

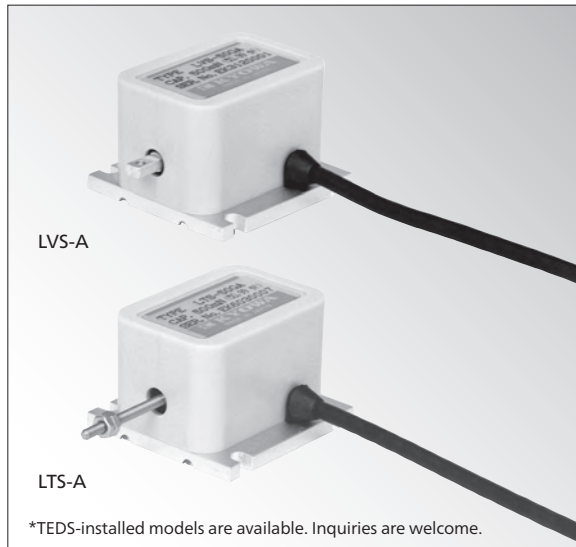
LVS-A/LTS-A

Ultra Small-capacity Load Cell

- Compact & lightweight
- 50 mN to 20 N

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-58

TRANSDUCERS



*TEDS-installed models are available. Inquiries are welcome.

Designed to accurately measure small loads ranging from 50 mN to 20 N.

- Compact & lightweight
- High accuracy
- Easy to handle

These load cells are designed to accurately measure small loads ranging from 50 mN to 20 N. Easy to install and handle, the LVS-A series measures loads in vertical direction to the mounted surface and the LTS-A series, in horizontal direction.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.5\%$ RO
Hysteresis	Within $\pm 0.5\%$ RO
Repeatability	0.5% RO or less
Rated Output	1.5 mV/V (3000×10^{-6} strain) or more 5GA and 10GA: 1.2 mV/V (2400×10^{-6} strain) or more

Environmental Characteristics

Safe Temperature	-10 to 70°C
Compensated Temperature	0 to 60°C
Temperature Effect on Zero	Within $\pm 0.05\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.1\%$ /°C

Electrical Characteristics

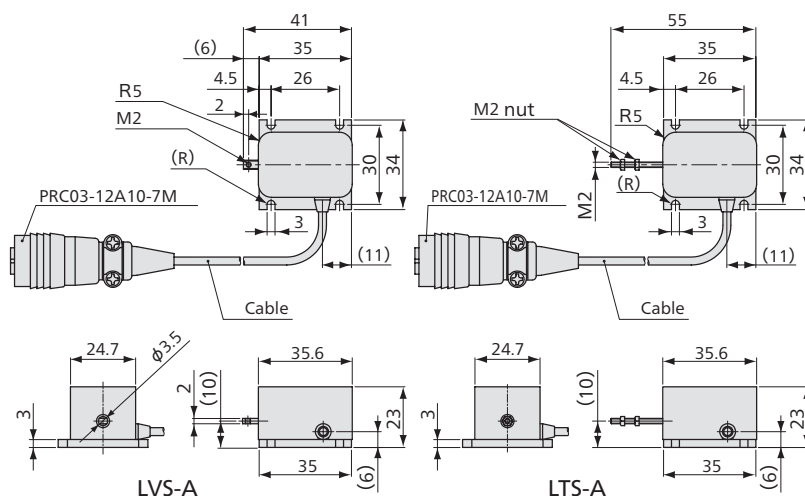
Safe Excitation	6 V AC or DC
Recommended Excitation	1 to 2 V AC or DC
Input Resistance	120 $\Omega \pm 10\%$
Output Resistance	120 $\Omega \pm 10\%$
Cable	4-conductor (0.05 mm ²) chloroprene shielded cable, 3 mm diameter by 1 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	120%
Ultimate Overloads	See table below.
Weight	Approx. 50 g (Excluding cable)

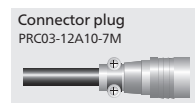
Models	Natural Frequencies	Rated Capacity	Ultimate Overloads
LVS-5GA	≈ 50 Hz	50 mN	1000%
LVS-10GA	≈ 111 Hz	100 mN	
LVS-20GA	≈ 147 Hz	200 mN	
LVS-50GA	≈ 294 Hz	500 mN	500%
LVS-100GA	≈ 455 Hz	1 N	
LVS-200GA	≈ 667 Hz	2 N	
LVS-500GA	≈ 1220 Hz	5 N	250%
LVS-1KA	≈ 1600 Hz	10 N	
LVS-2KA	≈ 2500 Hz	20 N	
LTS-50GA	≈ 256 Hz	500 mN	500%
LTS-100GA	≈ 385 Hz	1 N	
LTS-200GA	≈ 625 Hz	2 N	
LTS-500GA	≈ 1000 Hz	5 N	250%
LTS-1KA	≈ 1670 Hz	10 N	
LTS-2KA	≈ 1700 Hz	20 N	

Dimensions



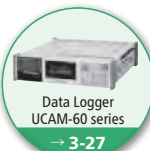
To Ensure Safe Usage

- The load cell should be carefully installed. Especially, never apply any impact (Force) in sensitivity direction.
- When mounting the rod to the measuring object, do not apply any bending or twisting force.



- Physical quantity indication
- Static measurement
- Dynamic measurement

LVS-A/LTS-A
Recommended
products for
combination



Load Cells (Load Transducers)