

Small-Sized Compression Load Cells

10 mm dia., 4 mm thick

LMBT-A

50 N to 2 kN

Ultra-miniature

Lightweight

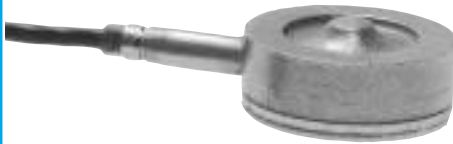
For high temp.

Suitable for load distribution measurement

NEW



LMBT-A-50N to 200N



LMBT-A-500N to 2kN

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

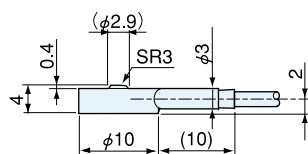
Compact and lightweight load cells in the LMBT-A series can be used by merely putting or bonding on the subject site or setting in a hollow.

Specifications

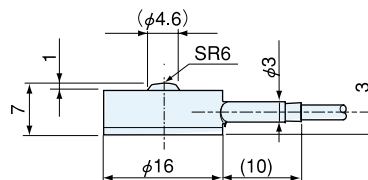
Performance	
Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.3\%$ RO
Hysteresis	Within $\pm 0.3\%$ RO
Repeatability	Within 0.3% RO
Rated Output	1.4 mV/V (2800 $\mu\text{m/m}$) or more
Environmental Capability	
Safe Temp. Range	-20 to 120°C (noncondensing)
Comp. Temp. Range	-10 to 100°C (noncondensing, excluding the nameplate)
Temp. Effect on Zero Bal.	Within $\pm 0.05\%$ RO/°C
Temp. Effect on Out.	Within $\pm 0.05\%$ /°C
Electrical Characteristics	
Safe Excit. Voltage	7 V AC or DC
Recom. Excit. Voltage	1 to 5 V AC or DC
Input Resistance	350 $\Omega \pm 2.5\%$
Output Resistance	350 $\Omega \pm 2.5\%$
Cable	4-conductor (0.035 mm ²) fluoroplastics shielded cable 1.8 mm diameter by 2 m long, bared at the tip (Shield wire is not connected to the mainframe.)
Mechanical Properties	
Safe Overload Rating	150%
Natural Frequency	See table below.
Spring Constant	See table below.
Weight	50 to 200 N: Approx. 1.5 g (excluding cable) 500 N to 2 kN: Approx. 7 g (excluding cable)
Protection Rating	Approximately equivalent to IP 64

Model	Rated Capacity	Nat. Freq. (App.)	Spring Constant (App.)
LMBT-A-50N	50 N	40 kHz	2.4 kN/mm
LMBT-A-100N	100 N	47 kHz	4.5 kN/mm
LMBT-A-200N	200 N	59 kHz	8.8 kN/mm
LMBT-A-500N	500 N	37 kHz	16 kN/mm
LMBT-A-1kN	1 kN	45 kHz	26 kN/mm
LMBT-A-2kN	2 kN	54 kHz	41 kN/mm

Dimensions



LMBT-A-50N to 200N



LMBT-A-500N to 2kN