

**Size** Ultra Compact  
**Safe Overload Rating** Maximum 500%  
 Tension/Compression Load Cell



**Applications**

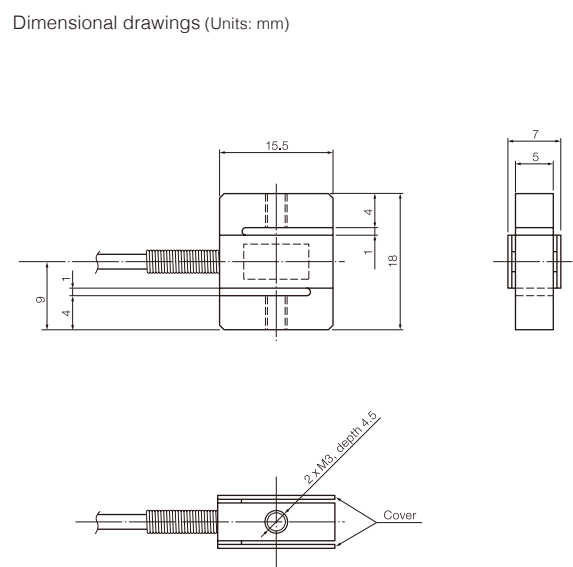
Tension measurement,  
 In-line load management

**Mounting Method**

Two M3 female screws to mount

**Specifications**

Type	Tension / Compression Load Cell			
Model	<b>TU-MBR□□N-G</b>			
	<b>RoHS</b> (10 substances)			
Rated Capacity (R.C.)	<b>2N</b>	<b>5N</b>	<b>10N</b>	<b>20N</b>
Natural Frequency	1.47kHz	2.45kHz	2.81kHz	2.92kHz
Weight (Approx.)	5g			
Safe overload rating	500% R.C.			
Rated Output (R.O.)	Approx. 0.4mV/V			
Linearity	0.1% R.O.			
Hysteresis	0.1% R.O.			
Repeatability	0.1% R.O.			
Zero Balance	±20% R.O.			
Safe Excitation Voltage	5V			
Input Terminal Resistance	350Ω ±5%			
Output Terminal Resistance	350Ω ±5%			
Insulation Resistance	>1000MΩ (DC50V)			
Compensated Temperature Range	-10 to 60°C			
Permissible Temperature Range	-20 to 70°C			
Temperature Effect on Zero Balance	1% R.O. / 10°C			
Temperature Effect on Output	1%R.C. / 10°C			
Cable	Φ2, 4-core shielded, 1m direct connection robot cable with bare lead wires			
Mounting Method	Screw holes*			
Body Material	Aluminum			



\* Fixing bolts used for the 2xM3 tap should be 4.5mm or less in depth

\* Fixing bolts used for the 2xM3 should be 4.5mm or less in depth. If more than 4.5 mm is used, it may push up the sensing section of the unit and cause damage.  
 \* When installing the unit, make sure that no excessive force is applied to the base of the cable. Otherwise, this may cause measurement error or damage.

# TEAC's strain gage products with compact, high accuracy and high stability.

## Related Products (Sensors)



Compression Load Cell  
**TC-FR(T)-G6**

**Compact, lightweight,  
and Stainless steel case**  
500N to 20kN, Ø51mm



Compression Load Cell  
**TC-USR(T)-G3**

**Overload protection Design**  
0.5N to 2kN, Ø17 to 34mm



Compression Load Cell  
**TC-XR(T)-G6**

**Center-hole type for  
Pressing and injection**  
5kN to 300kN, Ø62 to 100mm



Tension/Compression Load Cell  
**TU-QR(T)-G3**

**Compatible with tension  
and compression applica-  
tion for test equipment**  
50N to 2kN, Ø14 (M3 screw hole)



Low-profile load cell floor scale  
**TL-PS** etc.

**Simple structure by load cell**  
0.6kg to 400kg/120mm to 500mm



Compression Load Cell  
**TC-WLD(T)-G**

**For spot welding  
pressure control**



Compression Load Cell  
**TC-PF2(T)-G**

**For automotive brake-pedal  
force measurement**



Pressure Transducer  
**TP-AR** etc.

**High-precision,  
corrosion resistance,  
high temperature type**

## Related Products (Indicators and Signal Conditioners)



**New**  
EtherNet/IP.  
model  
CC-Link  
model

92 x 92mm  
Panel opening size

Color Graphics Digital Indicator  
**TD-900T**

RS-485 model  
EtherNet/IP™ model  
CC-Link model

**High performance model  
with large LCD**

Supporting two inputs, force sensor and displacement sensor, various comparison judgments function, and direct saving of waveform data onto large capacity internal memory.

TEDS	RoHS	4.3" LCD
Touch Panel	5,000 time/sec.	24-bit
Load/Vary Inputs	Waveform	Static Strain
Interrupt Check	High/Low Limit Compare	Judgements
D/A OUT	RS-232C	Bilingual

CE CC-Link EtherNet/IP



92 x 45mm  
Panel opening size

Digital Indicator  
**TD-700T**

Standard model  
CC-Link model  
RS-485 model

**Excellent model with compact  
and high functionality**

Supporting five key functions in one unit, numeric display, graph display, TEDS function, static strain display, and signal conditioner. This small and cost-effective TD-700T achieves equal or even higher performance to upper-class models, with high-visibility color LCD and various hold functions.

TEDS	RoHS	4,000 time/sec.	24-bit
Static Strain	Waveform	Bar Meter	D/A OUT
Data Rec	Various Holds	Bilingual	AC/DC Power

CE CC-Link



**New**

Attaches to  
common DIN rails

Signal Conditioner  
**TD-SC1**

D/A model  
RS-485 model

**Slim and light-weight  
signal conditioner**

Supporting high-speed sampling of 20,000 times/second, PC-based configuration via USB connection, selectable network, and TEDS calibration function.

TEDS	RoHS	Plug-in
20,000 time/sec.	24-bit	Static Strain
Bilingual	High/Low Limit Compare	Hold Functions

CE CC-Link EtherNet/IP\*

\* Under planning



Weights only 320g  
(incl. batteries)

Portable Digital Indicator  
**TD-01 Portable**

**On-site checking tool  
with versatility**

Supporting various functions that equal to embeded systems, in hand-held size, allowing you to take measurements anytime anywhere, according to your purpose.

TEDS	RoHS	Color LCD
Waveform	Bar Meter	High/Low Limit Compare
Data Rec	Static Strain	Interrupt Check
D/A OUT	Dual I/O	24-bit
AA Batteries	Long Time Operation	Bilingual

CE

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