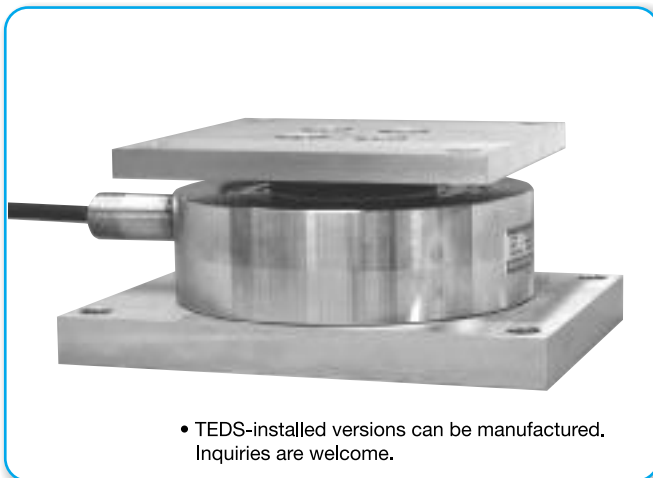


# Stainless Steel Load Cells

## LCTS-B

5 to 100 kN

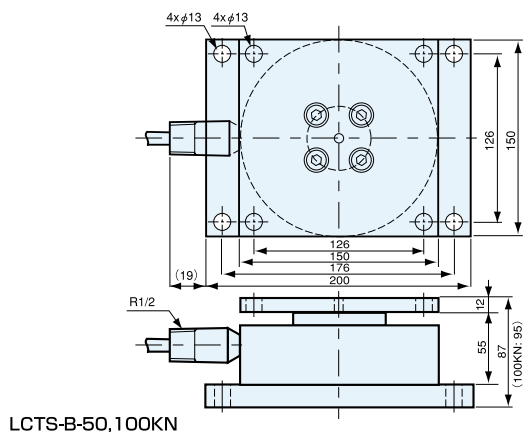
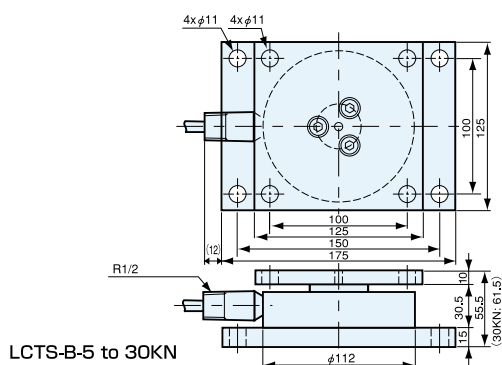
Stainless Steel



### Features

- 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 (protection rating IP67)
- Built-in steady brace mechanism makes LCTS-B suitable for weighing stirring tanks or tanks with feet, while simplifying peripheral facilities by eliminating check rod, etc.
- Since the load cell can be fixed with bolts, dropping or floating of the load cell can be prevented.

### Dimensions



Developed for weighing hoppers and tanks, LCTS-B series is stainless steel compression load cells with built-in steady brace mechanism.

### 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               | 2 mV/V (4000 $\mu\text{m/m}$ ) $\pm 0.1\%$                                                                                                                                      |
| Environmental Capability   |                                                                                                                                                                                 |
| Safe Temp. Range           | -20 to 70°C                                                                                                                                                                     |
| Comp. Temp. Range          | -10 to 60°C                                                                                                                                                                     |
| Temp. Effect on Zero Bal.  | Within $\pm 0.003\%$ RO/°C                                                                                                                                                      |
| Temp. Effect on Out.       | Within $\pm 0.003\%$ /°C                                                                                                                                                        |
| Electrical Characteristics |                                                                                                                                                                                 |
| Safe Excit. Voltage        | 20 V AC or DC                                                                                                                                                                   |
| Recom. Excit. Voltage      | 1 to 10 V AC or DC                                                                                                                                                              |
| Input Resistance           | 700 $\Omega \pm 0.7\%$                                                                                                                                                          |
| Output Resistance          | 700 $\Omega \pm 0.7\%$                                                                                                                                                          |
| Cable                      | 4-conductor (0.3 mm <sup>2</sup> ) chloroprene shielded cable, 7.6mm dia. by 5 m long (50, 100KN: 10 m long), bared at the tip (Shield wire is not connected to the mainframe.) |

| Mechanical Properties  |                                                  |
|------------------------|--------------------------------------------------|
| Safe Overload Rating   | 150%                                             |
| Critical Lateral Load* | 10 kN (50, 100 kN: 30 kN)                        |
| Weight                 | See table below.                                 |
| Enclosure              | Stainless steel alloy                            |
| Protection Rating      | IP 67 (Watertight type conforming to JIS C 0920) |

\*Maximum load which does not cause any mechanical damage.

| Model        | Rated Capacity | Weight (App.) |
|--------------|----------------|---------------|
| 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         |

### To Ensure Safe Usage

#### Accessories to Load Cell

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 Stopper

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 load or lateral displacement caused by thermal expansion of structure or vibration of stirrer.

#### Precautions

1. LCTS-B cannot be used for any onboard measurement.
2. LCTS-B cannot be used in an environment where it is frequently exposed to lateral load.
3. LCTS-B cannot be installed to any inclined or vertical surface.

### Installation Examples

