

LCTA-A

●Thin ●500 N to 3 kN

Thin Load Cell "Multi Force Sensor"



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

Advanced thin design 1/2 to 1/3 height to the conventional one

Original ideas and advanced technologies cultivated in weight control of large scale airplanes made the revolutionary thin design of the LCTA-A series load cells possible. The integrated design and rubber attachment enable use with the top and bottom fixed and provide excellent buffer.

- 1/2 to 1/3 height to the conventional one enables wide application.
- Optional dedicated rubber attachment enables fixing the top and bottom with bolts, thereby making it possible to design the system with no tension rod or stay rod used.
- Safety factor is 3 to 5 times higher than conventional type. Endures lateral loads up to 20% of the rated capacity.
- Rubber attachment attenuates impact energy and lessens the effects of thermal expansion of system and the moment of fixed section.
- Rubber attachment enables easy installation without concern for parallelism.
- Varieties of accuracies and output signals are available, enabling configuration of the most suitable system for each application.
- Combination instruments such as amplifiers are easily connected since the wirings are the same as conventional load cells.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.05\%$ RO
Hysteresis	Within $\pm 0.05\%$ RO
Repeatability	0.03% RO or less
Rated Output	2 mV/V (4000×10^{-6} strain) $\pm 0.2\%$

Environmental Characteristics

Safe Temperature	-20 to 70°C
Compensated Temperature	-10 to 60°C
Temperature Effect on Zero	Within $\pm 0.01\%$ RO/°C
Temperature Effect on Output	Within $\pm 0.01\%$ /°C

Electrical Characteristics

Safe Excitation	20 VDC
Recommended Excitation	1 to 10 VDC
Input Resistance	350 $\Omega \pm 1.5\%$
Output Resistance	350 $\Omega \pm 1.5\%$
Dedicated Connection Cable	HW005-40AD
Cable	4-conductor (0.5 mm ²) shielded vinyl sheath, 8.5 mm diameter by 5 m long, bared at the tip (Shield wire is not connected to the case.)

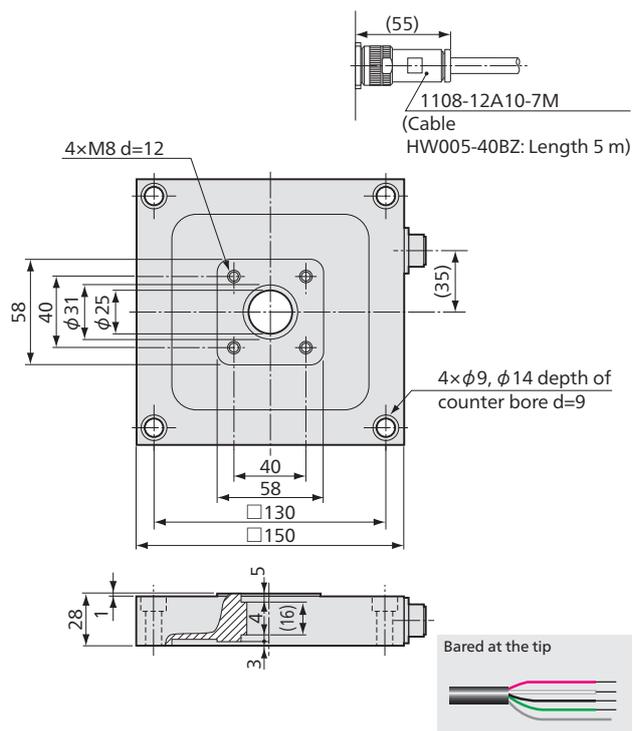
Mechanical Properties

Safe Overloads	150%
Ultimate Lateral Load	20% (Max load which does not cause any mechanical damage)
Weight	Approx. 1.1 kg (Excluding cable)
Materials	Aluminum alloy

- (Note 1) No LCTA-A is used for any onboard measurement.
 (Note 2) No LCTA-A is used in an environment where it is frequently exposed to lateral loads.
 (Note 3) No LCTA-A is installed to any inclined or vertical surfaces.

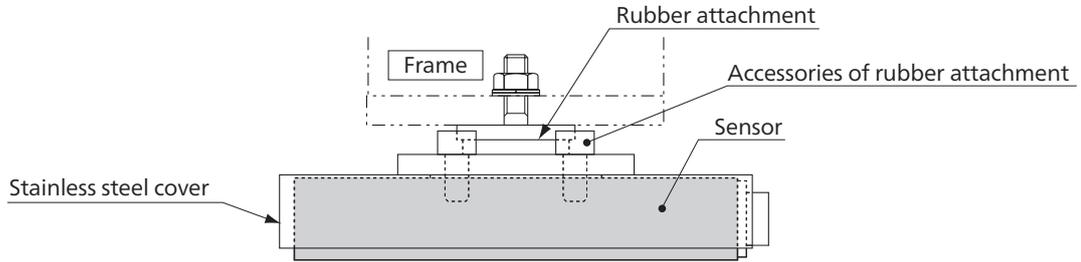
Models	Rated Capacity
LCTA-A-500N	500 N
LCTA-A-800N	800 N
LCTA-A-1KN	1 kN
LCTA-A-2KN	2 kN
LCTA-A-3KN	3 kN

Dimensions



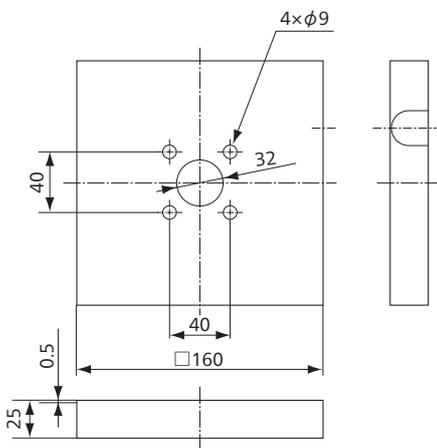


Optional accessories

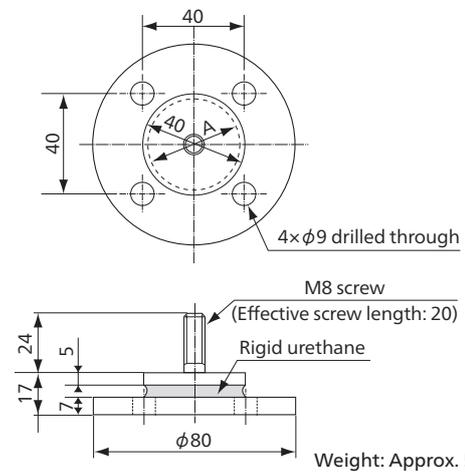


Applicable Accessories

Models	Stainless Steel Covers	Rubber Attachments
LCTA-A-500N	COV03-300K	RA02-100K
LCTA-A-800N		
LCTA-A-1KN		RA02-300K
LCTA-A-2KN		
LCTA-A-3KN		



Stainless Steel Cover



Rubber Attachment

Models	A
RA02-100K	30
RA02-300K	36

● Physical quantity indication

● Static measurement

● Dynamic measurement

