

LU-E

Tension/Compression Load Cell

CE

1
-94

Sensor



Tension/compression load cells with hermetically-sealed structure filled with inert gas

● Rated capacity: ± 500 N to 200 kN

Load cells with excellent stability and reliability with the detector filled with inert gas to prevent aging variation.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.2\%$ RO
Hysteresis	Within $\pm 0.1\%$ RO
Repeatability	0.1% RO or less
Rated Output	2 mV/V $\pm 0.2\%$

Environmental Characteristics

Safe Temperature	-30 to 85°C
Compensated Temperature	-10 to 70°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 AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω $\pm 0.5\%$
Output Resistance	350 Ω $\pm 0.5\%$
Cable	4-conductor (0.3 mm ²) chloroprene shielded cable, 7.6 mm diameter by 5 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is connected to the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	See table below.
Degree of Protection	IP32 (JIS C 0920/IEC 60529)
Compliance	Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS)

Optional Accessories

Saddle CA
Mount base CF
Rotating attachment RJ
Ball joint TU
Hook THC
Shackle TRC

Models

Model	Rated Capacity	Natural Frequencies (Approx.)	Weight (Approx.) ^{*1}	Saddle	Mount Base
LU-50KE	± 500 N	1.54 kHz	2.8 kg	CA-1B	CF-50
LU-100KE	± 1 kN	2.16 kHz			
LU-200KE	± 2 kN	3.28 kHz			
LU-500KE	± 5 kN	2.66 kHz	4.5 kg		CF-80
LU-1TE	± 10 kN	4.2 kHz	2.8 kg	—	—
LU-2TE	± 20 kN	4.97 kHz			
LU-5TE	± 50 kN	3.5 kHz			
LU-10TE	± 100 kN	3.14 kHz	9.5 kg		
LU-20TE	± 200 kN	2.5 kHz	22.0 kg		

^{*1} Excluding cable

^{*}TEDS-installed models are available. Please contact us.



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor