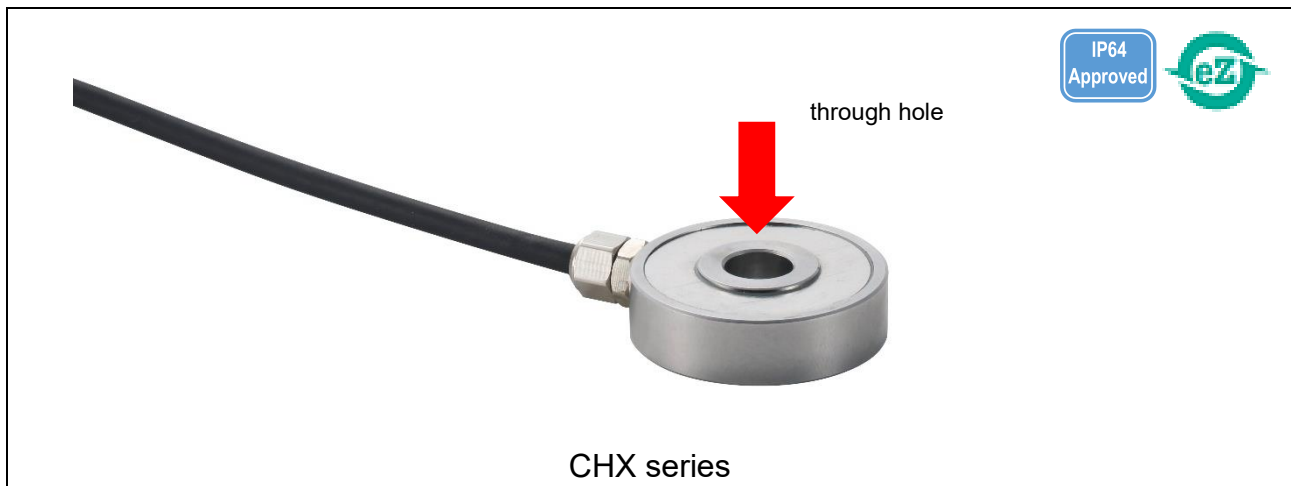

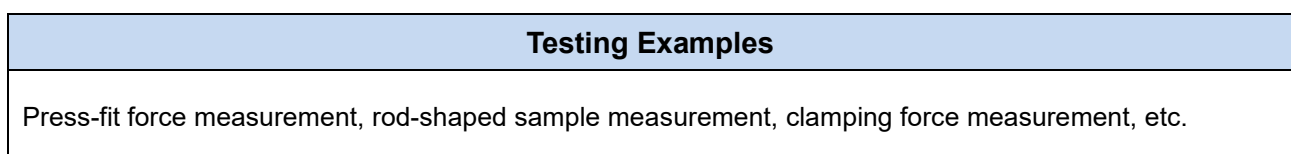
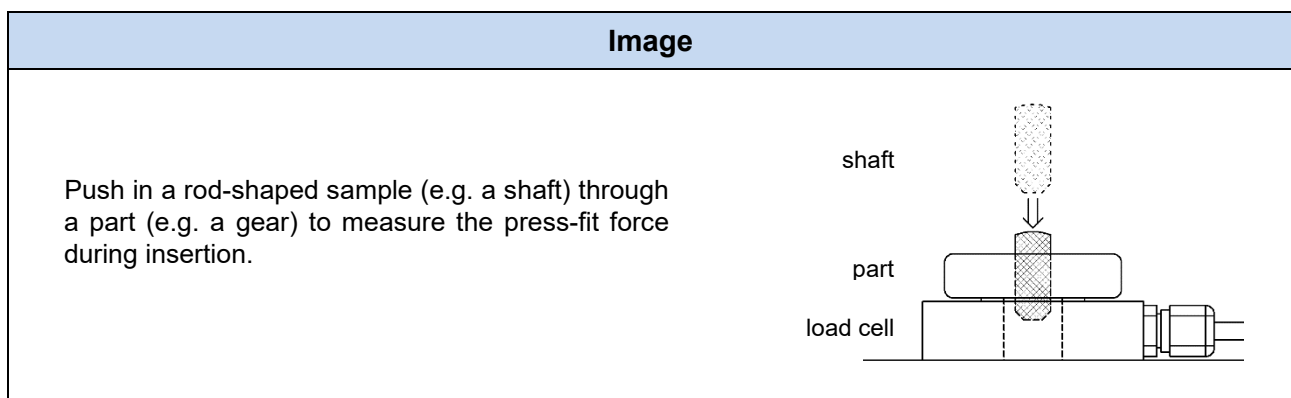



Washer Type Compression Load Cell CHX series

- Washer (through hole) type sensor, suitable for press-fit force measurement
- Small body, ideal for measurements in limited space
- 5 selectable amplifiers (indicators) to fit for purpose
- Graphing software (separately sold) available for analysis of results



* IP (Ingress Protection) is a standard which is based on IEC Standard for solid foreign materials, electric devices for water and cabinet.
* eZ-Connect series load cells  are interchangeable and can be connected to one amplifier without adjustment, therefore suitable for measurement of different types of force (e.g. tension and torque) or ranges (e.g. small force and high capacity).







Specifications		
Model	CHX series	eCHX series 
Capacity	Refer to page 3	
Accuracy (*1)	+/-2.0%F.S. or less (100N/500N) +/-1.0%F.S. or less (2000N)	-
Rated Output	0.7-1.5mV/V (100N) 1.2-2.0mV/V (500N) 1.0-1.5mV/V (2000N)	-
Recommended Voltage (Allowable Voltage)	5V-10V DC (15V DC)	-
Safe Overload Rating	150%	
Recommended Temperature (Allowable Temperature)	-10 to 60 degrees Celsius (-20 to 80 degrees Celsius)	
Cable	Approx. 3m	
Dimensions	See [Dimensions]	
Weight	Approx. 58g (100N/500N) Approx. 82g (2000N)	
Protection Rating (*2)	IP64	

*1 It is the accuracy of the sensor only. Refer to page 3 for the accuracy of combinations with the amplifier (indicator) under [Models of Sensors Combined with Indicators (Separated sensor models)] and [Models of eZ-Connect Series (Sensor Interchangeable Model)].

*2 IP is only approved for the sensor part. The amplifier (indicator), the connector parts, and cable are not secured.

* An amplifier (indicator) is required to read values. Refer to "Amplifiers (Indicators)" below for details.

* When ordering load cell without indicators, three connector types are available. See [Models of Load Cell Only] on page 3 for details. The load cells are not guaranteed either for the operability with your own amplifier (indicator) or for the accuracy as a result of such use.

Amplifiers (Indicators)						
Type	Sensor Combined with Amplifier (Indicator) *1			eZ-Connect series  Sensor Interchangeable Amplifier		
Feature	high accuracy (accuracy of load cell only)			no adjustment required		
Indicator	Handheld Type ZTS series	Handheld Type ZTA series	Desk Type FA Plus2	Desk Type eFA Plus2	Handheld Type eZT	
Image						
Use	- For measurement with high accuracy			- For a wide variety of use		
	-	- Displacement output - Data save to USB memory				
	-			- For integration		



* Refer to each specification for details.

*1 A load cell and the indicator are adjusted together. Readjustment and calibration are required when changing load cells.

[Models of Load Cell Only]

	Model	Capacity	Hole Diameter
CHX series	CHX-100N	100N	6.6mm
	CHX-500N	500N	6.6mm
	CHX-2000N	2000N	10.1mm

[Connector Type]

Code	-5P	-6P	-OC
Connector	 5 pin	 6 pin	Open End (without connector)
Connection	ZT series, FA Plus2, etc.	Some discontinued IMADA products	For integration
*Check the connector shape of your equipment to connect.			

* When ordering load cell only, select the connector type and add the code to the end of the load cell model; for example, the product model for CHX-500N with 5 pin is "CHX-500N-5P".

[Models of Sensors Combined with Indicators (Separated Sensor Models)]

Model			Capacity	Accuracy (*1)	Display	Resolution
ZTA	ZTS	FA Plus2				
ZTA-CHX-100N	ZTS-CHX-100N	FAP2-CHX-100N	100N	+/-2%F.S. or less	100.0N	0.1N
ZTA-CHX-500N	ZTS-CHX-500N	FAP2-CHX-500N	500N		500.0N	0.1N
ZTA-CHX-2000N	ZTS-CHX-2000N	FAP2-CHX-2000N	2000N	+/-1.0%F.S. or less	2000N (2.000kN)	1N (0.001kN)

* Refer to the specification of indicator for details.

*1 It is the accuracy of the sensor and indicator combined.

[Models of eZ-Connect Series (Sensor Interchangeable Model) ]

	Model	Capacity	Accuracy (*1)	Display	Resolution
eCHX series	eCHX-100N	100N	+/-2.2%F.S. or less	100.0N	0.1N
	eCHX-500N	500N		500.0N	0.1N
	eCHX-2000N	2000N	+/-1.2%F.S. or less	2000N (2.000kN)	1N (0.001kN)

* Refer to the specification of indicator for details.

*1 It is the accuracy of the sensor and indicator combined.





[Custom-made Cables]

Extended Cable Length	Extends the length of a cable for gauge to PC connection or load cell to amplifier connection
Enhanced Cable Flexibility	Changes the cable to a high-flex cable to reduce risks of disconnection

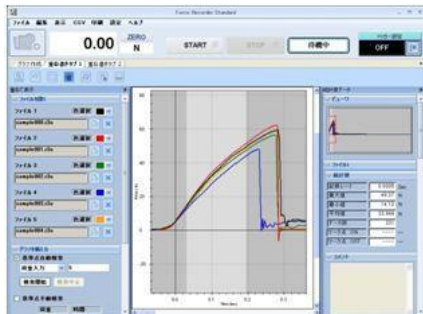
* Contact us for details of custom-made solutions.

[Related Products]

- Other Load Cells

Standard type DPU series	Coin shaped type LM series	Pen type PN-50N	For automatic doors DM-2000N
High accuracy load cell for general use with 2N to 500N capacity	Coin size load cell for compression	Pen-shaped sensor for measuring operation force of small samples	Designed for measurement of automatic door closing force
			

- Graphing Software Force Recorder Series

Image	Features
	<ul style="list-style-type: none"> - Available in 4 types; Light, Standard, Professional, and Plus - Plots graphs of force-displacement at real time via USB connection at max. 2000Hz or 1000Hz (Plus) - Comment function for keeping a note of testing conditions such as testing speed - Overlays up to 5 graphs (Standard and Professional) or 10 graphs (Plus) - Analyzes torque-angle relationships (Professional) <p>* Refer to each specification sheet for further information.</p>

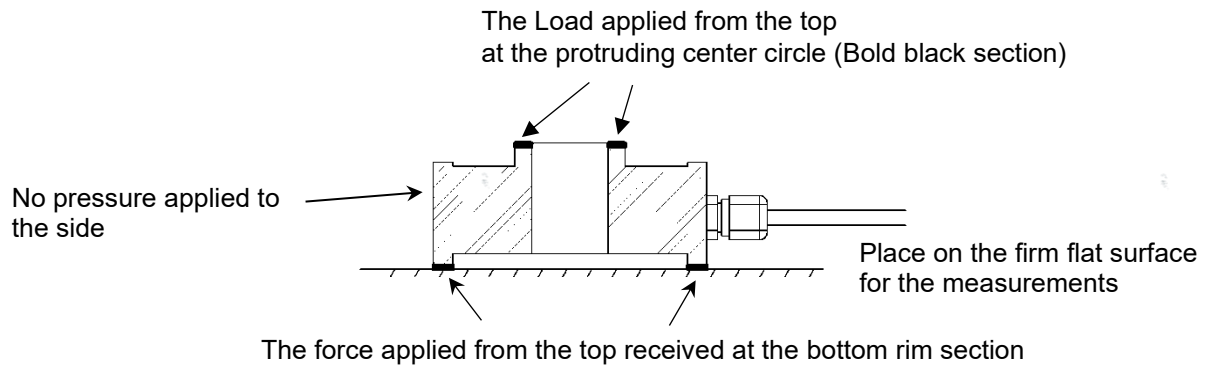
- Cables

Model	Type	Purpose of use
CB-108	Analog cable	To connect to a multi meter, oscilloscope
CB-118	Analog cable (For -AN option)	To connect to a multi meter, oscilloscope
CB-208	RS232C cable	To connect to a PC or your own system
CB-908	Open end connection cable	Output cable for loose wire 37 pin (Useful for connecting your own connector)
CTB-A	Terminal Block Cable	To connect to an external equipment such as PLC or to such and linear scale (*1)

*1 The linear scale connection is limited to models equipped with the displacement output function (ZTA series, eZT, FA Plus2, eFA Plus2).

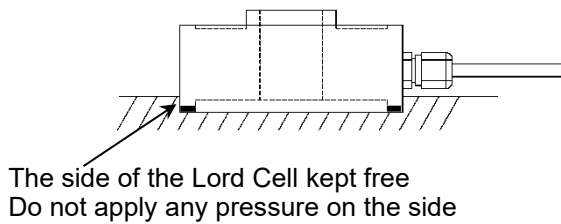
[Notes when use CHX series]

-The Load Cell receives the force at the area indicated with bold black section.

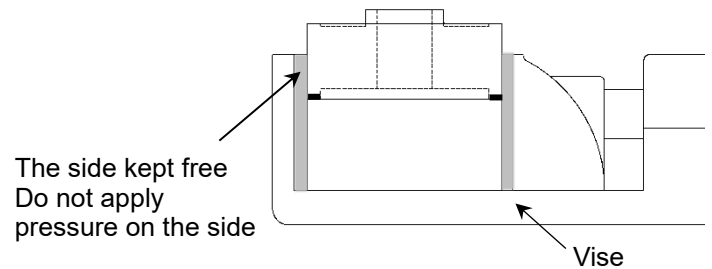


-The Load applied from the top distorts the Load Cell during the measurement. For accurate results, the Load Cell should be placed on a firm flat surface, free from any contact with obstacles, other than the bottom circular rim surface (bold black section).

X Do not insert or fit into the groove or the dent

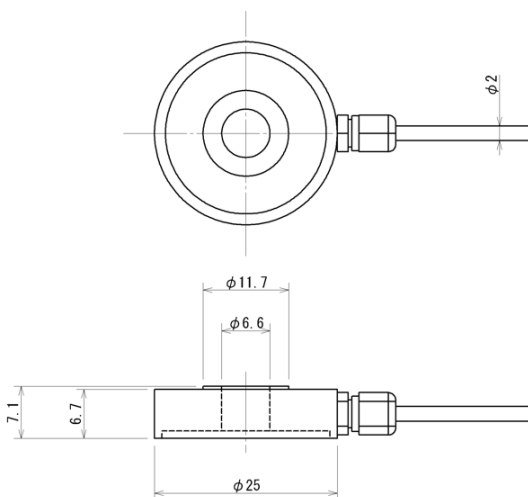


X Do not secure or hold the Load Cell using holding tools such as the vise

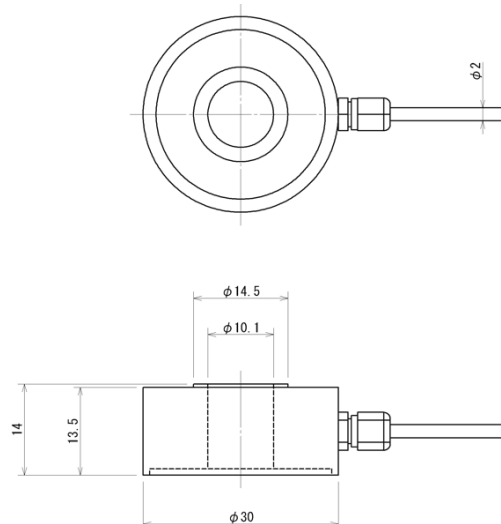


[Dimensions]

CHX-100N/500N



CHX-2000N



Unit: mm

[Cautions]

- Information in this document is subject to change without prior notice.
- This document introduces product descriptions and handling precautions, and it does not guarantee the features or safety mentioned therein.
- This product is designed for force measurement purpose only.
- Do not copy and use this content without authorization.
- Do not apply force more than its capacity or from incorrect direction to the measuring shaft.
- Do not use this product in the environments including fierce temperature changes, high temperature, high humidity, near water, dusty place.

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