

Small-sized Compression Load Cell



Compact, high capacity, highly accurate
Ideal for load distribution measurement

● Rated capacity: 5 to 50 kN

Compact and lightweight load cells that can be recessed or used fixed with a mounting band. Used for load distribution measurement with multiple sensors, load measurement in pipe mills, or with measuring site or load cell weight restrictions.

*Characteristics are affected by usage conditions. For details, check the instruction manual.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.5\%$ RO (20kN and 50kN: Within $\pm 1\%$ RO)
Hysteresis	Within $\pm 0.5\%$ RO (20kN and 50kN: Within $\pm 1\%$ RO)
Repeatability	0.5% RO or less
Rated Output	1.5 mV/V or more

Environmental Characteristics

Safe Temperature	-10 to 80°C
Compensated Temperature	0 to 70°C
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 6 V AC or DC
Input Resistance	350 Ω $\pm 2\%$
Output Resistance	350 Ω $\pm 2\%$
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 the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	See table below.
Material	Stainless steel
Degree of Protection	IP64 (JIS C 0920/IEC 60529)
Compliance	Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS)

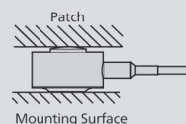
Models

Model	Rated Capacity	Natural Frequencies (Approx.)	Weight (Approx.)*1
LMC-A-5KN	5 kN	32 kHz	5 g
LMC-A-10KN	10 kN	38 kHz	6 g
LMC-A-20KN	20 kN	41 kHz	10 g
LMC-A-50KN	50 kN	29 kHz	30 g

*1 Excluding cable

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

To Ensure Proper Usage

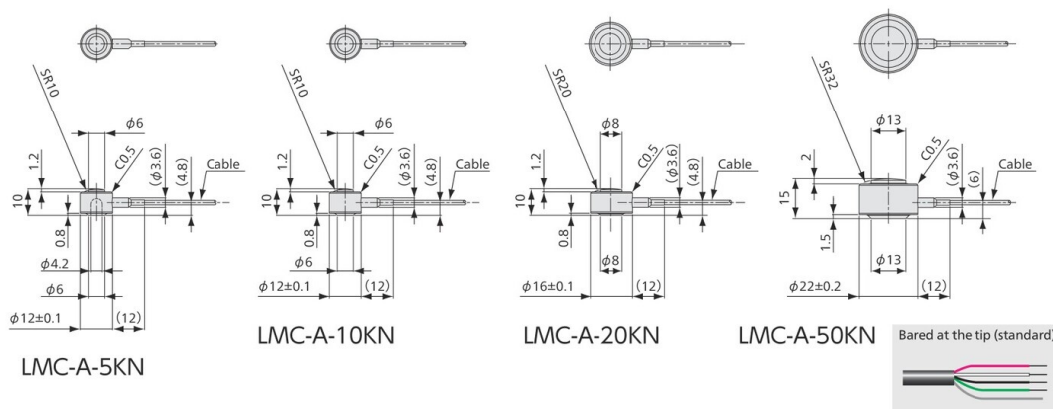


Compact large capacity load cells result in high surface pressure on the mounting surfaces under rated load. For the mount base material, use HRC40 or better metals such as SUS 630-H900.

Typical recommended material

- Patch material: HRC (35 to 38), SCM440, etc.
- mounting surface material: HRC40 or better, SUS 630-H900 SCM440, etc.

Dimensions



Sensor



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor