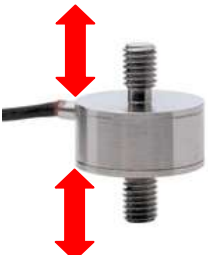
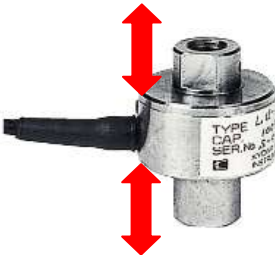


Load cell LMU/LU/ZD series

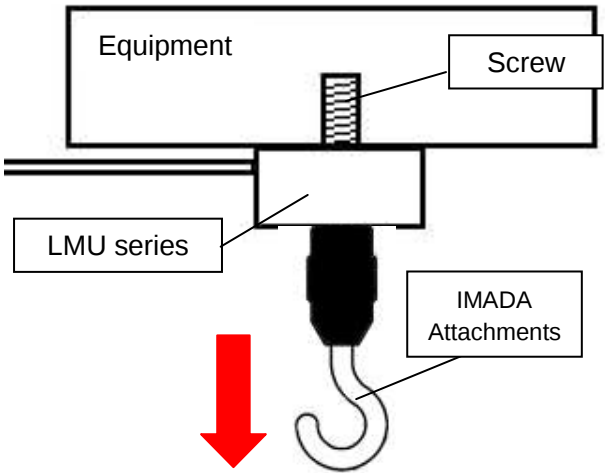
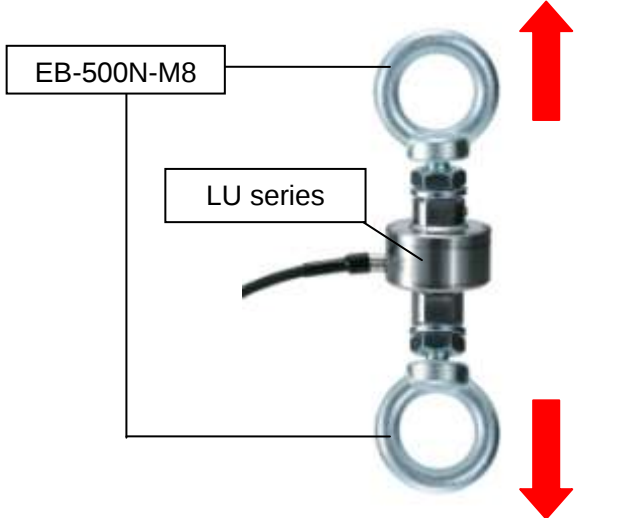
- Small and light weight load cells. They are suitable for a narrow space.
- It can be screwed with the both ends. Easy installation and fixation.

*They are used combining an indicator ZT series. Please refer to Page 3.

Model	Extra small type:LMU series	Small type: LU series	High capacity type: ZD
Capacity	50N~500N	50N~2000N	1000N~20kN
Force direction	Convertible type for Compression and Tension	Convertible type for Compression and tension	exclusive type for Compression or Tension (*)
Screws	Male screw(M5)	Female screw(M8)	Male screw(M12)
0Photos			

*Please choose the direction before you purchase.

[Using image]

Installing in equipment.	Hanging on equipment / Hooking samples
	

* Attachments and EB-500N-M are sold separately. Please feel free to contact our service group (+81-(0)532-33-3288) if you need.

[Specifications]

Model	LMU series	LU series	ZD series
Capacity	Please refer to the model list	Please refer to the model list	Please refer to the model list
Rated output	$\pm 1\text{mV} / \text{V} \pm 10\%$ (20N is $0.75\text{mV/V} \sim 1\text{mV/V}$)	$\pm 0.9 \sim 1.4\text{mV} / \text{V}$	1.5mV/V
Nonlinearity	0.5%R.O	0.5%R.O	0.25%R.O
Hysteresis	0.5%R.O	0.5%R.O	—
Recommended voltage (allowable applied voltage)	1~3V AC or DC(5V AC or DC)	2~5V AC or DC(7V AC or DC)	—
Allowable over load	120%R.O	150%	150%
Compensation temperature (allowable temperature)	0~50 degree Celsius (-10~60 degree Celsius)	0~70 degree Celsius (-10~70 degree Celsius)	-20~80 degree Celsius
Temperature influence for 0 degree	0.005%/ degree Celsius	0.05%/ degree Celsius	0.02%/ degree Celsius
Temperature influence for output	0.01%/ degree Celsius	0.05%/ degree Celsius	0.02%/ degree Celsius
Cable	Approx.2m(with a connector)	Approx.3m(with a connector)	Approx.3m(with a connector)
Dimensions	Please refer the dimension	Please refer the dimension	Please refer the dimension

[Model lists]

○LMU Series

Model	Capacity	Thread diameter
LMU-50N	50N	M5 P0.8
LMU-100N	100N	
LMU-200N	200N	
LMU-500N	500N	

○ZD series

Model	Capacity	Thread diameter
ZD1-1000N	1000N	M12P1.75
ZD1-2000N	2000N	
ZD1-5000N	5000N	
ZD1-10kN	10kN	
ZD1-20kN	20kN	

○ LU series

Model	Capacity	Thread diameter
LU-50N	50N	M8 P1.25
LU-100N	100N	
LU-200N	200N	
LU-500N	500N	
LU-1000N	1000N	
LU-2000N	2000N	

**Force value display/ Data management/ Operating external device
are ALL possible by combining with IMADA amplifier.**

Recommended Indicator : ZT Series

Separate sensor model digital force gauge



Combining with ZT series helps your needs such as...

- [Comfortable reading for measurement value](#)
→Measurement value is possible to check comfortably apart from the sensor. Users can keep safe distance even if the test involves some danger like Crushing test.
- [Easy data management on PC](#)
→Included software "ZT-Logger" helps to export series of data to PC. Furthermore, separately-sold software "Force Recorder" enables to draw into a graph in real time at 2000Hz. It also inputs sampling date and time at the same. Data management can be easy.
- [Various output functions for operating external devices](#)
→These functions expand the possibility of usage with external devices.

•Desktop force amplifier FA Plus



Desktop model is also available.

[The range list connecting with ZT series]

Models		Range	Accuracy(*1)	Display	Resolution
ZTA-LMU-50N	ZTS-LMU-50N	50N	±1%F.S.or less	50.00N	0.01N
ZTA-LMU-100N	ZTS-LMU-100N	100N		100.0N	0.1N
ZTA-LMU-200N	ZTS-LMU-200N	200N		200.0N	0.1N
ZTA-LMU-500N	ZTS-LMU-500N	500N		500.0N	0.1N

Models		Range	Accuracy(*1)	Display	Resolution
ZTA-LU-50N	ZTS-LU-50N	50N	±1%F.S.0 or less	50.00N	0.01N
ZTA-LU-100N	ZTS-LU-100N	100N		100.0N	0.1N
ZTA-LU-200N	ZTS-LU-200N	200N		200.0N	0.1N
ZTA-LU-500N	ZTS-LU-500N	500N		500.0N	0.1N
ZTA-LU-1000N	ZTS-LU-1000N	1000N		1000N	1N
ZTA-LU-2000N	ZTS-LU-2000N	2000N		2000N	1N

Models		Range	Accuracy(*1)	Display	Resolution
ZTA-ZD1-1000N	ZTS- ZD1-1000N	1000N	±0.5%F.S. or less	1000N(1.000kN)	1N(0.001kN)
ZTA-ZD1-2000N	ZTS- ZD1-2000N	2000N		2000N(2.000kN)	1N(0.001kN)
ZTA-ZD1-5000N	ZTS- ZD1-5000N	5000N		5000N(5.000kN)	1N(0.001kN)
ZTA-ZD1-10kN	ZTS- ZD1-10kN	10kN		10.00kN	0.1kN
ZTA-ZD2-20kN	ZTS- ZD2-20kN	20kN		20.00kN	0.1kN

* Please refer to each specification for the detail of ZT series/ software Force recorder/ FA Plus.

*1The accuracy is only available for combinations with our indicator.

[Related products]

Hoisting attachments EB/EN series		
	They are attachments for hanging samples and load cells.	
	Models	
	EN-500N	Hoisting attachments for LMU.
	EB-500N-M8	Hoisting attachments for LU.

[Other load cell line-up]

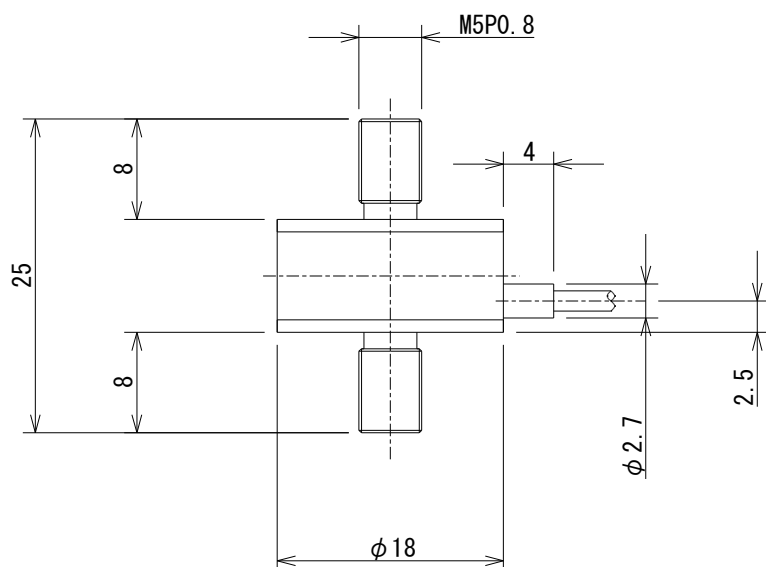
Variety of load cells are available for your needs.

Standard DPU series	Coin shaped type LM series	Pen type PN-50N	For automatic doors DM-2000N
Convertible type for compression/ tension	Convertible type for compression/ tension	Exclusive type for compression	Exclusive type for compression
			
High accuracy built-in type. For general use.	Coin size load cell for compression.	Pen-shaped to fit for measuring control force of small samples.	Fit to measure automatic door closing force.

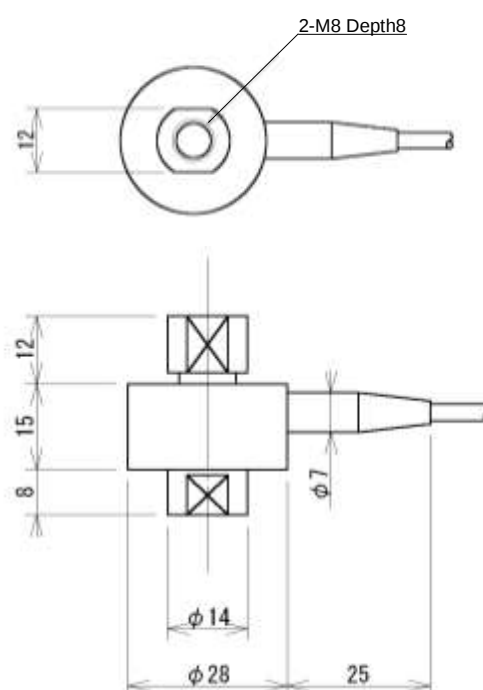
*Please refer to the each specification for the each load cell.

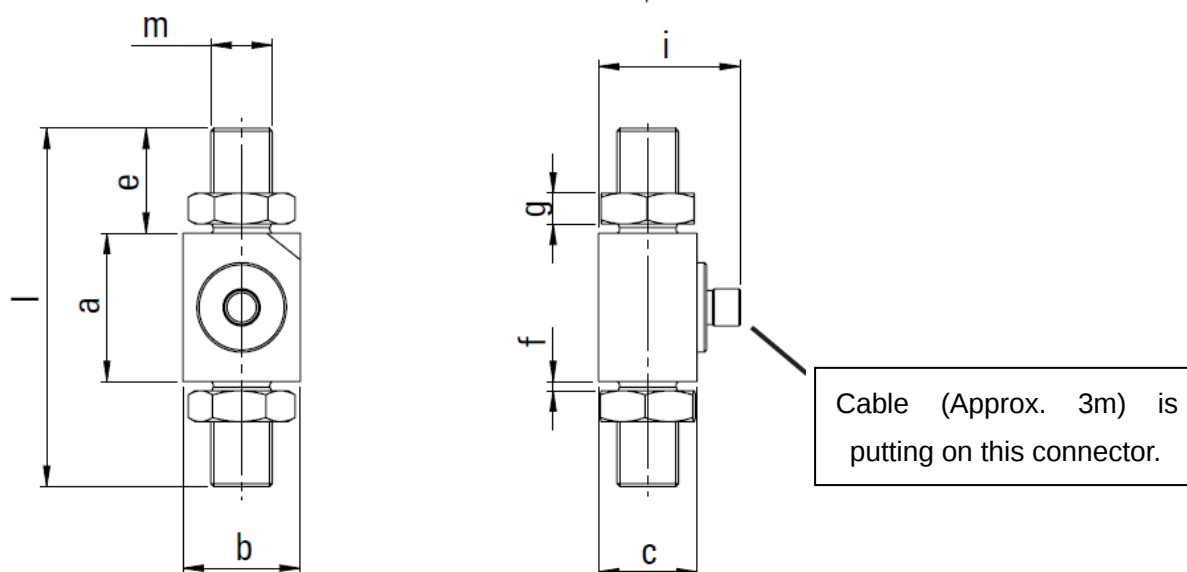
[Dimensions]

LMU series



LU series





Model	<i>l</i>	<i>e</i>	<i>a</i>	<i>b</i>	<i>c</i>	<i>g</i>	<i>i</i>	<i>f</i>	<i>l</i> 1	<i>d</i> 1	<i>d</i> 2	<i>a</i> 1	<i>m</i>
ZD1-1000N	78	21	36	30	30	6	44	2~4	154	12	32	10	M12
ZD1-2000N													
ZD1-5000N													
ZD1-10kN													
ZD1-20kN	116	34	48	38	32	10	46	2~4	228	20	51	16	M20×1.5

[Caution]

- This product is designed for force measurement only. Do not use it for other purpose.
- Please pay close attention to install this products.
 - Never apply strong force or impact especially on the sensing direction.
 - Do not apply bending or torsion stress when setting up the sensing shaft to a measuring object.
- Do not use in the condition of rapid temperature changes, high temperature, high humidity, near water and dusty place.
- The contents may be changed without notice in advance.

[Please feel free to contact us \(+81-\(0\)-532-33-3288\) for your measurement.](mailto:imada@imada.co.jp)