

Small-Sized Compression Load Cells

Compact but Large Rated Capacity

LCV-A

500 kN, 1 MN

Compact, Lightweight

Nonlinearity 1/1000

Fatigue Life $\geq 1 \times 10^7$

BISELCOM Gage Used



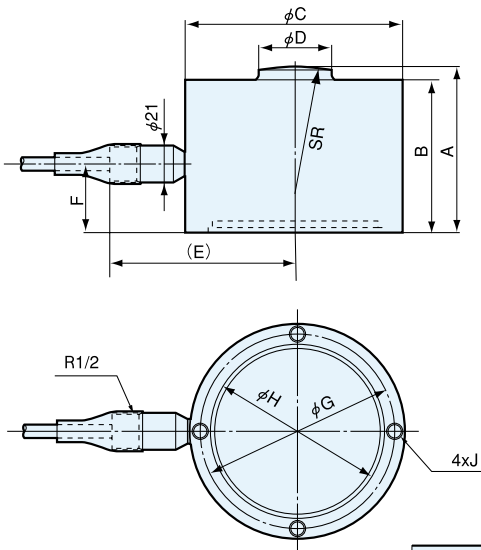
• TEDS-installed versions can be manufactured. Inquiries are welcome.

LCV-A series is compact and lightweight load cells developed for large capacities of 500 kN and 1 MN. They can easily be installed into existing facilities. The hermetically-sealed structure with inert gas filled in ensures stable and reliable performance with 1/1000 accuracy. Use of BISELCOM gage ensures increased output and improved reliability.

Specifications

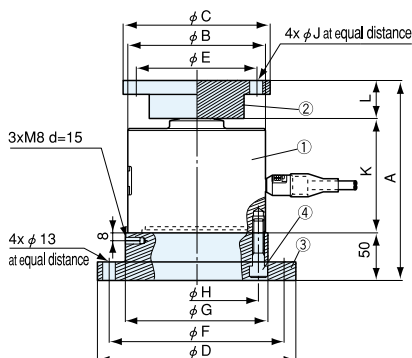
Performance										
Rated Capacity	See table below.									
Nonlinearity	Within $\pm 0.1\%$ RO									
Hysteresis	Within $\pm 0.1\%$ RO									
Repeatability	0.05% RO or less									
Rated Output	2.5 mV/V (5000 $\mu\text{m/m}$) $\pm 0.2\%$									
Environmental Capability										
Safe Temp. Range	-20 to 80°C									
Comp. Temp. Range	-10 to 70°C									
Temp. Effect on Zero Bal.	Within $\pm 0.005\%$ RO/°C									
Temp. Effect on Out.	Within $\pm 0.005\%$ /°C									
Electrical Characteristics										
Safe Excit. Voltage	20 V AC or DC									
Recom. Excit. Voltage	1 to 10 V AC or DC									
Input Resistance	350 $\Omega \pm 0.5\%$									
Output Resistance	350 $\Omega \pm 0.5\%$									
Cable	4-conductor (0.5 mm ²) chloroprene shielded cable, 8.5 mm dia. by 5 m long, with a press-fit terminal for 4 mm (Shield wire is not connected to the mainframe.)									
Mechanical Properties										
Safe Overload Rating	150%									
Natural Frequency	<table border="1"> <thead> <tr> <th>Model</th> <th>Nat. Freq. (App.)</th> <th>Weight (App.)</th> </tr> </thead> <tbody> <tr> <td>LCV-A-500KN</td> <td>13 kHz</td> <td>6 kg</td> </tr> <tr> <td>LCV-A-1MN</td> <td>12 kHz</td> <td>11 kg</td> </tr> </tbody> </table>	Model	Nat. Freq. (App.)	Weight (App.)	LCV-A-500KN	13 kHz	6 kg	LCV-A-1MN	12 kHz	11 kg
Model	Nat. Freq. (App.)	Weight (App.)								
LCV-A-500KN	13 kHz	6 kg								
LCV-A-1MN	12 kHz	11 kg								
Protection Rating	IP 67 (Watertight type conforming to JIS C 0920)									

Dimensions



Model	Rated Capacity	A	B	ϕC	ϕD	E	F	ϕG	ϕH	J	R
LCV-A-500KN	500 kN	95	88	126	42	107	40	113	101	M10 d=12	125
LCV-A-1MN	1 MN	120	110	146	58	117	50	130	115	M12 d=18	180

Dimensions with Accessories Mounted



• In Combination with Saddle CA and Mount Base CF

Load Cell Proper ①	Saddle ②	Mount Base ③	Hexagon Socket Head Cap Screw ④	A	ϕB	ϕC	ϕD	ϕE	ϕF	ϕG	ϕH	ϕJ	K	L
LCV-A-500KN	CA-50B	CF-113F	4-M10 L=45	173	126	118	178	100	154	130	113	11	95	28
LCV-A-1MN	CA-1MH	CF-130F	4-M12 L=50	210	146	156	208	128	184	150	130	13	120	40

Hexagon socket head cap screw is attached to the mount base for its connection to the load cell.