

Features

## Compact & Small Capacity

Body Material

## Aluminum

### Tension/Compression Load Cell



#### Applications

Load measurements for Robot and Test equipment

#### Mounting Method

M3/M4 screws to mount Tension/Compression load certified

#### Durable Robot Cable standardized

Enhanced durability against bending that occurs in moving parts with frequent repetitive motion, such as industrial robots and machine tools. High stability and reliability are realized.

#### Plug & Play with built-in TEDS

With the TD series indicators, equivalent input calibration, likely to forget in manual setting, can be performed automatically and help prevention.

(See the reverse page for detail on TEDS)

※Product image for illustration purposes only. Actual product may vary

#### Specifications

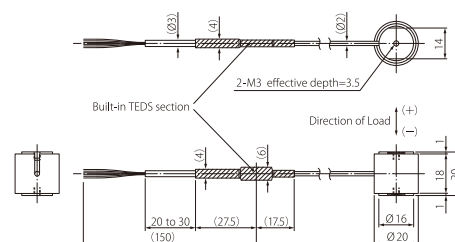
Type	Tension/Compression Load Cell							
Model	TU-MXR2(T)□□N-G3							
	TEDS					(Embedded in the tip of the cable)	RoHS	(10 substances)
Rated Capacity (R.C.)	10N	20N	50N	100N	200N	500N		
Natural Frequency	2.2kHz	3.0kHz	5.2kHz	8.0kHz	6.6kHz	(T.B.A.)		
Weight (Approx.)	9g	69g	10g	10g	21g	24g		
Safe overload rating	120% R.C.							
Rated Output (R.O.)	Approx. 1.5mV/V ±30%							
Linearity	0.1% R.O.							
Hysteresis	0.1% R.O.							
Repeatability	0.1% R.O.							
Safe Excitation Voltage	8V DC / AC							
Input Terminal Resistance	350Ω ±2%							
Output Terminal Resistance	350Ω ±2%							
Insulation Resistance	1000MΩ or more (50V DC)							
Compensated Temperature Range	-10 to 45°C							
Permissible Temperature Range	-20 to 60°C							
Temperature Effect on Zero Balance	0.5% R.O. /10°C							
Temperature Effect on Output	0.5% R.C. / 10°C							
Cable	Main unit to built-in TEDS section: Φ2, 4-core shielded cable, Built-in TEDS section to the end: Φ3, 6-core shielded cable, approx. 15cm, Total 3m, direct connection robot cable with bare lead wires							
Mounting Method	M3 Screw hole				M4 Screw hole			
Body Material	Aluminum			Stainless Steel				

Dimensional drawings (Units: mm)

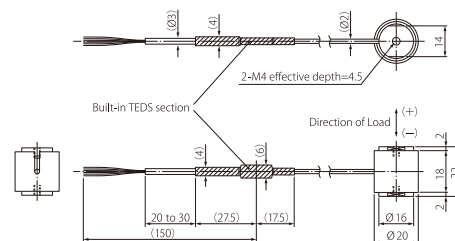
**TU-MXR2(T) 10N to 200N-G3**

**TU-MXR2(T) 500N-G3**

Dimensional drawings (Units: mm)



**TU-MXR2(T)10N to 200N-G3**



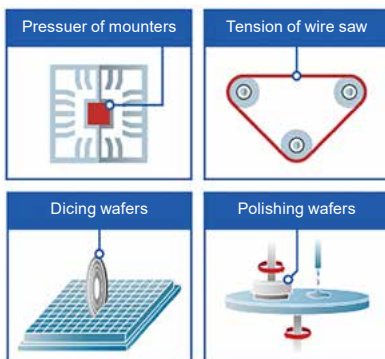
**TU-MXR2(T)500N-G3**

## TEAC Load Cells

Since the 1980s, when TEAC started manufacturing and selling load cells, we have cultivated technologies to achieve higher precision and smaller size with our unique structures. With these technologies, a number of load cells that achieve high response, high accuracy, and high stability, as well as products that take environmental conservation into consideration have been developed to match customers' applications.

We also offer customization for specific conditions (usage environment, space) that are difficult to meet with standard ones. From one-off prototypes to mass production, we support engineers involved in research and development on manufacturing technology.

Examples of application

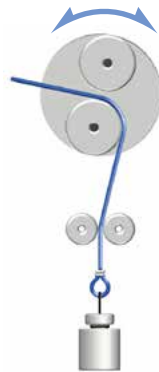


## Robot Cable standardized

Robot cables provide enhanced durability and stable performance against bending that occurs in moving parts with frequent repetitive motion, such as industrial robots and machine tools.

Every TEAC's ultra-compact load cells employ robot cables, together with the TEDS function, contribute to factory automation and labor savings.

\* Customized proposals that match your application and environment are available. Please contact our sales representatives for detail.

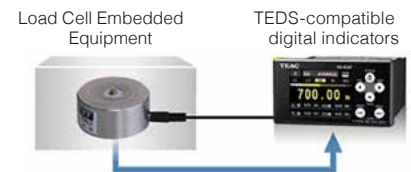


As shown above, fix the core wire so that it does not move, bend it 90 degrees to the left or right, and confirm that no wire breakage occurs.

## TEDS-compatible

The TEDS (Transducer Electronic Data Sheet) system is a generic term for a description format standardized by IEEE that electronically reads and writes sensor's specific characteristic, which is recorded in an EEPROM built into the sensor and can be read and written electronically.

Model name, serial number, sensitivity (output value against physical quantity) and other calibration factors are digitized and recorded in the memory built into the load cell body. Sensor's specific values can be set electronically, automating the reading of recorded information and equivalent input calibration, eliminating human error in setting and reducing the burden of load cell replacement.



**Sending individual specific values of each load cell indicated in the unit's Data Sheet**

TEAC has been strongly promoting TEDS (IEEE 1451.4 Transducer Electronic Data Sheet) compliance for load cells and load cell indicators. We are the first Japanese manufacturer that obtained a "Manufacturer ID", making our load cells and indicators TEDS-compatible.

## Related Products (Indicators and Signal Conditioners)



92 x 92mm  
Panel opening size

Color Graphics Digital Indicator

### TD-9000T

**NPN type** (Standard) **PNP type**  
Standard 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 into large capacity internal memory.

UL US 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.

UL US CE CC-Link



Attaches to common DIN rails

Signal Conditioner

### TD-SC1

D/A model  
RS-485/Modbus RTU model  
CC-Link model  
EtherNet/IP™ 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.

UL US CE UK CA  
CC-Link EtherNet/IP



Weights only 320g  
(incl. batteries)

Portable Digital Indicator

### TD-01 Portable

#### On-site checking tool with versatility

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

CE

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