



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

LMBT-A

Small-sized Compression Load Cell



Compact, supports high temperatures
Ideal for load distribution measurement

- Rated capacity: 50 N to 2 kN
- High temp. (compensated: -10 to 100°C)

Ultra-small and lightweight high-temperature load cells. It can be used by adhering it, fitting it into a recess.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.3\%$ RO
Hysteresis	Within $\pm 0.3\%$ RO
Repeatability	0.3% RO or less
Rated Output	1.4 mV/V or more

Environmental Characteristics

Safe Temperature	-20 to 120°C (Non-condensing)
Compensated Temperature	-10 to 100°C (Non-condensing)
Temperature Effect on Zero	Within $\pm 0.05\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.05\%/^{\circ}\text{C}$

Electrical Characteristics

Safe Excitation	7 V AC or DC
Recommended Excitation	1 to 5 V AC or DC
Input Resistance	350 Ω $\pm 2.5\%$
Output Resistance	350 Ω $\pm 2.5\%$
Cable	4-conductor (0.035 mm ²) fluoroplastic shielded cable, 1.6 mm diameter by 2 m long, bared at the tip. (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Spring Constant	See table below.
Material	Stainless steel
Weight	50 to 200N: Approx. 1.5 g (Excluding cable) 500N to 2KN: Approx. 6.5 g (Excluding cable)
Degree of Protection	IP64 (JIS C 0920/IEC 60529)
Compliance	Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS)

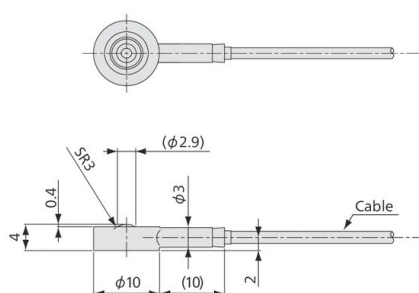
■ **Optional Accessories** Mount base CFM-B

Models

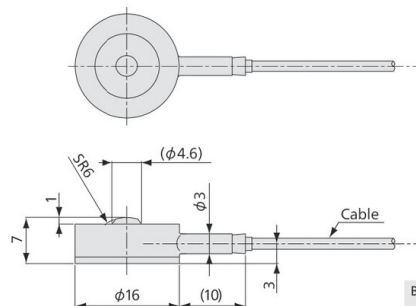
Model	Rated Capacity	Natural Frequencies (Approx.)	Spring Constant (Approx.)
LMBT-A-50N	50 N	40 kHz	2.4 kN/mm
LMBT-A-100N	100 N	47 kHz	4.5 kN/mm
LMBT-A-200N	200 N	59 kHz	8.8 kN/mm
LMBT-A-500N	500 N	37 kHz	16 kN/mm
LMBT-A-1kN	1 kN	45 kHz	26 kN/mm
LMBT-A-2kN	2 kN	54 kHz	41 kN/mm

*TEDS-installed models are available. Please contact us.

■ Dimensions



LMBT-A-50 to 200N



LMBT-A-500N to 2kN

Bared at the tip (standard)

