

Load Cells
(Load Transducers)

Outline

Compressive

Tensile

Tensile &
compressive

Component

Special

Other

LMBT-A

●High-temperature (100°C) ●50 N to 2 kN

Small-sized Compression Load Cell



Ultra-small & lightweight Suitable for load distribution measurement

Ultra-small and lightweight. For high temperature up to 100°C by bonding or just putting on the measurement point or setting in a hollow in use.

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 $\pm 0.05\%$ /°C

Electrical Characteristics

Safe Excitation	7 V AC or DC
Recommended Excitation	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) fluoroplastic shielded cable, 1.8 mm diameter by 2 m long, bared at the tip (Shield wire is not connected to the case.)

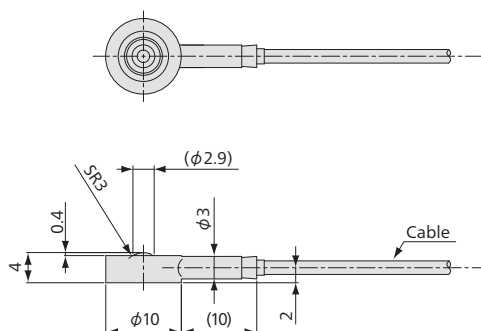
Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Spring Constant	See table below.
Material	Stainless steel
Weight	50N to 200N: Approx. 1.5 g (Excluding cable) 500N to 2KN: Approx. 6.5 g (Excluding cable)
Degree of Protection	IP64 (IEC 60529)

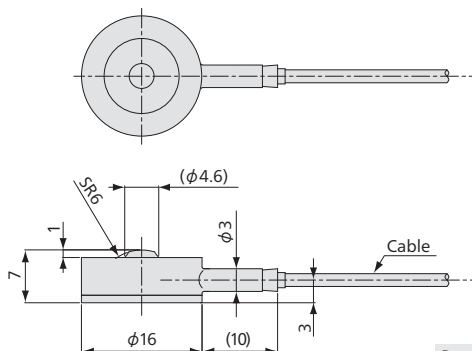
Optional Accessories Mount base CFM-B (Page 2-66)

Models	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

Dimensions



LMBT-A-50N to 200N



LMBT-A-500N to 2KN

Bared at the tip

