

# SB/SBA Single beam load cell

## Description

Capacities: ( $E_{max}$ )  
0.5, 1, 2, 3, 5, 8, 10, 20t

Rated output:  
2.0mV/V  
Digital: 1,000,000d

Accuracy:  
C3 OIML R60

Material of elastomer:  
Alloy steel or stainless steel

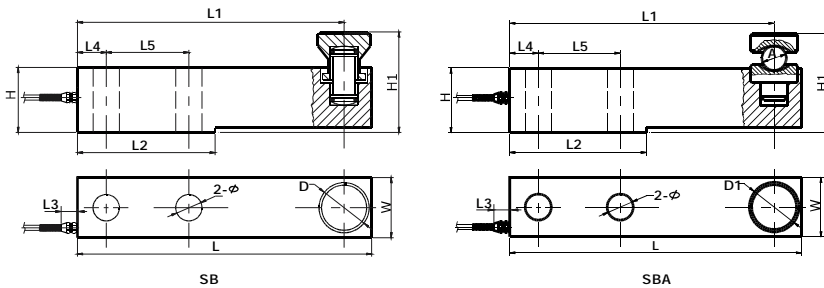
Execution standard:  
GB/T 7551-1997 Certificate  
(eqv OIML R60)  
Combined error: 0.015%

Sealed to IEC 529:  
Protection grade: IP67 or IP68.  
Protection against total immersion  
in water for 30 minutes at a pressure  
corresponding to a 1 m head of water.



## Dimensions

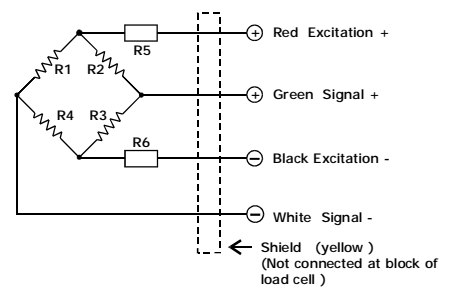
(In mm. 1mm = 0.03937 inches)



CAP./SIZE	L	L1	L2	L3	L4	L5	H	H1	φ	D	D1	W	A
0.5, 1, 2, 3t	203	181	95	24	19	64	43	57.9	13	35	39	37	15.9
5, 8t	235	213	110	24	23	66	52	78.9	21	42	44	48	25.48
10t	279	247	133	24	25	82	67	127.7	28	57	58	60	38.1
20t	318	280	153	24	32	89	82.5	143.5	34	70	69	70	50.8

## Circuit Diagram

Electrical Termination  
4 Core cable standard lengths:  
0.5~3t: 3m, 5~8t: 7m, 10t: 9m, 20t: 12m  
Diameter: φ6  
Connection:  
Refer to the following drawing:



**Notice:**  
Do not change the length of cable, or lese,  
it will effect the sensitivity of load cell.

## Specification

Item\ Parameter	C3	Unit
Rated load ( $E_{max}$ ):	0.5, 1, 2, 3, 5, 8, 10, 20	t
Maximal numbers of load cell verification Intervals (Nic):	3000	d
Minimum load cell verification intervals Intervals (Vmin):	0.01	% of rated load
Rated output (Cn):	2.0 ± 0.1%	mV/V
*Combined error:	0.015	±% of rated output
Temperature effect on sensitivity (Tkc):	0.0012	±% of rated output/°C
Temperature effect on zero balance (TK0):	0.0008	±% of rated output/°C
Zero balance:	1.0	±% of rated output
Input resistance (Rlc):	385 ± 5	Ω (Ohms)
Output resistance (Ro):	351 ± 2	Ω (Ohms)
Insulation resistance:	≥ 5000	MΩ (Mega-Ohms)
Safe overload:	150	% of rated capability
Ultimate overload:	300	% of rated capability
Operating temperature range:	-20 ~ +70 / -20 ~ +160	°C / °F
Recommend excitation:	8 ~ 15	V (DC or AC)
Maximum excitation:	18	V (DC or AC)
Material of elastomer:	Alloy steel / Stainless steel	
Protection class:	IP67/IP68	

The data for deviation of synthesis error, TK0, Tkc are typical values. The sum of these data meets the requirements according to OIML R60

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