



Strain Gage

Load Cell

Pressure
SensorAcceleration
SensorTorque
SensorDisplacement
SensorComponent
Force
SensorAutomotive
SensorCivil
Engineering
Sensor

LCTS-B

Stainless Steel Load Cell



Compression load cells with built-in steady brace mechanism for weighing hoppers and tanks

- Rated capacity: 5 to 100 kN
- "Thin" and "integrated top/bottom plates" structure for easy installation to hopper brackets or tank feet
- Degree of protection: IP67

Load cells with internal steady brace functionality for weighing stirring tanks or tanks with feet. Fixed bolts prevent load cell dropping or floating from thermal expansion or vibration.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.05\%$ RO
Hysteresis	Within $\pm 0.05\%$ RO
Repeatability	0.02% RO or less
Rated Output	2 mV/V $\pm 0.1\%$

Environmental Characteristics

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

Electrical Characteristics

Safe Excitation	20 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	700 Ω $\pm 0.7\%$
Output Resistance	700 Ω $\pm 0.7\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 7.6 mm diameter by 5 m long (50KN and 100KN: 10 m long), 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.
Material	Stainless steel
Degree of Protection	IP67 (JIS C 0920/IEC 60529)

*No LCTS-B is used for any onboard measurement.

*No LCTS-B is used in an environment where it is frequently exposed to lateral loads.

*No LCTS-B is installed to any inclined or vertical surfaces.

Models

Model	Rated Capacity	Weight (Approx.)*1
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

*1 Excluding cable

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

To Ensure Proper Usage

● Load cell accessories

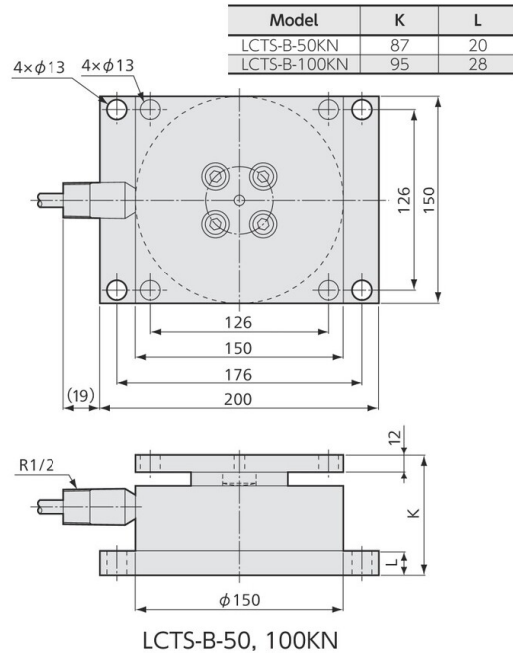
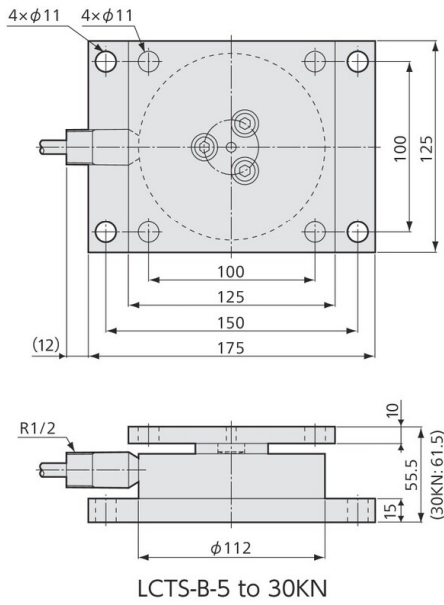
Do not disassemble or modify peripherals such as top plates or mounting plates for installing LCTS-B Series products.

Doing so could impair functionality and performance, potentially interfering with measurements.

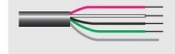
● Installation of floating prevention stoppers

Install accident prevention stoppers 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 in the structure or the vibration of stirrers.

■ Dimensions



Bared at the tip (standard)



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Sensor



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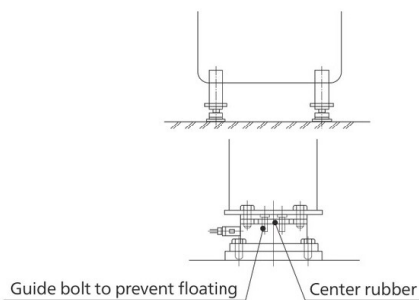
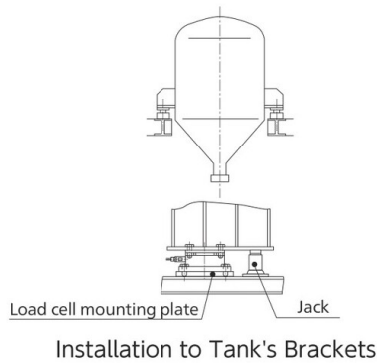
Displacement
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Component
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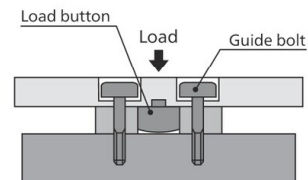
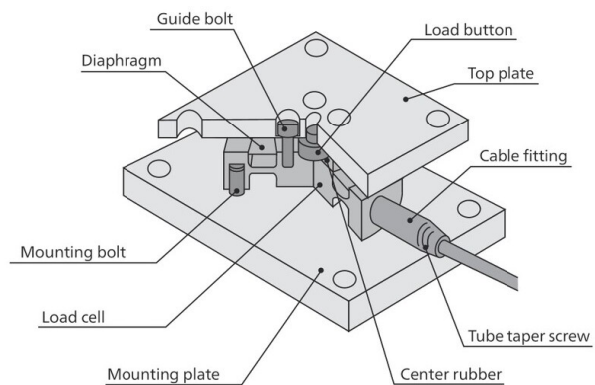
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■ Installation Example



■ Internal Structure



Installation to Tank's Feet

Mechanical Stopper (Steady Brace)