

# LMC-A

## Small-Sized Compression Load Cells



● 10 to 50 kN

### Specifications

#### Performance

|                  |  |
|------------------|--|
| Rated Capacity : | See table below.                                       |
| Nonlinearity :   | Within $\pm 0.5\%$ RO (within $\pm 1\%$ if 20kN, 50kN) |
| Hysteresis :     | Within $\pm 0.5\%$ RO (within $\pm 1\%$ if 20kN, 50kN) |
| Repeatability :  | Within 0.5% RO   |
| Rated Output :   | 1.5 mV/V (3000 $\mu$ m/m) or more                      |

#### Environmental Characteristics

|                                      |                           |
|--------------------------------------|---------------------------|
| Safe Temperature Range :             | -10 to 60°C               |
| Compensated Temperature Range :      | 0 to 70°C                 |
| Temperature Effect on Zero Balance : | Within $\pm 0.05\%$ RO/°C |
| Temperature Effect on Output :       | Within $\pm 0.05\%$ /°C   |

#### Electrical Characteristics

|                                  |  |
|----------------------------------|--|
| Safe Excitation Voltage :        | 7V AC or DC  |
| Recommended Excitation Voltage : | 1 to 6V AC or DC   |
| Input Resistance :               | 350 $\Omega$ $\pm$ 2%  |
| Output Resistance :              | 350 $\Omega$ $\pm$ 2%  |
| Cable :                          | 4-conductor (0.035 mm <sup>2</sup> ) vinyl shielded cable, 2 m long,<br>1.7 mm diameter, bared at the tip<br>(Shield wire is not connected to mainframe) |

#### Mechanical Properties

|                        |                                       |
|------------------------|---------------------------------------|
| Safe Overload Rating : | 150%                                  |
| Natural Frequency :    | See table below                       |
| Weight :               | See table below (not including cable) |
| Material :             | Stainless steel                       |
| Protection rating :    | IP64 JIS C 0920 splash-proof type     |

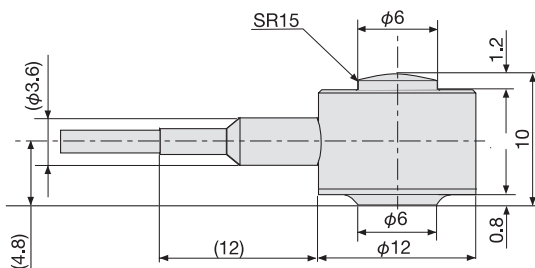
| Model      | Rated Capacity | Natural Frequency (Approx.) | Weight (approx.) |
|------------|----------------|-----------------------------|------------------|
| LMC-A-10KN | 10kN           | 38kHz                       | 6g               |
| LMC-A-20KN | 20kN           | 41kHz                       | 10g              |
| LMC-A-50KN | 50kN           | 29kHz                       | 30g              |

\*Operating conditions may adversely affect characteristics. For details, please consult the instruction manual.

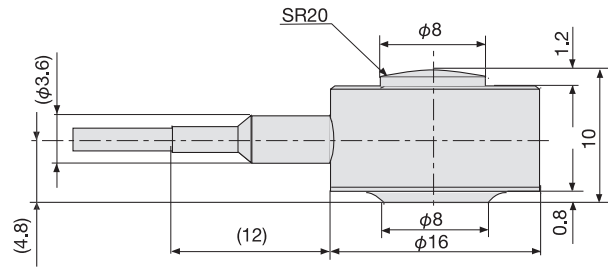
### Compact and high output accuracy Suitable for load distribution measurement

Compact and lightweight load cells can be used by merely placing or bonding on the load site, setting in a hollow, or affixing with a mounting band. Major applications include measurement of load distribution by using multiple units, load measurement in pipe making mills, or where a measuring site or the weight of the load cell itself is limited.

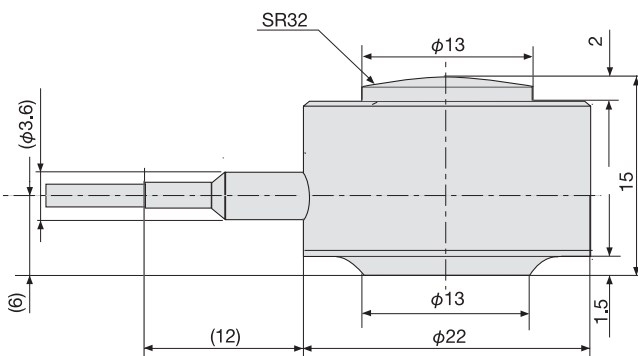
### ■ Dimensions



LMC-A-10KN

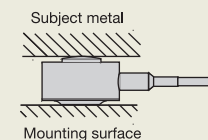


LMC-A-20KN



LMC-A-50KN

### To Ensure Safe Usage



Given that this is a compact high capacity device, this gives high surface pressure on the mounting surface when at rated load. For the mounting seat material, use HRC40 or better metals such as SUS630-H900.

Example of recommend materials

- Subject metal material: HRC (35 to 38), SCM440, etc.
- Mounting surface material: HRC40 or better, SUS630-H900 SCM440, etc.

Bared at the tip

