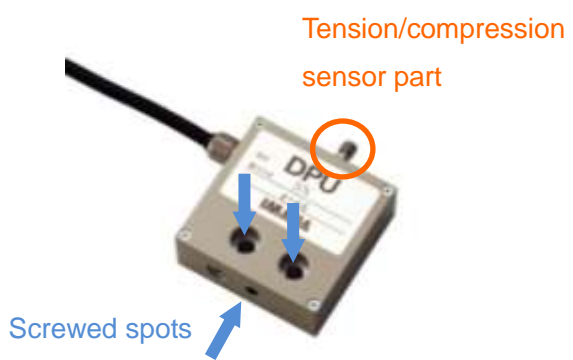
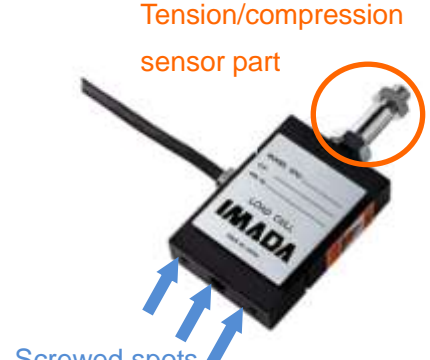


Tension/ Compression Load cell DPU series


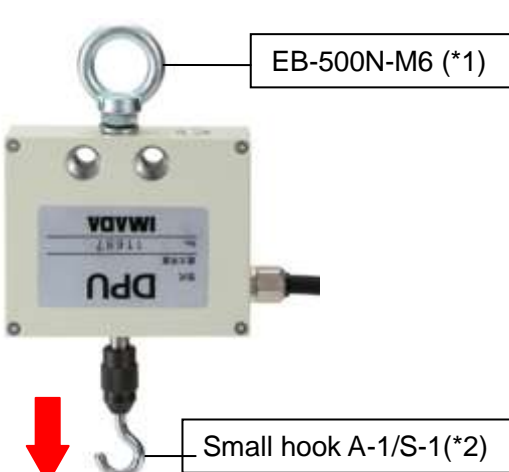
Strain gauge type load cell for tension/compression test.

This product can be built in equipment like on manufacture line.

For a standard load	For a high load
Capacity: 2~500N	Capacity: 1000~20kN
<p>Installation is easy for equipment or external devices.</p> <p>-Compatible compression/tension load cell –Being screwed –Rectangular parallelepiped shape</p>	
 <p>Tension/compression sensor part</p> <p>Screwed spots</p>	 <p>Tension/compression sensor part</p> <p>Screwed spots</p>

*An indicator is required to read force value. Please refer to page 3 for the detail.→



[Using images]

Built-in status	Hanging on equipment/hooking samples
	 <p>EB-500N-M6 (*1)</p> <p>Small hook A-1/S-1(*2)</p>

*1 Hoisting attachment for load cells EB 500N-M6 is sold separately. Please refer to page 4 for the detail.

*2 Small hook A-1/S-1 is sold separately.

[Specification]

Model	DPU-2N~500N	DPU-1000N~20kN
Photos	For a standard load 	For a high load 
Capacity	Please refer to the model list.	Please refer to the model list.
Rated output	1mV / V±10% (2N, 5N is 0.9~1.25 mV/ V±10%)	2mV/ V±1%
Nonlinearity	0.12%R.O.	0.05%R.O.
Hysteresis	0.12%R.O.	0.05%R.O.
Recommended voltage (allowable applied voltage)	5V DC (12V DC)	10V DC(18V DC)
Allowable over load	Please refer to the model list.	Please refer to the model list.
Compensation temperature (allowable temperature)	0~+50 degree Celsius (-10~+60 degree Celsius)	-10~+70 degree Celsius (-20~+80 degree Celsius)
Temperature influence for 0 degree	0.02%/ degree Celsius	0.01%/ degree Celsius
Temperature influence for output	0.01%/ degree Celsius	0.01%/ degree Celsius
Weight	Approx. 325g	Approx. 800g DPU-10kN: Approx.1.7kg DPU-20kN: Approx.2.3kg
Cable	2m(with a connector)	3m(with a connector)
Dimensions	Refer to dimensions on page 5.	Refer to dimensions on page 5.

[Load cell model list]

Model	Capacity	Allowable over load	Thread diameter
DPU-2N	2N	150%	M6
DPU-5N	5N		
DPU-10N	10N	200%	
DPU-20N	20N		
DPU-50N	50N		
DPU-100N	100N		
DPU-200N	200N		
DPU-500N	500N	240%	M10
DPU-1000N	1000N		
DPU-2000N	2000N		
DPU-5000N	5000N	120%	N/A*
DPU-10kN	10kN		
DPU-20kN	20kN		

*Instead of a thread, DPU-10kN and 20kN are cut an internal screw which is M18P1.5 depth 22. It is possible to install a thread as an option.

**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



Separate sensor model
digital force gauge
ZT series

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]

Model		Capacity	Accuracy(*1)	Display	Resolution
ZTA-DPU-2N	ZTS-DPU-2N	2N	±0.2%F.S. or less	2.000N(2000mN)	0.001N(1mN)
ZTA-DPU-5N	ZTS-DPU-5N	5N		5.000N(5000mN)	0.001N(1mN)
ZTA-DPU-10N	ZTS-DPU-10N	10N		10.00N	0.01N
ZTA-DPU-20N	ZTS-DPU-20N	20N		20.00N	0.01N
ZTA-DPU-50N	ZTS-DPU-50N	50N		50.00N	0.01N
ZTA-DPU-100N	ZTS-DPU-100N	100N		100.0N	0.1N
ZTA-DPU-200N	ZTS-DPU-200N	200N		200.0N	0.1N
ZTA-DPU-500N	ZTS-DPU-500N	500N		500.0N	0.1N
ZTA-DPU-1000N	ZTS-DPU-1000N	1000N		1000N(1.000kN)	1N(0.001kN)
ZTA-DPU-2000N	ZTS-DPU-2000N	2000N		2000N(2.000kN)	1N(0.001kN)
ZTA-DPU-5000N	ZTS-DPU-5000N	5000N		5000N(5.000kN)	1N(0.001kN)
ZTA-DPU-10kN	ZTS-DPU-10kN	10kN		10.00kN	0.01kN
ZTA-DPU-20kN	ZTS-DPU-20kN	20kN		20.00kN	0.02kN

* 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		
	Feature	
	The attachments help tension/compression test by attaching to one or two side of the load cell and letting through rope, hooks, shafts and so on.	
	Model	
	EB-500N-M6	Hoisting attachment for DPU-5N~500N.
	EB-2000N	Hoisting attachment for DPU-1000N, 2000N.
	EB-20kN	Hoisting attachment for DPU-10kN, 20kN(*1)
RE-20kN	Hoisting attachment for DPU-10kN, 20kN	

* The photo is installing two EB-20kN to DPU for a high load.

*1 Please refer to the EB series specification for the detail.

[Other load cell line-up]

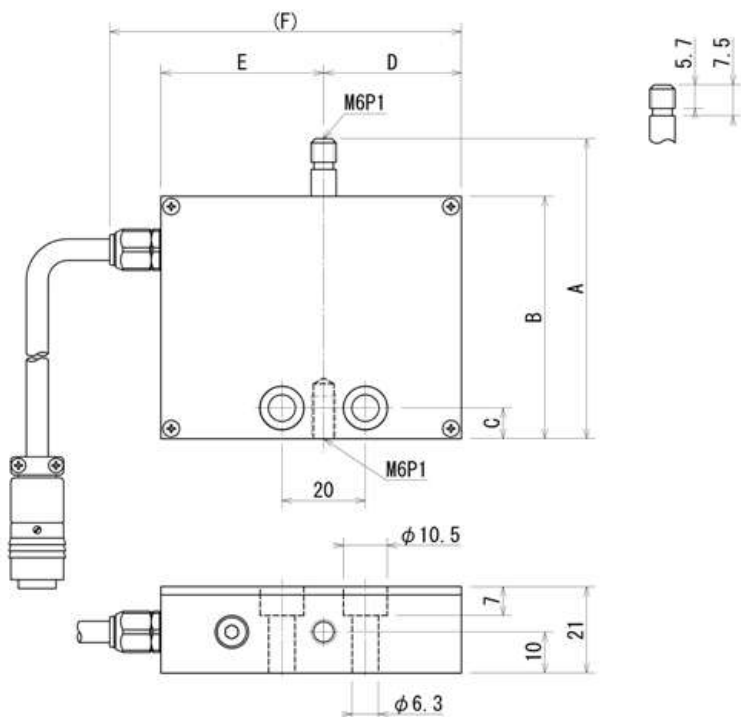
Please choose the suitable one matching your needs from our varieties of load cell.

Coin shaped type LM series	High accuracy coin shaped type LC series	Extra small type LMU series	Pen type PN-50N	For automatic doors DM-2000N
Coin size load cell for compression.	High accuracy coin shaped load cell for compression.	Sensor diameter is only 18mm	Pen-shaped to fit for measuring control force of small samples.	Fit to measure automatic door closing force.

*please refer to each specification for the detail of each load cell.

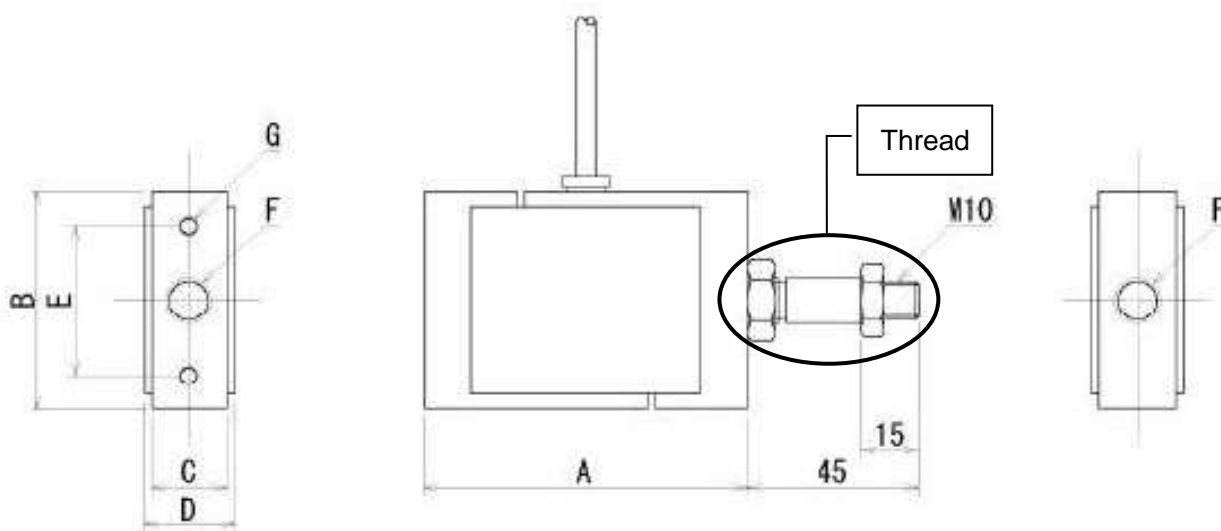
[Dimension]

DPU-2.5N~500N



Model	A	B	C	D	E
DPU-2N	71	57	12	26	32
DPU-5N	71	57	12	26	32
DPU-10N	71	57	12	26	32
DPU-20N	73	59	7.5	33	39
DPU-50N	73	59	7.5	33	39
DPU-100N	73	59	7.5	33	39
DPU-200N	73	59	7.5	33	39
DPU-500N	73	59	7.5	33	39

DPU-1000N~20kN



Model	A	B	C	D	E	F	G	Note
DPU-1000N	85	58	20	26	40	M12 P1.75 Depth 15	M5 Depth 8	With a thread
DPU-2000N	85	58	20	26	40	M12 P1.75 Depth 15	M5 Depth 8	With a thread
DPU-5000N	85	58	20	26	40	M12 P1.75 Depth 15	M5 Depth 8	With a thread
DPU-10kN	105	78	32	38	60	M18 P1.5 Depth 22	M6 Depth 10	No thread
DPU-20kN	110	88	36	42	60	M18 P1.5 Depth 22	M6 Depth 10	No thread

[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.](tel:+81-0-532-33-3288)