E_{max}	kg	250[2], 500[2,3], 1000, 2000, 5000				
Accuracy Class According to OIML R60[2]				C3	C4	C5	C6
Maximum Number of Verification Intervals	n_{lc}			3000	4000	5000	6000
Minimum Verification Interval (V_{min} = E_{max}/Y)	v_{min}			E_{max}/6000	E_{max}/8000	E_{max}/10000	E_{max}/12000
Minimum Verification Interval, **Type MR**[3]	v_{min}			E_{max}/15000	E_{max}/20000	E_{max}/20000	E_{max}/20000
Accuracy Class According to Type Designation[1]			CC	C3	C4	C5	C6
Combined Error		%S	≤ ± 0.050	≤ ± 0.023	≤ ± 0.018	≤ ± 0.014	≤ ± 0.012
Hysteresis		%S	≤ ± 0.050	≤ ± 0.017	≤ ± 0.013	≤ ± 0.010	≤ ± 0.008
Non-Repeatability	E_R	%S	≤ ± 0.070	≤ ± 0.035	≤ ± 0.026	≤ ± 0.021	≤ ± 0.018
Creep Error (30 Minutes)		%S	≤ ± 0.060	≤ ± 0.025	≤ ± 0.018	≤ ± 0.015	≤ ± 0.012
Creep Error (20-30 Minutes)		%S	≤ ± 0.0200	≤ ± 0.0053	≤ ± 0.0039	≤ ± 0.0032	≤ ± 0.0026
Minimum Dead Load Output Return	MDLOR	%S	≤ ± 0.050	≤ ± 0.017	≤ ± 0.013	≤ ± 0.010	≤ ± 0.008
Minimum Dead Load Output Return, **Type MI6**	MDLOR	$\%S_{nom}$		≤ ± 0.008	≤ ± 0.008	≤ ± 0.008	
Temp. Effect on Min. Dead Load Output	TC_o	$\%S_{nom}/5^oC$	≤ ± 0.0250	≤ ± 0.0117	≤ ± 0.0088	≤ ± 0.0070	≤ ± 0.0058
Temp. Effect on Min. Dead Load Output, **Type MR**[3]	TC_o	$\%S_{nom}/5^oC$		≤ ± 0.0047	≤ ± 0.0035	≤ ± 0.0035	≤ ± 0.0035
Temperature Effect on Sensitivity	TC_S	$\%S/5^oC$	≤ ± 0.0250	≤ ± 0.0088	≤ ± 0.0065	≤ ± 0.0053	≤ ± 0.0045
Minimum Deadload	E_{min}	$\%E_{max}$	0				
Safe Load Limit	E_{lim}	$\%E_{max}$	150				
Ultimate Load	E_{ult}	$\%E_{max}$	300				
Maximum Safe Sideload		$\%E_{max}$	100				
Deflection at E_{max}		mm	0.13, 0.13, 0.21, 0.29, 0.38				
Excitation Voltage		V	5 … 12				
Maximum Excitation Voltage		V	15				
Rated Output	S_{nom}	mV/V	2 ≤ ± 0.02				
Current Calibration	SC-version		Standard				
Zero Balance		$\%S_{nom}$	≤ ± 1.0				
Input Resistance	R_{in}	Ω	1000 ± 50				
Output Resistance	R_{out}	Ω	1000 ± 10				
Insulation Resistance	R_{ins}	MΩ	≥ 5000				
Compensated Temperature Range	T_{cps}	°C	-10 … +40				
Operating Temperature Range	T_{opr}	°C	-40 … +80				
Storage Temperature Range	T_{srg}	°C	-40 … +90				
Element Material			Stainless steel 1.4542				
Sealing (DIN 40.050 / EN 60.529)			IP66 and IP68				
Recommended Torque on Fixation Bolts		Nm	150				
ATEX options for Potentially Explosive Atmospheres			Pending				

1 The specified accuracies apply for the compensated temperature range.
2 Capacities 1, 2 and 5t are OIML R60 C6 approved; 500kg C3 approved and for 250kg approval pending.
3 For version 500kg-C3MR: v_{min} = E_{max}/20000 and TC_o= ≤ ± 0.0035

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.

Correct mounting of the load cells is essential to ensure optimum performance.
Further information is available on request.



	Dimensions in mm				
E_{max} (kg)	250	500	1000	2000	5000
A	130.0	130.0	130.0	130.0	172.0
B	15.5	15.5	15.5	15.5	19.1
C	25.4	25.4	25.4	25.4	38.1
D	76.2	76.2	76.2	76.2	95.3
E	31.8	31.8	31.8	31.8	38.0
F	13.0	13.0	13.0	13.0	20.5
G	20.5	20.5	20.5	20.5	30.2
H	14.2	14.2	14.2	14.2	20.0
J	25.2	26.0	27.95	31.95	40.0
K	31.8	31.8	31.8	35.8	44.0
L	57.1	57.1	57.1	57.1	76.2
M	M12	M12	M12	M12	M20

Cable specifications:

Length 3m for capacities up to 1t.
Length 6m for 2t and 5t.
6-Wire cable standard.

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

Shield is not connected to the load cell body.

All dimension tolerances according to ISO 2768m, unless otherwise specified.

All specifications subject to change without notice.

6/3/50/01 E

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