LCTS-B

Stainless Steel Load Cell

●Stainless steel ●5 to 100 kN

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

For weighing hoppers and tanks with steady brace mechanism Stainless steel structure

- ●Stainless steel structure enables use under conditions where the load cell is exposed to moisture and corrosive gases.
- ●"Thin" and "Top and Bottom plates integrated" design facilitates installation to hopper brackets or tank's feet.
- ●Hermetically-sealed structure (IP 67) (IEC 60529)
- ●Built-in steady brace mechanism makes LCTS-B suitable for weighing stirring tanks or tanks with feet, while simplifying peripheral facilities by eliminating check rods, etc.
- ●Since the load cell is fixed with bolts, dropping or floating of the load will be avoided.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.05% RO
Hysteresis	Within ±0.05% RO
Repeatability	0.02% RO or less
Rated Output	2 mV/V (4000 ×10^{-6} strain) ±0.1%

Environmental Characteristics

Safe Temperature	-20 to 70°C
Compensated Temperature	-10 to 60°C
Temperature Effect on Zero	Within ±0.003% RO/°C
Temperature Effect on Output	Within ±0.003%/°C

Electrical Characteristics

Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	700 Ω±0.7%
Output Resistance	700 Ω±0.7%
Cable	4-conductor (0.3 mm²) chloroprene shielded cable,
	7.6 mm diameter by 5 m long (10 m long with 50KN and 100KN),
	bared at the tip
	(Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	150%
Ultimate Lateral Load	10 kN (50KN and 100KN: 30 kN)
	(Max. load which does not cause any mechanical damage)
Weight	See table below.
Materials	Stainless steel
Degree of Protection	IP67 (IEC 60529)

Models	Rated Capacity	Weight*
LCTS-B-5KN	5 kN	≈ 5 kg
LCTS-B-10KN	10 kN	
LCTS-B-20KN	20 kN	
LCTS-B-30KN	30 kN	≈ 6 kg
LCTS-B-50KN	50 kN	≈ 11 kg
LCTS-B-100KN	100 kN	≈ 13 kg

*Excluding cable

To Ensure Safe Usage

■Accessories to Load Cells

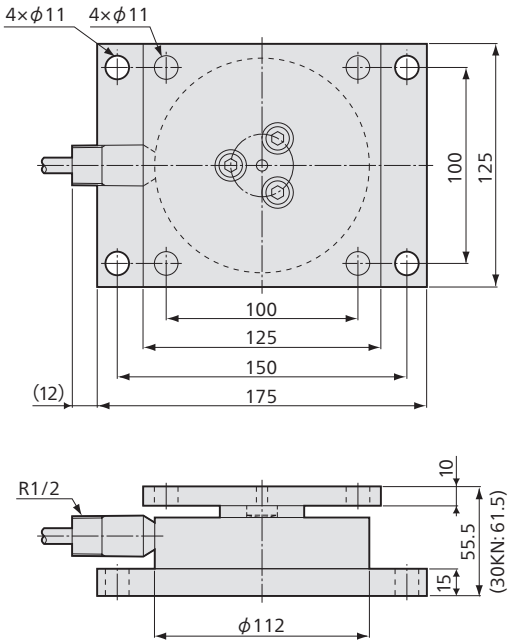
Do not disassemble or remodel accessories such as top plate and mounting plate designed for installation of LCTS-B series load cells.

■Installation of Floating Prevention Stoppers

Install the hazard prevention stopper when using in an environment where the load cell may be damaged or the hopper or tank may overturn due to lateral loads or lateral displacement caused by thermal expansion of structure or vibration of stirrers.

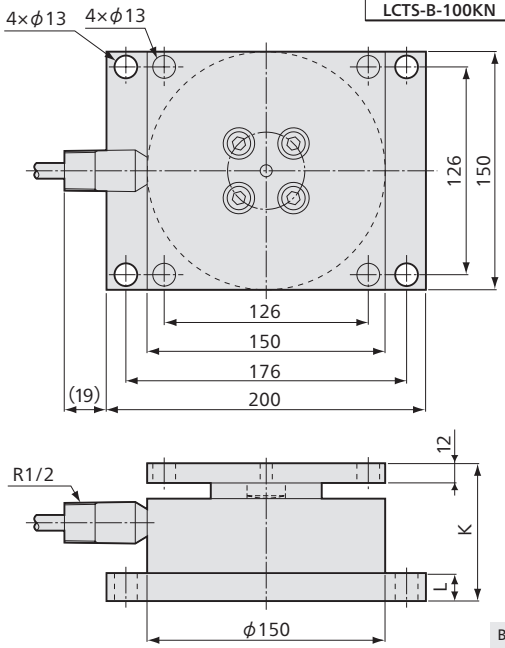
(Note 1) No LCTS-B is used for any onboard measurement.
(Note 2) No LCTS-B is used in an environment where it is frequently exposed to lateral loads.
(Note 3) No LCTS-B is installed to any inclined or vertical surfaces.

Dimensions

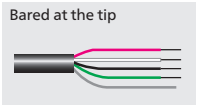


LCTS-B-5KN to 30KN

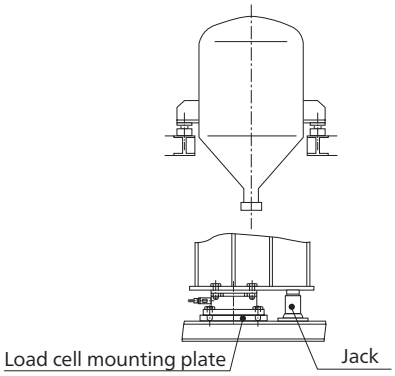
Models	K	L
LCTS-B-50KN	87	20
LCTS-B-100KN	95	28



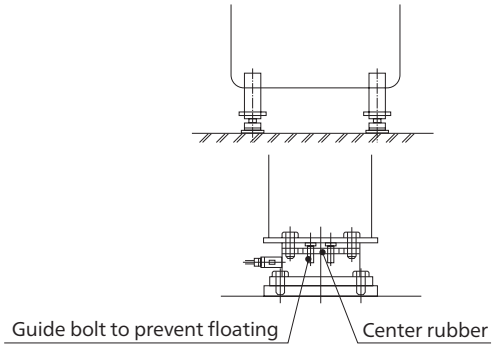
LCTS-B-50KN & 100KN



Installation Examples

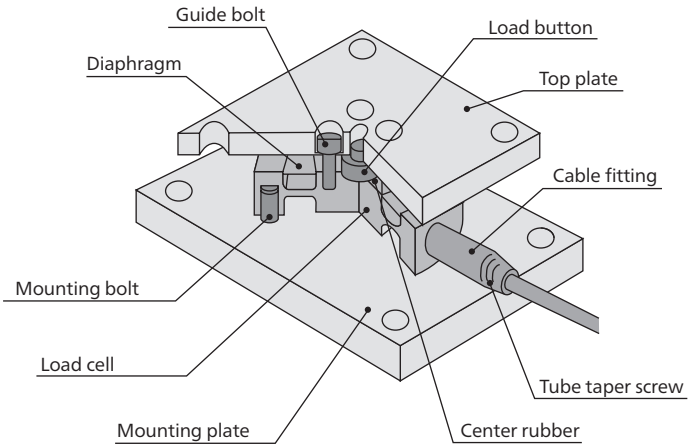


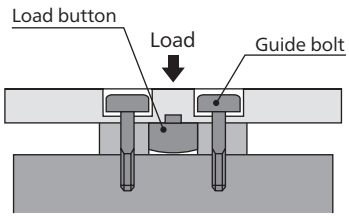
Installation to Tank's Brackets



Installation to Tank's Feet

Internal Structure





Mechanical stopper (Steady brace)