Tension/Compression Load Cell

# TU-MBR(T)□□N-G3

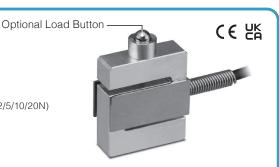
# Ultra Compact, Safe overload of 500% (2/5/10/20N)

### **Applications**

## **Mounting Method**

Tension measurement, and In-line load management

Female scew to mount



Robot Cable

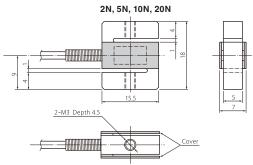
**TEDS** 

(Embeded in the body) (10 substances)

### **Specifications**

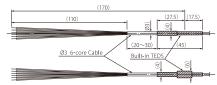
Line up	TU-MBR(T) 2N-G3	TU-MBR(T) 5N-G3	TU-MBR(T) 10N-G3	TU-MBR(T) 20N-G3	TU-MBR(T) 50N-G3	TU-MBR(T) 100N-G3	TU-MBR(T) 200N-G3
Rated Capacity (R.C.)	2N	5N	10N	20N	50N	100N	200N
Natural Frequency	1.47kHz	2.45kHz	2.81kHz	2.92kHz	2.92kHz	(TBA)	
Weight	5g						
Safe overload rating	500% R.C.				150% R.C.		
Rated Output (R.O.)	Approx. 0.4mV/V				Approx. 1mV/V		
Linearity	0.1% R.O.						
Hysterisis	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 or more (DC50V)						
Compensated Temperature Range	-10°C 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 robot cable for 3m direct connection (to built-in TEDS part), φ3, 6-core cable lead about 170mm from built-in TEDS part						
Mounting Method	Screw hole*						
Body Material	Aluminum					Stainle	ss Steel
Included Accessories	Anti-rotating Gig						
Optional Accessories	Load Button, Rod-end Bearing						

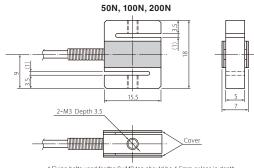
#### Dimensional drawings



\* Fixing bolts used for the 2 x M3 tap should be 4.5mm or less in depth

#### Shield robot cable (common)





- \* Fixing bolts used for the 2xM3 tap should be 4.5mm or less in depth
- \* Fixing bolts used for the 2-M3 should be 4.5mm or less in depth. If more than 4.5mm is used, it may push up the sensing section of the unit and cause damage
- $^{\star}$  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.

Also see follwing pages for optional/included accessories:

Page 36 for optional Base Plate

Page 37 for optional Rod-end Bearing

Page 38 for optional Load Button and included Anti-rotating Jig.



