# **LUR-A-SA1**

## **Compact Tension/Compression Load Cell**



### **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

#### 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).

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

#### **Specifications**

#### Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.5% RO
Hysteresis	Within ±0.5% RO
Rated Output	0.5 mV/V or more
	50NSA1: Approx. 0.4 mV/V

#### **Environmental Characteristics**

Safe Temperature	-10 to 70°C
Compensated Temperature	0 to 70°C
Temperature Effect on Zero	Within ±0.05% RO/°C
	(50NSA1: Within ±0.1% RO/°C)
Temperature Effect on Output	Within ±0.05%/°C
	(50NSA1: Within ±0.1%/°C)

#### **Electrical Characteristics**

Safe Excitation	7 V AC or DC		
Recommended Excitation	1 to 2 V AC or DC		
Input Resistance 350 Ω ±2%			
Output Resistance 350 Ω ±2%			
Cable 4-conductor (0.05 mm²) chloroprene shielded cable,			
3 mm diameter by 5 m long, terminated with a connector plug			
PRC03-12A10-7M			
(Shield wire is conne	ected to the case.)		

#### **Mechanical Properties**

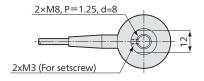
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Safe Overloads	150%
<b>Natural Frequencies</b>	See table below.
Weight	Approx. 70 g (Excluding cable)
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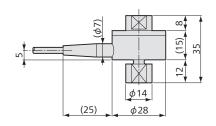
Standard Accessories Hexagon socket head setscrew M3, L=4

Optional Accessories Ball joint TU (Page 2-75)

Models	Rated Capacity	Natural Frequencies (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





PRC03-12A10-7M

Physical quantity indication

●Static measurement ●Dynamic measurement

















Compressive

Tensile

Tensile & compressive

Component

Special

Other