



Strain Gage

Load Cell

Pressure Sensor

Acceleration Sensor

Torque Sensor

Displacement Sensor

Component Force Sensor

Automotive Sensor

Civil Engineering Sensor

LCX-A-ID

Small-sized Compression Load Cell



Compact, lightweight, easily installable load cells

- Rated capacity: 500 N to 20 kN
- Degree of protection: IP67
- Detachable cable for easy installation

Small-size load cells made from stainless steel for use as detectors for systems requiring corrosion resistance.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.1\%$ RO
Hysteresis	Within $\pm 0.1\%$ RO
Repeatability	0.05% RO or less
Rated Output	1.5 mV/V or more (500N: 1.0 mV/V or more)

Environmental Characteristics

Safe Temperature	-20 to 80°C (Non-condensing)
Compensated Temperature	-10 to 70°C (Non-condensing)
Temperature Effect on Zero	Within $\pm 0.005\%$ RO/°C (500N: $\pm 0.01\%$ RO/°C)
Temperature Effect on Output	Within $\pm 0.005\%$ /°C

Electrical Characteristics

Safe Excitation	15 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	375 Ω $\pm 1.5\%$
Output Resistance	350 Ω $\pm 1\%$

Cable	Model: TE-45
	6-conductor (0.08 mm ²) chloroprene shielded cable, 4.4 mm diameter by 3 m long
	Sensor side: Terminated with a connector plug 213FCW-8P
	Measuring instrument side: Bared at the tip
	(Shield wire is not connected to the case.)

Mechanical Properties

Safe Overloads	150%
Safe Lateral Loads	15% the rated capacity
Natural Frequencies	See table below.
Material	Stainless steel
Weight	See table below.
Degree of Protection	IP67 (JIS C 0920/IEC 60529)

■ Optional Accessories Saddle CA-2F
Mount base CX

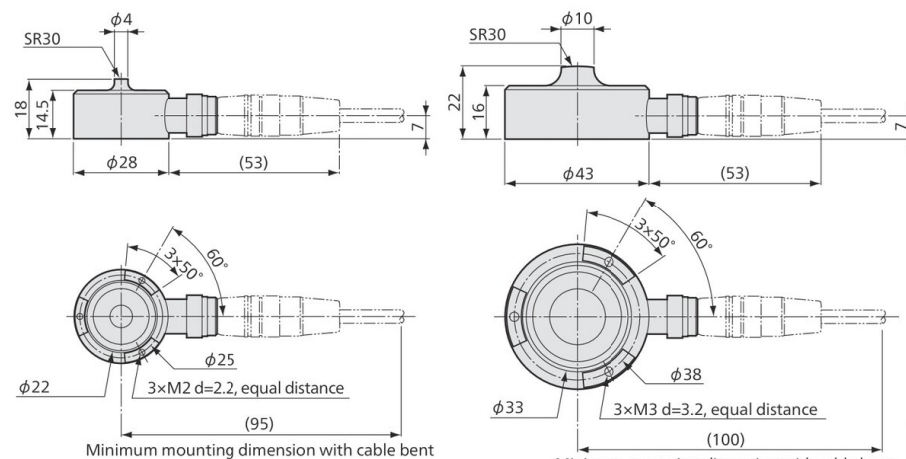
Models

Model	Rated Capacity	Natural Frequencies (Approx.)	Spring Constant	Weight (Approx.) [*]
LCX-A-500N-ID	500 N	24 kHz	13 kN/mm	45 g
LCX-A-1KN-ID	1 kN	29 kHz	23 kN/mm	
LCX-A-2KN-ID	2 kN	37 kHz	38 kN/mm	
LCX-A-5KN-ID	5 kN	24 kHz	74 kN/mm	120 g
LCX-A-10KN-ID	10 kN	28 kHz	109 kN/mm	
LCX-A-20KN-ID	20 kN	37 kHz	190 kN/mm	

*Models with the cable which is resistant to repeated bending (flexible cable) are available. Please contact us.

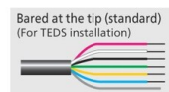
*1 Excluding cable

■ Dimensions



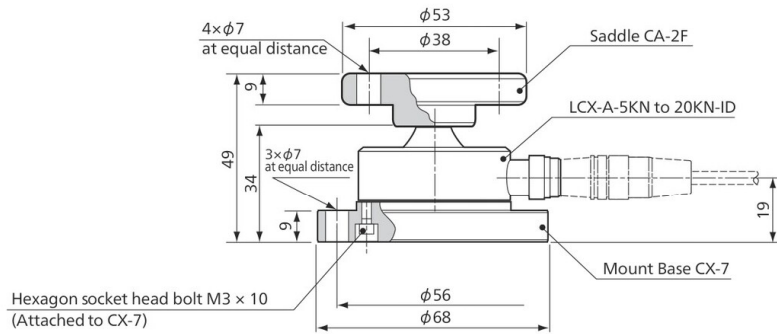
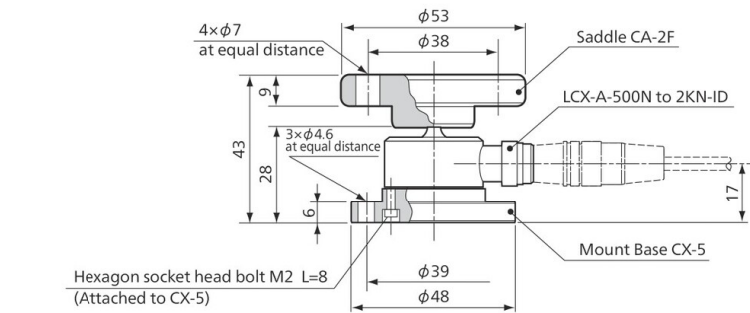
LCX-A-500N-ID to 2KN-ID

LCX-A-5KN-ID to 20KN-ID

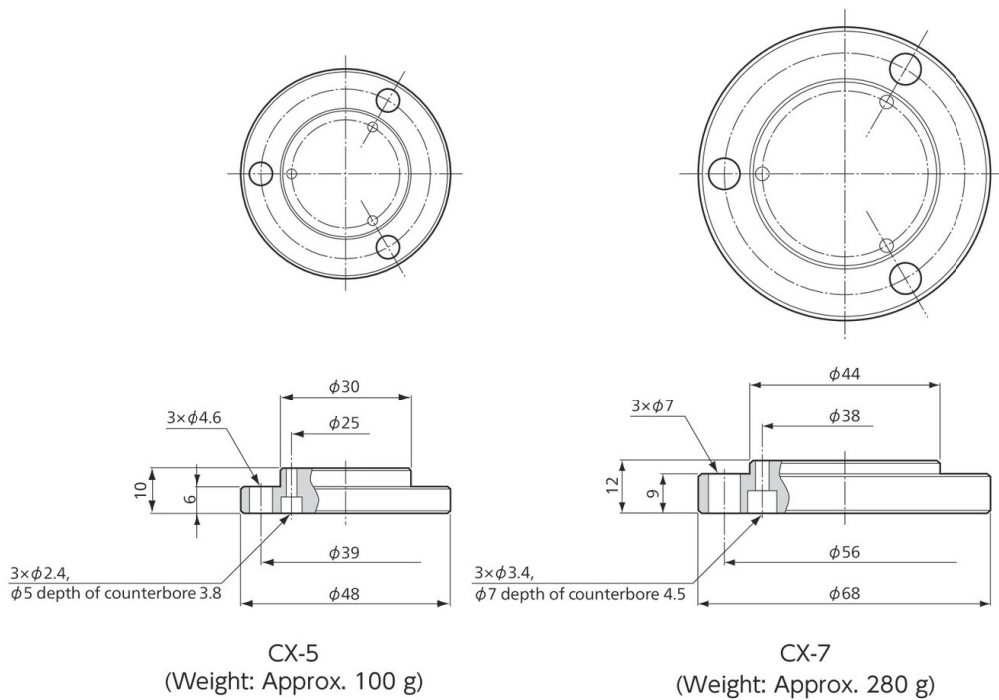


Configuration Diagram

- In combination with saddle (CA) and mount base (CX)



Mount Base CX



1
-80

Sensor



Strain Gage

Load Cell

Pressure
Sensor

Acceleration
Sensor

Torque
Sensor

Displacement
Sensor

Component
Force
Sensor

Automotive
Sensor

Civil
Engineering
Sensor