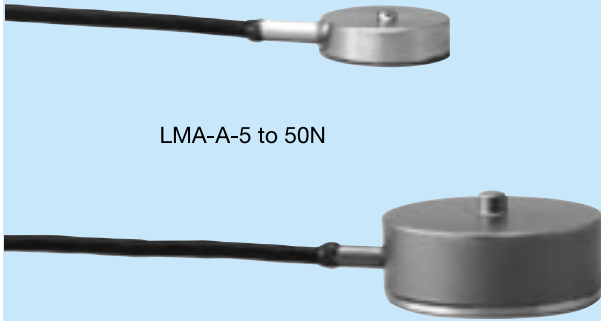


LMA-A

Small-Sized Compression Load Cells

● 12 mm ϕ , 4 mm Thick (5 to 50 N) ● 5 N to 1 kN



LMA-A-5 to 50N

LMA-A-100N to 1KN

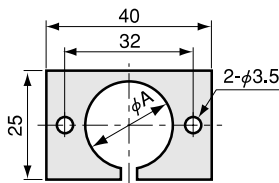
- TEDS-installed versions can be manufactured. Inquiries are welcome.

Compact and lightweight LMA-A series load cells can be used by merely putting or bonding on the subject site or setting in a hollow.

Features

- Compact
- Lightweight
- Low price
- Suitable for load distribution measurement

Mount Base CFM-A



Model	ϕ A	Thickness
CFM-5A	12.2	1.5
CFM-100A	20.2	3.0

Specifications

Performance

Rated Capacity: See table below.

Nonlinearity: Within $\pm 1\%$ RO

Hysteresis: Within $\pm 1\%$ RO

Repeatability: 1% RO or less

Rated Output:

0.6 to 2 mV/V (1200 to 4000 $\mu\text{m/m}$) (LMA-A-5N)

0.75 to 2 mV/V (1500 to 4000 $\mu\text{m/m}$) (LMA-A-10N to 1KN)

Note: Rated output is sorted to one of the classes divided by every 2% difference in output value. Since the rated output stated in the Test Data Sheet is the center value of the class, it may have a maximum error of $\pm 1\%$.

Environmental Characteristics

Safe Temperature Range: -10 to 60°C

Compensated Temperature Range: 0 to 50°C

Temperature Effect on Zero Balance:

Within $\pm 0.3\%$ RO/ $^\circ\text{C}$ (LMA-A-5N)

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

Within $\pm 0.05\%$ RO/ $^\circ\text{C}$ (LMA-A-100N to 1KN)

Temperature Effect on Output

Within $\pm 0.2\%$ / $^\circ\text{C}$ (LMA-A-5N to 50N)

Within $\pm 0.05\%$ / $^\circ\text{C}$ (LMA-A-100N to 1KN)

Electrical Characteristics

Safe Excitation Voltage: 7 VAC or DC

Recommended Excitation Voltage: 1 to 5 VAC or DC

Input Resistance: $350 \Omega \pm 2.5\%$

Output Resistance: $350 \Omega \pm 2.5\%$

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 mainframe.)

Mechanical Properties

Safe Overload Rating: 150%

Natural Frequency: See table below.

Weight: See table below

Material:

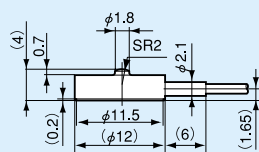
Copper alloy (LMA-A-5N to 50N)

Stainless steel (LMA-A-100N to 1KN)

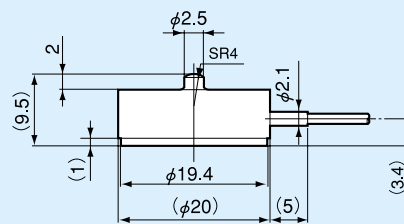
Optional Accessory Mount Base CFM-A

Model	Rated Capacity	Natural Frequency (Approx.)	Weight (Approx.)	Mount Base
LMA-A-5N	5 N	15.3 kHz	13 g including cable	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	23 g including cable	CFM-100A
LMA-A-100N	100 N	21.6 kHz		
LMA-A-200N	200 N	29.7 kHz		
LMA-A-500N	500 N	43.9 kHz		
LMA-A-1KN	1 kN	53 kHz		

Dimensions



LMA-A-5 to 50N



LMA-A-100N to 1KN