

LMB-A

Small-Sized Compression Load Cells

● 50 N to 2 kN



NEW



LMB-A-500N to 2KN



LMA-A-50 to 200N

- TEDS-installed versions can be manufactured. Inquiries are welcome.

Ultra-small and lightweight LMB-A series load cells can be used by merely putting or bonding on the subject site or setting in a hollow.

Features

- Ultra-small sized
- Lightweight
- Low price
- Suitable for load distribution measurement

Specifications

Performance

Rated Capacity: See table below.

Nonlinearity: Within $\pm 0.5\%$ RO

Hysteresis: Within $\pm 0.5\%$ RO

Repeatability: Within 0.3% RO

Rated Output: 1.4 mV/V (2800 $\mu\text{m/m}$) or more

Note: Rated output is sorted to one of the classes divided by every 1% difference in output value to the rated capacity. Since the rated output stated in the Test Data Sheet is the center value of the class, it may have a maximum error of $\pm 0.5\%$.

Environmental Characteristics

Safe Temperature Range: -10 to 80°C (noncondensing)

Compensated Temperature Range: 0 to 70°C (noncondensing)

Temperature Effect on Zero Balance:

Within $\pm 0.1\%$ RO/ $^\circ\text{C}$ (LMB-A-50N)

Within $\pm 0.05\%$ RO/ $^\circ\text{C}$ (LMB-A-100N to 2KN)

Temperature Effect on Output

Within $\pm 0.05\%/^\circ\text{C}$

Electrical Characteristics

Safe Excitation Voltage: 7 VAC or DC

Recommended Excitation Voltage: 1 to 5 VAC or DC

Input Resistance: $350\ \Omega \pm 2.5\%$

Output Resistance: $350\ \Omega \pm 2.5\%$

Cable: 4-conductor (0.035 mm^2) vinyl shielded cable, 1.7 mm diameter by 2 m long, bared at the tip (Shield wire is not connected to mainframe.)

Mechanical Properties

Safe Overload Rating: 150%

Natural Frequency: See table below.

Spring Constant: See table below.

Weight

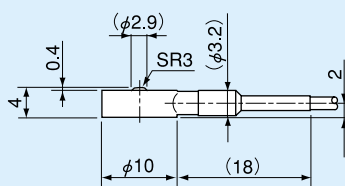
LMB-A-50 to 200N: Approx. 1.5 g (excluding cable)

LMB-A-500N to 2KN: Approx. 6 g (excluding cable)

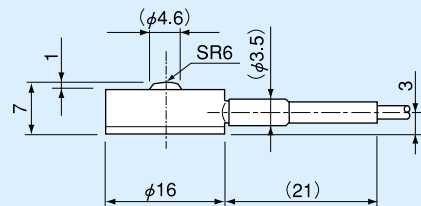
Protection Rating: Approximately equivalent to IP64

Model	Rated Capacity	Natural Frequency (Approx.)	Spring Constant (kN/mm)
LMB-A-50N	50 N	40 kHz	2.4
LMB-A-100N	100 N	47 kHz	4.5
LMB-A-200N	200 N	59 kHz	8.8
LMB-A-500N	500 N	37 kHz	16
LMB-A-1KN	1 kN	45 kHz	26
LMB-A-2KN	2 kN	54 kHz	41

Dimensions



LMB-A-50 to 200N



LMB-A-500N to 2KN