

Universal Load Cell

FEATURES

- Capacities: 50-5000 kg, 100-10k lbs
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 3000d
- Integrated overload stop (50–500 kg)
- Current calibration output (SC version) ensures easy and accurate parallel connection of multiple load cells
- Optional
 - ATEX and FM certified versions are available for use in potentially explosive atmospheres

APPLICATIONS

- Hybrid scales
- · Process weighing
- · Belt checkweighers
- Dynamometers
- · Material testing machines

DESCRIPTION

The BSP is a stainless steel S-type load cell that can be used in either tension or compression.

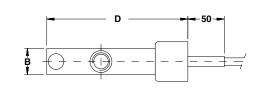


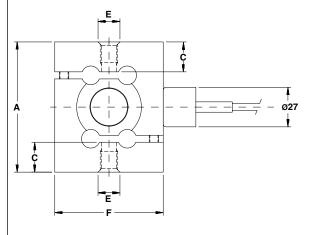
This product is suitable for a wide range of hybrid scales, overhead track scales, belt scales, and process weighing applications.

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

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

OUTLINE DIMENSIONS in millimeters





Cable specifications

Cable length: 10m

Excitation + Green
Excitation - Black
Output + White
Output - Red
Shield Transparent

Cable screen is not connected to the load cell body.
Performance may be affected if load cell cables are shortened.
Tension applications result in a negative output signal.

Capacity (kg)	50, 125	250	500	1250	2500, 5000
A	84.3	88.9	88.9	95.2	120.6
В	23.9	18.0	18.0	24.1	36.6
C thread	12.7	14.0	14.0	14.0	29.2
D	85.7	84.1	96.8	84.1	84.1
E	M8x1.25		M1:	2x1	M24x2
F	63.5	61.9	74.6	61.9	61.9

Capacity (lb)	100, 250	500	1k	2.5k	5k, 10k
Α	3.32	3.50	3.50	3.75	4.75
F	2.48	2.44	2.94	2.44	2.44
В	0.94	0.71	0.71	0.95	1.44
D	3.36	3.32	3.81	3.31	3.31
E threads	3/8-24UNF-3B	1/2	-20 UNF	1-14 UNS-3B	

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Universal Load Cell

SPECIFICATIONS									
PARAMETER		VALUE	UNIT						
Standard capacities (E _{max})	50, 125,	250, 500, 1250, 25	kg						
Standard capacities (E _{max})	100, 250, 500, 1000, 2500, 5000, 10000			lbs					
Accuracy class according to OIML R-60 /NTEP	NTEP IIIL	Non-Approved	C3						
Maximum number of verfication intervals	10000		3000						
Minimum verification interval = V _{min} /E _{max} /Y)			E _{max} /10000						
Rated output (=S)	3 (2	for 2500 and 5000	mV/V						
Rated output tolerance	0.03 (0.02 for 2500 and 5000 kg)			± mV/V					
Zero balance	1.0			±% FSO					
Combined error	0.0200	0.0500	0.0200	±% FSO					
Non-repeatability	0.0100	0.0200	0.0100	±% FSO					
Minimum dead load output return		0.0500	0.0167	±% FSO					
Creep error (30 minutes)		0.0600	0.0245	±% FSO					
Creep error (20–30 minutes)	0.0300	0.0200		±% FSO					
Temp. effect on minimum dead load output	(8000.0)	0.0250	0.0070	±% FSO/5°C (/°F)					
Temperature effect on sensitivity	(0.0010)	0.0250	0.0050	±% FSO/5°C (/°F)					
Minimum dead load		0	% E _{max}						
Maximum safe overload		150	% E _{max}						
Ultimate overload		300	% E _{max}						
Maximum safe side load		100	% E _{max}						
Deflection at E _{max}		0.28 max.	mm						
Excitation voltage		5 to 15	V						
Maximum excitation voltage		18	V						
Input resistance		350±3.5	Ω						
Output resistance		350±3.5	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								

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.



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