

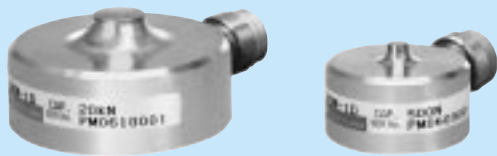
LCX-A-ID

Small-Sized Compression Load Cells

● 28 mm ϕ , 18 mm Thick (500 N to 2 kN) ● 500 N to 20 kN



NEW



Compact and lightweight LCX-A-ID series load cells can easily be incorporated into equipment. In addition, the connector-equipped design facilitates installation by eliminating the need to handle the cable together with the load cell as well as enables easy replacement of the cable.

Features

- Compact, lightweight and thin
- Waterproof connector
- Stainless steel case
- TEDS installed (for TEDS, refer to page 8-21)

Specifications

Performance

- Rated Capacity: See table below.
- Nonlinearity: Within $\pm 0.1\%$ RO
- Hysteresis: Within $\pm 0.1\%$ RO
- Repeatability: 0.05% RO or less
- Rated Output:
 - 1.0 mV/V (2000 $\mu\text{m}/\text{m}$) or more (LCX-A-500N-ID)
 - 1.5 mV/V (3000 $\mu\text{m}/\text{m}$) or more (LCX-A-1KN to 20KN-ID)

Environmental Characteristics

- Safe Temperature Range: -20 to 80°C
- Compensated Temperature Range: -10 to 70°C
- Temperature Effect on Zero Balance:
 - Within $\pm 0.01\%$ RO/ $^\circ\text{C}$ (LCX-A-500N-ID)
 - Within $\pm 0.005\%$ RO/ $^\circ\text{C}$ (LCX-A-1KN to 20KN-ID)
- Temperature Effect on Output: Within $\pm 0.005\%/^\circ\text{C}$

Electrical Characteristics

- Safe Excitation Voltage: 15 VAC or DC
- Recommended Excitation Voltage: 1 to 10 VAC or DC
- Input Resistance: $375\ \Omega \pm 5\ \Omega$
- Output Resistance: $350\ \Omega \pm 3.5\ \Omega$
- Cable: 6-conductor (0.08 mm²) chloroprene shielded cable, 4.4 mm diameter by 3 m long, terminated with connector plug to the transducer side and bared at the other side (Shield wire is not connected to mainframe.)

Mechanical Properties

- Safe Overload Rating: 150%
- Safe Lateral Load Rating: 15% the rated capacity
- Natural Frequency: See table below.
- Material: SUS, metallic finish
- Weight:
 - Approx. 45 g (LCX-A-500N to 2KN-ID) (excluding cable)
 - Approx. 120 g (LCX-A-5KN to 20KN-ID) (excluding cable)
- Protection Rating: IP67
(Watertight structure conforming to JIS C 0920)

Model	Rated Capacity	Natural Frequency (Approx.)	Spring Constant (kN/mm)
LCX-A-500N-ID	500 N	24 kHz	13
LCX-A-1KN-ID	1 kN	29 kHz	23
LCX-A-2KN-ID	2 kN	37 kHz	38
LCX-A-5KN-ID	5 kN	24 kHz	74
LCX-A-10KN-ID	10 kN	28 kHz	109
LCX-A-20KN-ID	20 kN	37 kHz	190

Dimensions

