



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

# LCN-A

## Small-sized Compression Load Cell



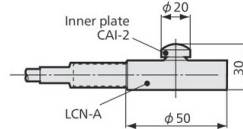
### Compact, lightweight, and corrosion-resistant

- Rated capacity: 500 N to 20 kN
- Degree of protection: IP67

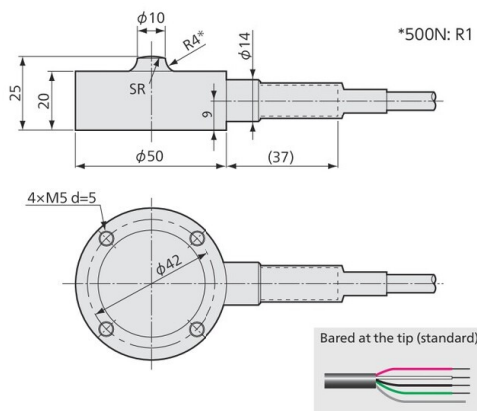
Stainless steel (SUS630) load cells for use as detectors for systems requiring corrosion resistance. Compact and lightweight for easy mounting to existing equipment. Hermetically-sealed structure filled with inert gas for stability and reliability.

#### Inner plate CAI-2

The inner plate is intended to protect the load sensing part at the top of load cell.



#### Dimensions



#### Specifications

##### Performance

|                |                        |
|----------------|------------------------|
| Rated Capacity | See table below.       |
| Nonlinearity   | Within $\pm 0.15\%$ RO |
| Hysteresis     | Within $\pm 0.1\%$ RO  |
| Repeatability  | 0.05% RO or less       |
| Rated Output   | 2 mV/V $\pm 0.3\%$     |

##### Environmental Characteristics

|                              |                            |
|------------------------------|----------------------------|
| Safe Temperature             | -20 to 80°C                |
| Compensated Temperature      | -10 to 70°C                |
| Temperature Effect on Zero   | Within $\pm 0.005\%$ RO/°C |
| Temperature Effect on Output | Within $\pm 0.01\%$ °C     |

##### Electrical Characteristics

|                        |                                                                                                                                                          |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe Excitation        | 20 V AC or DC                                                                                                                                            |
| Recommended Excitation | 1 to 12 V AC or DC                                                                                                                                       |
| Input Resistance       | 350 $\Omega$ $\pm 0.5\%$                                                                                                                                 |
| Output Resistance      | 350 $\Omega$ $\pm 0.5\%$                                                                                                                                 |
| Cable                  | 4-conductor (0.5 mm <sup>2</sup> ) chloroprene shielded cable, 8.5 mm diameter by 3 m long, bared at the tip (Shield wire is not connected to the case.) |

##### Mechanical Properties

|                      |                                                                       |
|----------------------|-----------------------------------------------------------------------|
| Safe Overloads       | 200%                                                                  |
| Natural Frequencies  | See table below.                                                      |
| Weight               | Approx. 220 g (Excluding cable)                                       |
| Material             | Main unit: SUS630, Bottom plate: SUS304                               |
| Degree of Protection | IP67 (JIS C 0920/IEC 60529)                                           |
| Compliance           | Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS) |

- Optional Accessories
- Saddle CA-2F
  - Mount base CF-42
  - Inner plate CAI-2

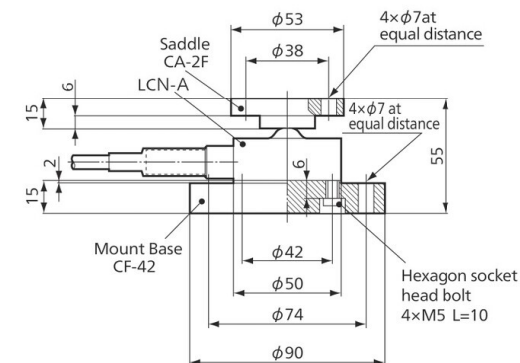
#### Models

| Model      | Rated Capacity | Natural Frequencies (Approx.) | SR |
|------------|----------------|-------------------------------|----|
| LCN-A-500N | 500 N          | 6.4 kHz                       | 15 |
| LCN-A-1KN  | 1 kN           | 5.3 kHz                       |    |
| LCN-A-2KN  | 2 kN           | 7.6 kHz                       |    |
| LCN-A-5KN  | 5 kN           | 13 kHz                        | 30 |
| LCN-A-10KN | 10 kN          | 18 kHz                        |    |
| LCN-A-20KN | 20 kN          | 24 kHz                        |    |

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

#### Configuration Diagram

- In combination with saddle (CA) and mount base (CF)



\*Hexagon socket head bolts to connect the load cell and mount base are attached to the mount base.