



Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

LCV-A

Small-sized Compression Load Cell



High capacity

- Rated capacity: 500 kN, 1 MN
- Degree of protection: IP67
- Uses BISELCOM gage*

*BISELCOM gages are self-temperature-compensation strain gages with added sensitivity temperature compensation functionality.

This is a high-capacity load cell, and its compact size makes it easy to install in existing equipment. The hermetically-sealed structure is filled with inert gas for superior stability and reliability with 1/1000 nonlinearity. BISELCOM gage boosts output and reliability.

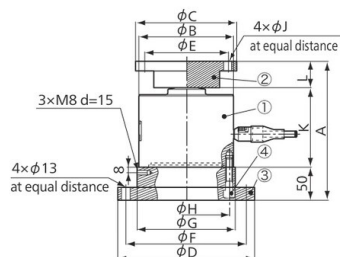
Models

Model	Rated Capacity	Natural Frequencies (Approx.)	A	B	φC	φD	(E)	F	φG	φH	J	SR	Weight (Approx.)*1
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

*1 Excluding cable

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

Configuration Diagram



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

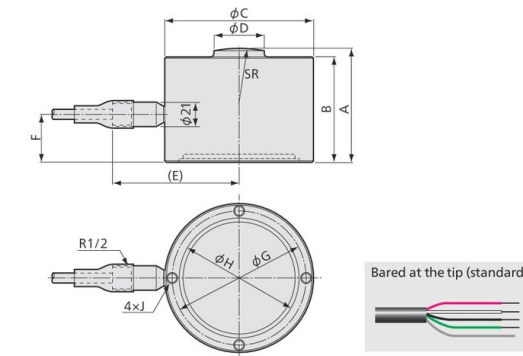
Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω ±0.5%
Output Resistance	350 Ω ±0.5%
Cable	4-conductor (0.5 mm ²) chloroprene shielded cable, 8.5 mm diameter by 5 m long, bared at the tip (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	See table below.
Degree of Protection	IP67 (JIS C 0920/IEC 60529)
Compliance	Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS)

- Optional Accessories Saddle CA
 Mount base CF

Dimensions



- In combination with saddle (CA) and mount base (CF)

① Load Cell	② Saddle	③ Mount Base	④ Hex. Socket Head Bolt	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.