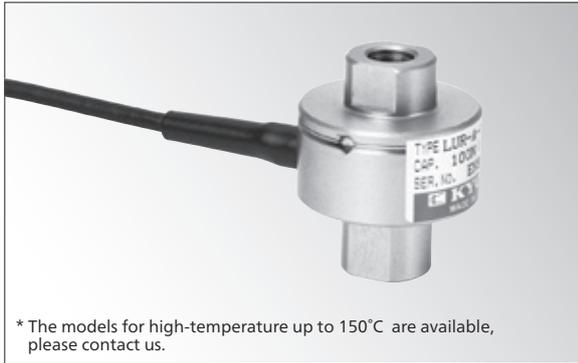


LUR-A-SA1

● $\phi 28$ mm, 80 g ● 50 N to 2 kN

Compact Tension/Compression Load Cell



* The models for high-temperature up to 150°C are available, please contact us.

Compact Lightweight Tension & Compression Load Cells

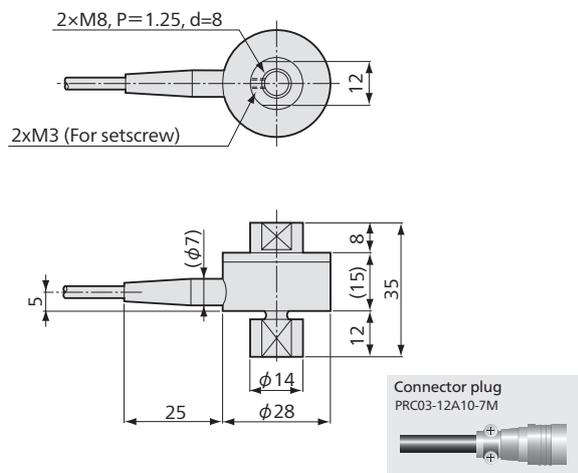
Compact & lightweight LUR-A-S1 series are easy to use tension/compression load cells. They are used in various fields ranging from production lines to experiments.

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

To Ensure Safe Usage

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

■ 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 or more for 100 N to 2 kN Approx. ± 0.4 mV/V for 50 N

Environmental Characteristics

Safe Temperature	-10 to 70°C
Compensated Temperature	0 to 70°C
Temperature Effect on Zero	Within $\pm 0.05\%$ RO/°C for 100 N to 2 kN Within $\pm 0.1\%$ RO/°C for 50 N
Temperature Effect on Output	Within $\pm 0.05\%$ /°C for 100 N to 2 kN Within $\pm 0.1\%$ /°C for 50 N

Electrical Characteristics

Safe Excitation	7 V AC or DC
Recommended Excitation	1 to 2 V AC or DC
Input Resistance	$350 \Omega \pm 2\%$
Output Resistance	$350 \Omega \pm 2\%$
Cable	4-conductor (0.05 mm ²) chloroprene shielded cable, 3 mm diameter by 5 m long, terminated with an NDIS connector plug PRC03-12A10-7M (Shield wire is connected to the case.)

Mechanical Properties

Safe Overloads	150%
Natural Frequencies	See table below.
Weight	Approx. 70 g (Excluding cable)

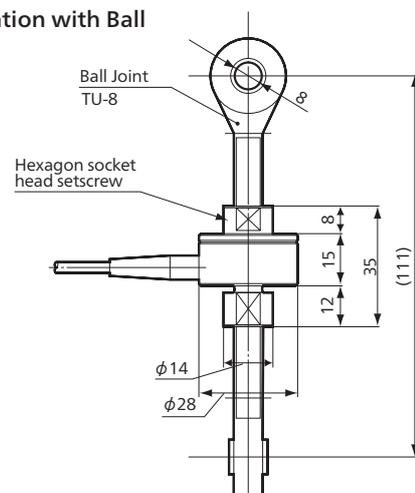
Standard Accessories Hexagon socket head setscrew M3, L=4

Optional Accessories Ball joint TU (Page 2-74)

Models	Rated Capacity	Natural Frequencies
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



● Physical quantity indication ● Static measurement ● Dynamic measurement

LUR-A-SA1 Recommended products for combination

 Instrumentation Amplifier WGA-900A → 3-95	 Data Logger UCAM-60B → 3-25	 Strain Amplifier DPM-900 Series → 3-5	 Universal Recorder EDX-200A → 3-55	 Universal Recorder EDX-100A → 3-63	 Sensor Interface PCD-400A → 3-77
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