5 kN to 50 kN

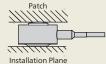
# **Small-sized Compression Load Cell**



## **Compact** High Accuracy Suitable for Load Distribution Measurement

Compact & lightweight load cells are 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.

### To Ensure Safe 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 SUS630-H900.

Example of recommended materials

- Patch material: HRC (35 to 38), SCM440, etc.
  Installation Plane material: HRC40 or better,
- SUS630-H900 SCM440, etc

#### **Specifications**

#### Performance

Rated Capacity	See table below.	
Nonlinearity	Within ±0.5% RO for 5, 10 kN	
	Within ±1%RO for 20, 50 kN	
Hysteresis	Within ±0.5% RO for 5, 10 kN	
	Within ±1%RO for 20, 50 kN	
Repeatability	Within 0.5% RO	
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 ±0.05% RO/°C
Temperature Effect on Output	Within ±0.05%/°C

#### **Electrical Characteristics**

Safe Ex	citation	7 V AC or DC		
Recommended Excitation		1 to 6 V AC or DC		
Input Resistance		350 Ω±2%		
Output Resistance 350 Ω±2%		350 Ω±2%		
Cable 4-conductor (0.035 mm²) 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 (Excluding cable).	
Materials	Stainless steel
Degree of Protection	IP64 (IEC 60529)
RoHS Directive	EN50581

Models	Rated Capacity	Natural Frequencies (Approx.)	Weight (Approx.)
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

<sup>\*</sup>Operating conditions may adversely affect characteristics. For details, see the instruction manual.

#### Dimensions

