

Thin Compression Load Cells

25 mm Thick (5 to 20 kN)

LCK-A

5 to 200 kN

Thin

High Reliability

Hermetically Sealed Structure with Inert Gas Filled in



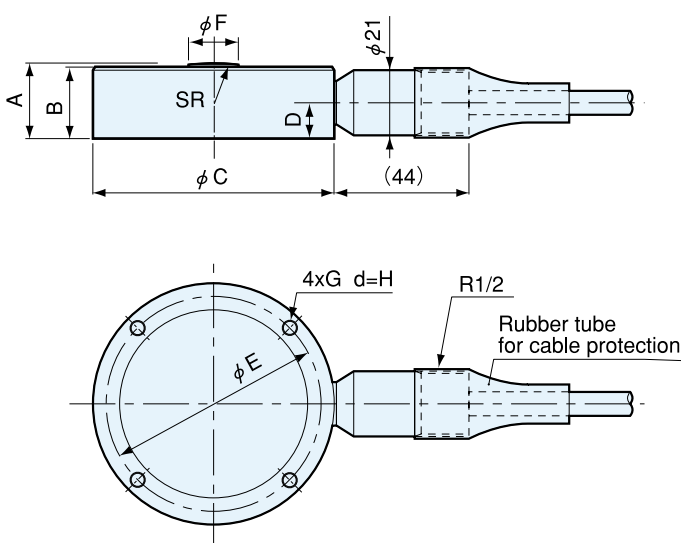
- TEDS-installed versions can be manufactured. Inquiries are welcome.

While load cells in the LCK-A series are designed to be thin for convenient installation as detection terminals of weighing systems, they are excellent in every point; accuracy, reliability, stability, and response. The thin design makes them suitable for applications where the space, especially the height, is limited or the detecting part is desired to be downsized for measurement of force or weight applied to a conveyor, hopper or tank.

Specifications

Performance	
Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.2\%$ RO (200kN: Within $\pm 0.5\%$ RO)
Hysteresis	Within $\pm 0.2\%$ RO (200kN: Within $\pm 0.5\%$ RO)
Repeatability	0.05% RO or less
Rated Output	2 mV/V (4000 $\mu\text{m/m}$) $\pm 0.5\%$
Environmental Capability	
Safe Temp. Range	-30 to 80°C
Comp. Temp. Range	-10 to 70°C
Temp. Effect on Zero Bal.	Within $\pm 0.007\%$ RO/ $^\circ\text{C}$
Temp. Effect on Out.	Within $\pm 0.005\%$ / $^\circ\text{C}$
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 (0.3 mm ²) chloroprene shielded cable, 7.6 mm dia. by 5 m long, bared at the tip (Shield wire is not connected to the mainframe.)
Mechanical Properties	
Safe Overload Rating	150%
Natural Frequency	Refer to table below.
Weight	Refer to table below.
Protection Rating	IP 67 (Watertight type conforming to JIS C 0920)

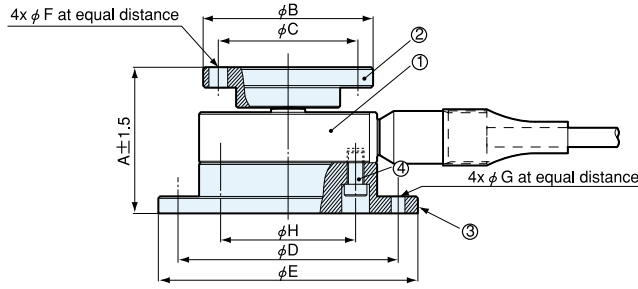
Dimensions



Model	Rated Capacity	Natural Frequency (App.)	A	B	ϕC	D	ϕE	ϕF	G	H	R	Weight (App.)
LCK-A-5KN	5 kN	10.7 kHz	25	23.5	78	12	70	16	M5	8	50	900g
LCK-A-10KN	10 kN	11.4 kHz										
LCK-A-20KN	20 kN	14.2 kHz										
LCK-A-50KN	50 kN	24.2 kHz	30	28	98	14.5	80	18	M8	12	70	1.8 kg
LCK-A-100KN	100 kN	14.8 kHz	35	33	108	17.5	90	25	M8	12	70	2.5 kg
LCK-A-200KN	200 kN	12.6 kHz	50	45	118	25	100	35	M8	12	100	4.1 kg

Dimensions with Accessories Mounted

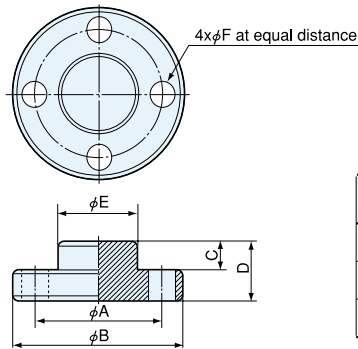
● In Combination with Saddle CA and Mount Base CF



Load Cell Proper ①	Saddle ②	Mount Base ③	Hexagon Socket Head Cap Screw ④	A	φB	φC	φD	φE	φF	φG	φH
LCK-A-5KN	CA-2B	CF-70D	4-M5 L=20	74	53	38	100	116	7	9	70
LCK-A-10KN											
LCK-A-20KN											
LC -A-50KN	CA-10B	CF-80D	4-M8 L=20	84	98	80	130	154	11	13	80
LC -A-100KN	CA-10B	CF-90D	4-M8 L=20	89	98	80	140	164	11	13	90
LCK-A-200KN	CA-50B	CF-100D	4-M8 L=25	118	118	100	150	174	11	13	100

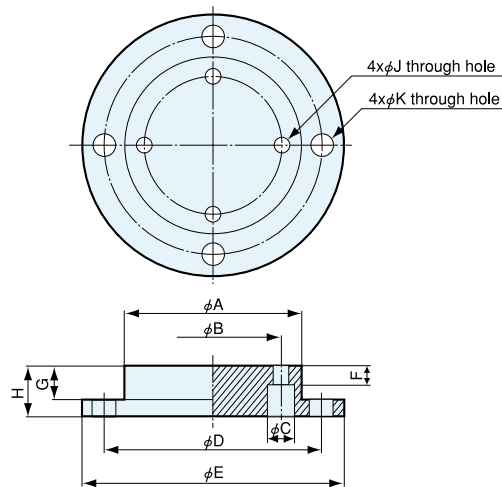
Hexagon socket head cap screw is attached to the mount base for its connection to the load cell.

Dimensions of Saddle



Model	φA	φB	C	D	φE	φF	Hexagon Socket Head Cap Screw	Weight (App.)
CA-2B	38	53	9	19	24	7	M6	200 g
CA-10B	80	98	12	24	60	11	M10	1 kg
CA-50B	100	118	13	28	80	11	M10	1.8 kg

Dimensions of Mount Base



Model	φA	φB	φC	φD	φE	F	G	H	φJ	φK	Weight (App.)
CF-70D	84	70	10	100	116	13	20	30	5.5	9	
CF-80D	106	80	16	130	154	13	20	30	9	13	
CF-90D	116	90	16	140	164	13	20	30	9	13	
CF-100D	126	100	16	150	174	18	25	40	9	13	