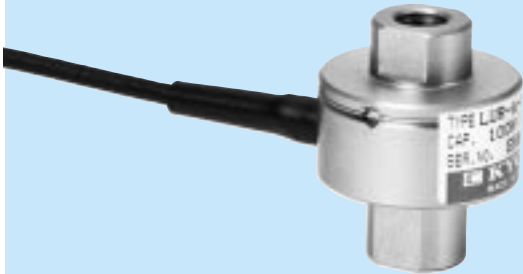


LUR-A-SA1

Compact Tension/Compression Load Cells

● 28 mm ϕ , Weight 80 g ● 50 N to 2 kN



Compact and lightweight LUR-A-S1 series is easy-to-use tension/compression load cells, which can be used in various fields ranging from production lines to experiments.

Features

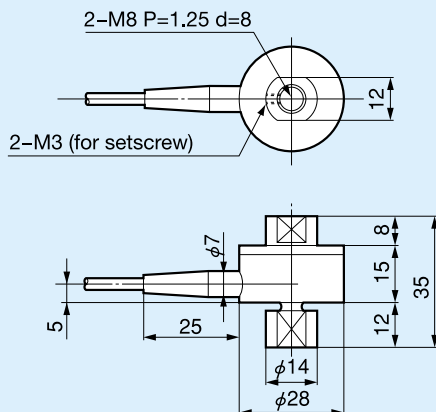
- Compact
- Lightweight

To Ensure Safe Usage

- Consult with our sales engineer when using in combination with special accessories.
- Special accessories for tension loads should be mounted to the load cell at our factory.
- When using for tension loads, be sure to fix the load cell with accessory hexagon socket head setscrews (M3 L=4).

Note: The connector plug at the cable tip may be replaced with R05-PB5M. When ordering, suffix "-R" to the model number

Dimensions



Specifications

Performance

Rated Capacity: See table below.

Nonlinearity: Within $\pm 0.5\%$ RO

Hysteresis: Within $\pm 0.5\%$ RO

Rated Output:

± 0.5 mV/V (1000 $\mu\text{m/m}$) or more (LUR-A-100NSA1 to 2KNSA1)

Approx. 0.4 mV/V (800 $\mu\text{m/m}$) (LUR-A-50NSA1)

Environmental Characteristics

Safe Temperature Range: -10 to 70°C

Compensated Temperature Range: 0 to 70°C

Temperature Effect on Zero Balance:

Within $\pm 0.05\%$ RO/ $^\circ\text{C}$ (LUR-A-100NSA1 to 2KNSA1)

Within $\pm 0.1\%$ RO/ $^\circ\text{C}$ (LUR-A-50NSA1)

Temperature Effect on Output:

Within $\pm 0.05\%$ / $^\circ\text{C}$ (LUR-A-100NSA1 to 2KNSA1)

Within $\pm 0.1\%$ RO/ $^\circ\text{C}$ (LUR-A-50NSA1)

Electrical Characteristics

Safe Excitation Voltage: 7 VAC or DC

Recommended Excitation Voltage: 1 to 2 VAC or DC

Input Resistance: $350 \Omega \pm 2\%$

Output Resistance: $350 \Omega \pm 2\%$

Cable: 4-conductor (0.05 mm²) chloroprene shielded cable, 3 mm diameter by 5 m long, terminated with NDIS connector plug

Mechanical Properties

Safe Overload Rating: 150%

Natural Frequency: See table below.

Weight: Approx. 80 g

Standard Accessories

Hexagon socket head setscrew M3 L=4

Model	Rated Capacity	Natural Frequency (Approx.)
LUR-A-50NSA1	± 50 N	2 kHz
LUR-A-100NSA1	± 100 N	4 kHz
LUR-A-200NSA1	± 200 N	5 kHz
LUR-A-500NSA1	± 500 N	9 kHz
LUR-A-1KNSA1	± 1 kN	14 kHz
LUR-A-2KNSA1	± 2 kN	20 kHz

Dimensions in Combination with Ball Joint

In Combination with Ball Joint TU-8

