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 More Applications are possible

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.

- ●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 ±0.05% RO
Hysteresis	Within ±0.05% RO
Repeatability	0.03% RO or less
Rated Output	2 mV/V ±0.2%

Environmental Characteristics

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

Electrical Characteristics

Safe Excitation	20 V DC
Recommended Excitation	1 to 10 V DC
Input Resistance	350 Ω±1.5%
Output Resistance	350 Ω±1.5%
Dedicated connection cable	HW005-40AD
Cable	4-conductor (0.5 mm²) shielded vinyl sheath, 8.5 mm diameter by 5 m long, bared at the tip (Shield wire is not connected to the case.)

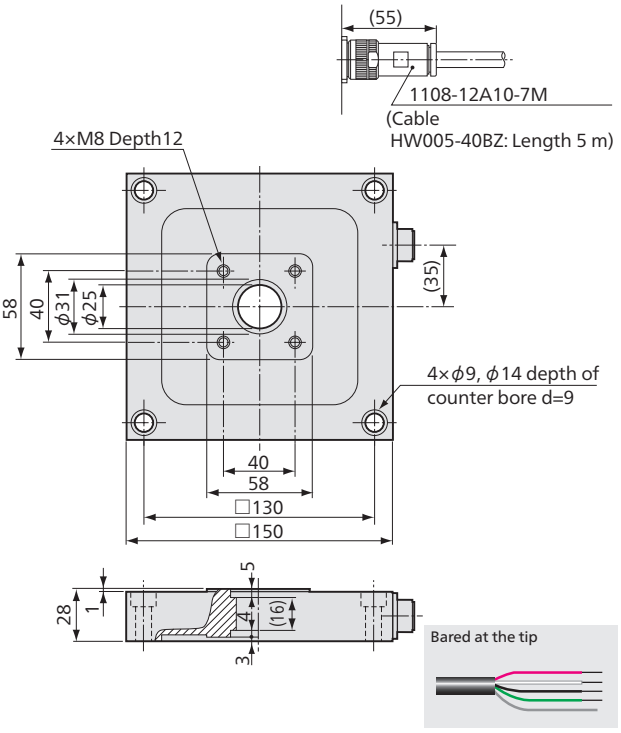
Mechanical Properties

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

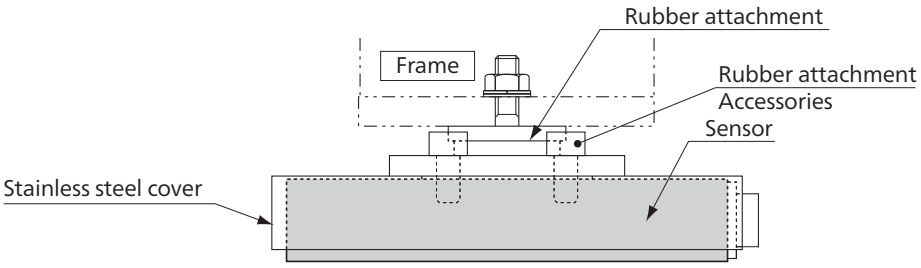
Precautions
1. No LCTA-A is used for any onboard measurement.
2. No LCTA-A is used in an environment where it is frequently exposed to lateral loads.
3. No LCTA-A is installed to any inclined or vertical surfaces.

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

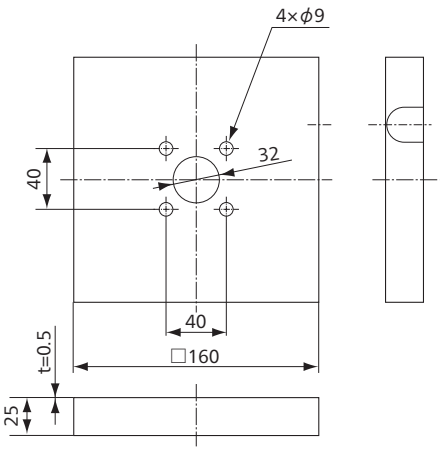


Accessories



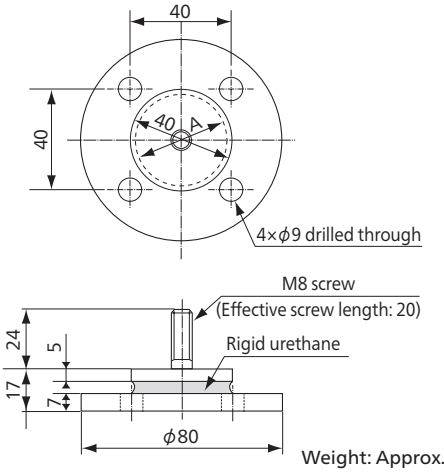
Applicable Accessories

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



Weight: Approx. 180 g

Stainless Steel Cover



Weight: Approx. 500 g

Rubber Attachment

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

●Physical quantity indication ●Static measurement ●Dynamic measurement

LCTA-A Recommended products for combination

Instrumentation Amplifier WGA-900A → 3-95
Instrumentation Amplifier WGA-680A → 3-97
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