

LCTB-A

●Thin ●5 kN to 50 kN

Thin Load Cell "Multi Force Sensor"



*TEDS-installed models are available. Inquiries are welcome.
*Model for intrinsic safety construction is "M4AL2".

Advanced Thin Design 1/2 to 1/3 height to the Conventional one More Applications are possible

- Optional dedicated rubber attachment enables fixing the top and bottom with bolts, thereby making it possible to design the system with no tension rod or stay rod used.
- Safety factor is 3 to 5 times higher than conventional type. Endures lateral loads up to 20% of the rated capacity.
- Rubber attachment attenuates impact energy and lessens the effects of thermal expansion of system and the moment of fixed section.
- Rubber attachment enables easy installation without concern for parallelism.
- Varieties of accuracies and output signals are available, enabling configuration of the most suitable system for each application.
- Combination instruments such as amplifiers are easily connected since the wirings are the same as conventional load cells.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.03\%$ RO
Hysteresis	Within $\pm 0.03\%$ RO
Repeatability	0.02% RO or less
Rated Output	1.5 mV/V $\pm 0.2\%$

Environmental Characteristics

Safe Temperature	-20 to 70°C
Compensated Temperature	-10 to 60°C
Temperature Effect on Zero	Within $\pm 0.005\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.005\%$ /°C

Electrical Characteristics

Safe Excitation	20 V DC
Recommended Excitation	1 to 10 V DC
Input Resistance	350 $\Omega \pm 1.5\%$
Output Resistance	350 $\Omega \pm 1.5\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 6 mm diameter by 5 m long, bared at the tip (Shield wire is not connected to the case.)

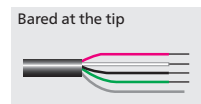
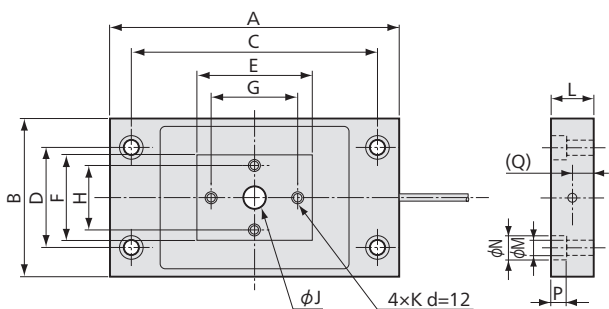
Mechanical Properties

Safe Overloads	150%
Ultimate Lateral Load	50% (Max load which does not cause any mechanical damage)
Weight	See table below.
Materials	Aluminum alloy

Precautions

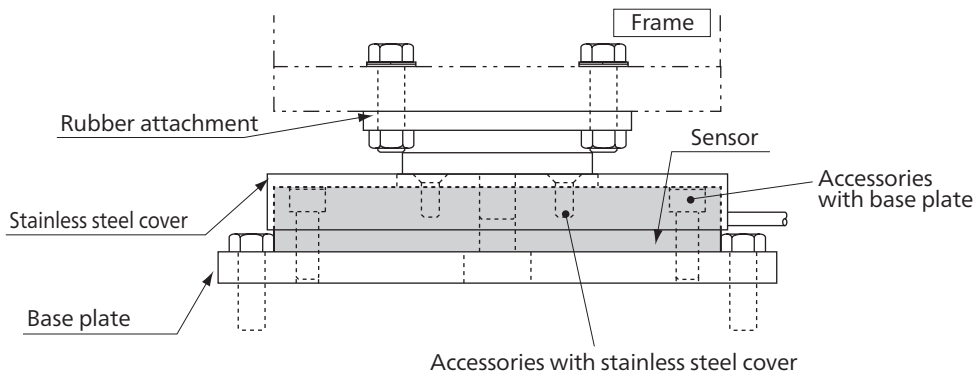
1. No LCTB-A is used for any onboard measurement.
2. No LCTB-A is used in an environment where it is frequently exposed to lateral loads.
3. No LCTB-A is installed to any inclined or vertical surfaces.

Dimensions



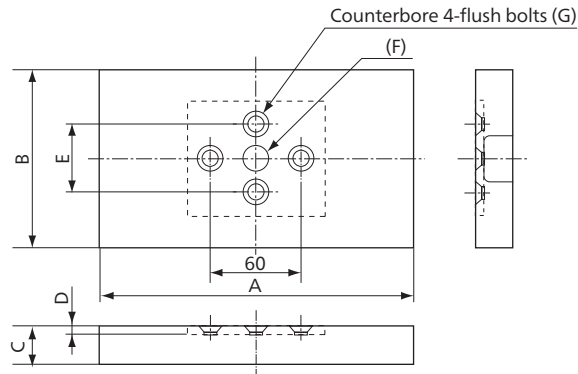
Models	Rated Capacity	A	B	C	D	E	F	G	H	ϕJ	K	L	ϕM	ϕN	P	(Q)	Weight*
LCTB-A-5KN	5 kN	200	110	170	70	80	60	60	45	16	M8	29	11	17	11	15	≈ 1.8 kg
LCTB-A-10KN	10 kN											35				16.5	≈ 2.3 kg
LCTB-A-20KN	20 kN											39				19	≈ 4.3 kg
LCTB-A-30KN	30 kN	260	150	220	90	90	80	60	60	20	M10	49	13	19	13	24	≈ 5.3 kg
LCTB-A-50KN	50 kN											24				≈ 5.3 kg	

*Excluding cable



Applicable Accessories

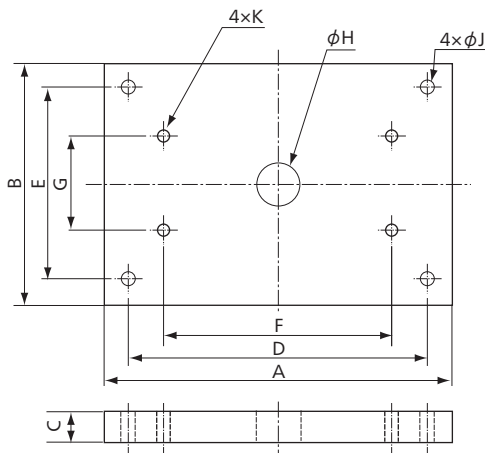
Models	Stainless Steel Covers	Rubber Attachments	Base Plates
LCTB-A-5KN	COV01-2T	RA01-2T	BP01-2T
LCTB-A-10KN			
LCTB-A-20KN			
LCTB-A-30KN	—	RA01-5T	—
LCTB-A-50KN			



Stainless Steel Cover

Models	A	B	C	D	E	(F)	G	Weight
COV01-2T	206	116	25	5.5	45	18	M8	≈ 400 g
COV01-5T	270	160	35	9.5	60	22	M10	≈ 900 g

Base plate



Load Cell Models	Base plate Models	A	B	C	D	E	F	G	φH	φJ	K
LCTB-A-5KN LCTB-A-10KN LCTB-A-20KN	BP01-2T	250	250	14	220	138	170	70	30	13	M10

● Physical quantity indication

● Static measurement ● Dynamic measurement

LCTB-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

