



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

LMA-A

Small-sized Compression Load Cell

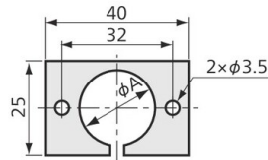


Compact, lightweight, affordable
Ideal for load distribution measurement

● **Rated capacity: 5 N to 1 kN**

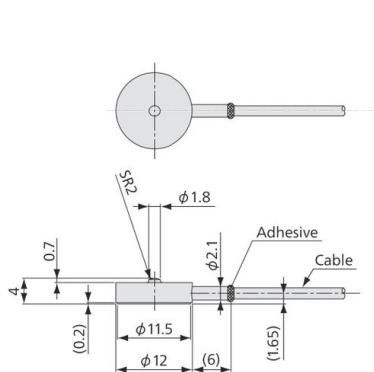
Ultra-small and lightweight load cells. It can be used by adhering it, fitting it into a recess.

■ Mount Base CFM-A

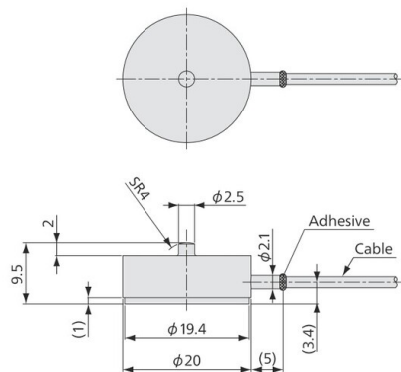


Model	φA	Thickness	Material
CFM-5A	12.2	1.5	Aluminum alloy
CFM-100A	20.2	3.0	Aluminum alloy

■ Dimensions

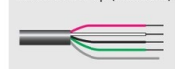


LMA-A-5 to 50N



LMA-A-100N to 1kN

Bared at the tip (standard)



Specifications

Performance

Rated Capacity See table below.

Nonlinearity Within $\pm 1\%$ RO

Hysteresis Within $\pm 1\%$ RO

Repeatability 1% RO or less

Rated Output 0.75 to 2 mV/V

(5N: 0.6 to 2 mV/V)

Environmental Characteristics

Safe Temperature -10 to 60°C (Non-condensing)

Compensated Temperature 0 to 50°C (Non-condensing)

Temperature Effect on Zero Within $\pm 0.05\%$ RO/ $^{\circ}\text{C}$ (5N: Within $\pm 0.3\%$ RO/ $^{\circ}\text{C}$)

(10 to 50N: Within $\pm 0.2\%$ RO/ $^{\circ}\text{C}$)

Temperature Effect on Output Within $\pm 0.05\%$ / $^{\circ}\text{C}$ (5 to 50N: Within $\pm 0.2\%$ / $^{\circ}\text{C}$)

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 ($0.035\ \text{mm}^2$) 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 5 to 50N: Approx. 1.5 g (Excluding cable)

100N to 1kN: Approx. 11 g (Excluding cable)

Material Copper alloy (100N to 1kN: Stainless steel)

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-A

■ Models

Model	Rated Capacity	Natural Frequencies (Approx.)	Mount Base
LMA-A-5N	5 N	15.3 kHz	CFM-5A
LMA-A-10N	10 N	17.5 kHz	
LMA-A-20N	20 N	24.8 kHz	
LMA-A-50N	50 N	32.6 kHz	
LMA-A-100N	100 N	21.6 kHz	CFM-100A
LMA-A-200N	200 N	29.7 kHz	
LMA-A-500N	500 N	43.9 kHz	
LMA-A-1kN	1 kN	53.0 kHz	

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