



**Key feature:**

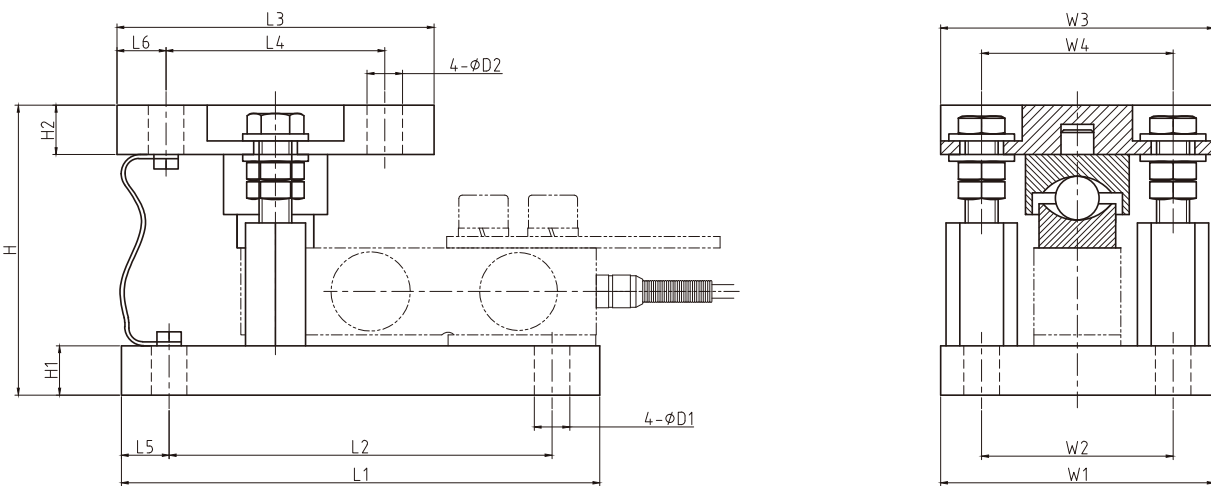
- Compact and easy installation.
- Upper plate with blind hole to be loaded.
- Adjustable height screw against overload and overturn.
- Self-reset vertical force with ball between upper load cup and bottom load cup, to ensure good weighing repeatability.
- Alloy steel and stainless steel optional.
- Assembled with single-ended shear beam B510A



**Product description:**

The M-B510A-1A is a typical weigh module assembled with B510A load cell, which is designed for static weighing system, such as hopper, silo, vessel and tank weighing systems. Capacity is from 50kg to 10t.

**Dimensions (in mm& lb):**



Rated Capacity	L1	L2	L3	L4	L5	L6	H	H1	H2	W1	W2	W3	W4	D1	D2
lb/inches															
100-4,000; 5,000SE	6.89	5.51	4.57	3.15	0.69	0.71	4.17	0.71	0.71	3.94	2.76	3.94	2.76	0.51	0.51
5,000-10,000	9.25	7.87	5.91	3.94	0.69	0.98	5.31	0.91	0.91	6.30	3.54	6.30	3.54	0.67	0.67
15,000-20,000	12.20	9.84	8.28	5.92	1.18	1.18	7.33	1.12	1.50	7.09	4.33	7.09	4.33	1.02	1.02
kg/mm															
50-2,000	175.0	140.0	116.0	80.0	17.5	18.0	106.0	18.0	18.0	100.0	70.0	100.0	70.0	13.0	13.0
3,000-5,000	235.0	200.0	150.0	100.0	17.5	25.0	135.0	23.0	23.0	160.0	90.0	160.0	90.0	17.0	17.0
7,500-10,000	310.0	250.0	210.4	150.4	30.0	30.0	186.3	28.5	38.0	180.0	110.0	180.0	110.0	26.0	26.0

## M-B510A-1A Weighing Module Specifications

Parameter	Units	Specification	
Model No.		M-B510A-1A	
Load Cell		B510A	
Rated capacity (E <sub>max</sub> )	lb / Klb	100; 250; 500 / 1; 2.5; 4; 5SE <sup>4)</sup> ; 5; 10; 15; 20	
Rated capacity (E <sub>max</sub> )	kg / t	50; 100; 250 / 0.5; 1; 2; 3; 5; 7.5; 10	
Rated output	mV/V	3.0 ± 0.003	
Combined error	% of E <sub>max</sub>	< ± 0.017	
Repeatability error	% of AL <sup>3)</sup>	< ± 0.010	
Creep; 30 minute	% of AL	< ± 0.017	
Min. dead load output return (DR); 30 min	% of AL	< ± 0.017	
Temp. effect on	Min. dead load output	% of E <sub>max</sub> /°C	< ± 0.0023
	Rated output <sup>2)</sup>	% of AL/°C	< ± 0.0020
Temperature range	Compensated	°C(°F)	-10 to +40 [+14 to +104]
	Operating		-30 to +65 [-22 to +149]
	Safe storage		-40 to +80 [-40 to +176]
Excitation voltage	Recommended	V AC/DC	5 ~ 15
	Maximum		15
Terminal resistance	Excitation	Ω	382 ± 5
	Output		350 ± 3
Insulation resistance @50VDC	MΩ	>5000	
Breakdown voltage	V AC	>500	
Seal type / IP rating			Cap. ≤250kg/500lb: Silicon rubber / IP66
			Cap. ≥500kg/1Klb: Hermetically welded / IP68
Load limit	Safe	% of E <sub>max</sub>	150
	Ultimate		200
Cable length			Cap. ≤2000kg/5000lb SE: 3.0
			Cap. ≥3000kg/5000lb: 5.0

### Notes:

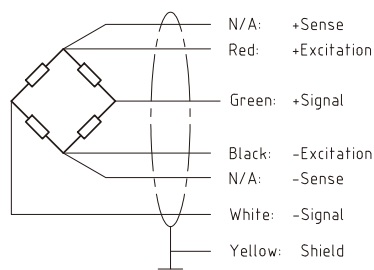
<sup>1)</sup> Error due to the combined effect of non-linearity and hysteresis

<sup>2)</sup> The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44

<sup>3)</sup> AL = Applied Load

<sup>4)</sup> SE = Small Edition

Cable Colour Code: 4-wire [Optional: 6-wire]



Shield connected to load cell body