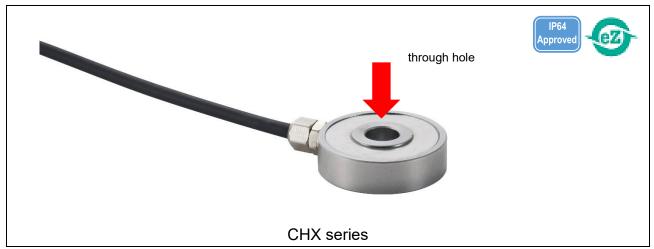


Washer Type Compression Load Cell CHX series

- 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).

Image		
Push in a rod-shaped sample (e.g. a shaft) through a part (e.g. a gear) to measure the press-fit force	shaft	
during insertion.	part	
	load cell	

Testing Examples

Press-fit force measurement, rod-shaped sample measurement, clamping force measurement, etc.



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

*3 Refer to specification of [Options Available for Load cell Cable] to change cable length or so.

* 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.



[Available Amplifiers (Indicators)]

	Separated Sensor Model				
Handheld type ZTS series	Handheld type ZTA series	Desktop type FA Plus2			
- Handheld use	- Handheld use	- Desktop use			
- Higher accuracy	- Higher accuracy - I/O displacement - Data saving to USB	- Higher accuracy			
eZ-Connect series Sensor Interchangeable Amplifier 🏼 🎯					
Desktop type eFA Plus2	Handheld type eZT	Quad Sensor Measuring Amplifier QSMA-400			
		and a state			
		- Up to 4 different load cells can be			
- Desktop use	- Handheld use	connected Simultaneously. (Load cell			
- Load cell interchangeable	 Load cell interchangeable 	interchangeable)			
(such as measurement of tension and torque, or low and high load)	(such as measurement of tension and torque, or low and high load)	 To use QSMA-400, the graphing Software Quad Graph Drawer is required to be downloaded. 			

* Refer to the specification sheet of each indicator for details.

[Models of Load Cell Only]

	Model	Capacity	Hole Diameter
0.11/	CHX-100N	100N	6.6mm
CHX	CHX-500N	500N	6.6mm
series	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. For integration		For integration

* 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".

IMADA CO., LTD. Washer Type Compression Load Cell CHX series IModels of Sensors Combined with Indicators (Separated Sensor Mod

	Model		Consoitu	Accuracy	Diaplay	Resolution
ZTA	ZTS	FA Plus2	Capacity	(*1)	Display	Resolution
ZTA-CHX-100N	ZTS-CHX-100N	FAP2-CHX-100N	100N	+/-2%F.S.	100.0N	0.1N
ZTA-CHX-500N	ZTS-CHX-500N	FAP2-CHX-500N	500N	or less	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)

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

* 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-100N	100N	Acquiracy of concor	100.0N	0.1N
eCHX	eCHX-500N	500N	Accuracy of sensor +	500.0N	0.1N
series	eCHX-2000N	2000N	Accuracy of amplifier	2000N (2.000kN)	1N (0.001kN)

*1 Total accuracy when combined with the eZ-Connect series amplifier.

e.g. Total accuracy of eCLFX and eZT \rightarrow +/-1.2%F.S. or less (Load cell: +/-1.0%F.S. or less + Amplifier: +/-0.2%F.S. or less)

* Please refer to the accuracy of the sensor of eZ-Connect in the Specifications table.

[Related Products]

- Other Load Cells

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

- Graphing Software Force Recorder Series

Image	Features
	 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) * Refer to each specification sheet for further information.

FORCE MEASUREMENT



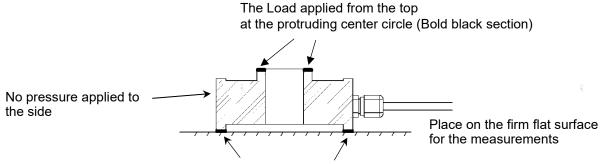
- Cables

Model	Туре	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)
СТВ-А	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).

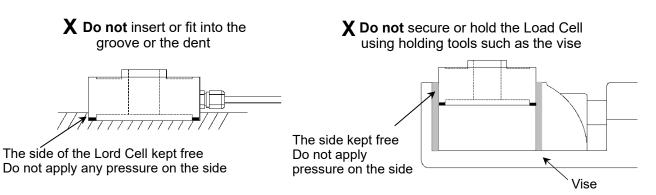
[Notes when use CHX series]

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



The force applied from the top received at the bottom rim 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).



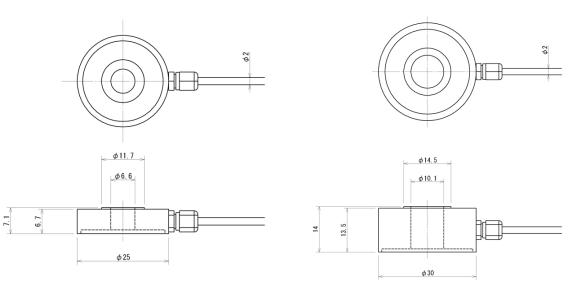
IMADA CO., LTD. Washer Type Compression Load Cell CHX series



[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.

IMADA CO., LTD.

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