

## Small-sized Compression Load Cell



\*TEDS-installed models are available. Inquiries are welcome.

### Compact & Lightweight

- Service life: 10 million times or more
- BISELCOM® gages are used.

LCV-A series is a compact & lightweight load cell developed for large capacity of 500 kN and 1 MN. They are easily installed into existing facilities. The hermetically-sealed structure with inert gas filled in ensures stable and reliable performance with 0.1% nonlinearity. Use of BISELCOM gages ensures increased output and improved reliability.

\*BISELCOM gages are self-temperature-compensation gages with the sensitivity temperature compensation function added.

### Specifications

#### Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.1% RO
Hysteresis	Within ±0.1% RO
Repeatability	0.05% RO or less
Rated Output	2.5 mV/V ±0.2%

#### Environmental Characteristics

Safe Temperature	-20 to 80°C
Compensated Temperature	-10 to 70°C
Temperature Effect on Zero	Within ±0.005% RO/°C
Temperature Effect on Output	Within ±0.005%/°C

#### Electrical Characteristics

Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω ±0.5%
Output Resistance	350 Ω ±0.5%
Cable	4-conductor (0.5 mm <sup>2</sup> ) chloroprene shielded cable, 8.5 mm diameter by 5 m long, with crimp-style terminals for 4 mm (Shield wire is not connected to the case.)

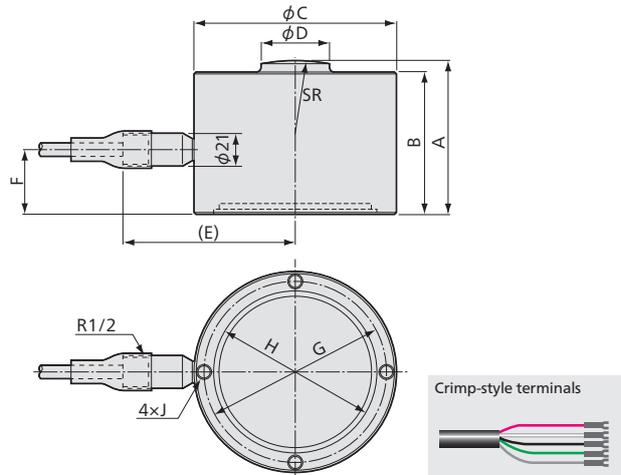
#### Mechanical Properties

Safe Overloads	150%
Natural Frequencies & Weight	See table below.
Degree of Protection	IP67 (IEC 60529)

Optional Accessories (For details, see pages 2-72 to 2-76)

- Saddle CA-B
- Mount Base CF

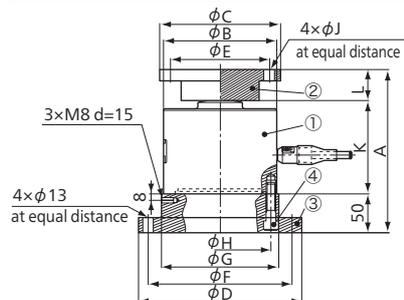
### Dimensions



Models	Rated Capacity	Natural Frequencies	A	B	φC	φD	(E)	F	G	H	J	SR	Weight
LCV-A-500KN	500 kN	≈ 13 kHz	95	88	126	42	107	40	113	101	M10 d=12	125	≈ 6 kg
LCV-A-1MN	1 MN	≈ 12 kHz	120	110	146	58	117	50	130	115	M12 d=18	180	≈ 10 kg

\*Excluding cable

### Dimensions in Combination with Accessories



### In Combination with Saddle CA and Mount Base CF

① Load Cells	② Saddles	③ Mount Bases	④ Hex. socket Head Bolts	A	φB	φC	φD	φE	φF	φG	φH	φJ	K	L
LCV-A-500KN	CA-50B	CF-113F	4xM10 L=45	173	126	118	178	100	154	130	113	11	95	28
LCV-A-1MN	CA-1MH	CF-130F	4xM12 L=50	210	146	156	208	128	184	150	130	13	120	40

Hexagon socket head bolts to connect the load cell to the mount base are attached to the mount base.

- Physical quantity indication
- Static measurement
- Dynamic measurement

LCV-A Recommended products for combination

Instrumentation Amplifier WGA-900A  
→ 3-95

Instrumentation Amplifier WGA-680A  
→ 3-97

Data Logger UCAM-60B  
→ 3-25

Strain Amplifier DPM-900 Series  
→ 3-5

Universal Recorder EDX-200A  
→ 3-55

Universal Recorder EDX-100A  
→ 3-63