TEAC

Compression Load Cell

TC-FR(T)□□N/KN-G6

Tension Load Cell

TT-FR(T)□□N/KN-G6

Features

Body Material

Compact & Universal Stainless Steel

Compression Load Cell (TC-FR) / Tension Load Cell (TT-FR)

Benefit

Easy to install on the existing facilities/systems.

Vacuum compatible

Works in vaccum state.
(TC-FR custom design model)

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 prevetion.
(See the reverse page for detail on TEDS)

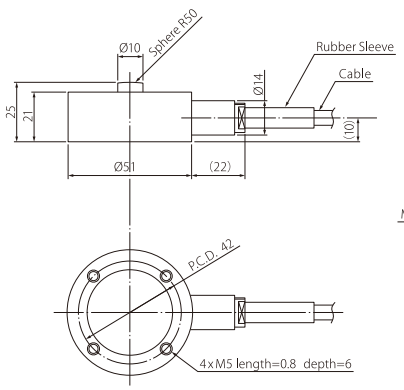
Specifications

Type	Compression Load Cell						TensionLoad Cell				
Model	TC-FR(T)□□N/KN-G6 TEDS (Embeded in the body) RoHS (10 substances)						TT-FR(T)□□N/KN-G6 TEDS (Embeded in the body) RoHS (10 substances)				
Rated Capacity (R.C.)	**500N**	**1kN**	**2kN**	**5kN**	**10kN**	**20kN**	**500N**	**1kN**	**2kN**	**5kN**	**10kN**
Natural Frequency	3.6kHz	5.0kHz	6.0kHz	7.0kHz	10.0kHz	TBA*	3.6kHz	5kHz	6kHz	7kHz	10kHz
Weight	230g	230g	230g	230g	230g	230g	0.24kg	0.24kg	0.24kg	0.24kg	0.24kg
Safe overload rating	150 % R.C.						150 % R.C.				
Rated Output (R.O.)	2mV/V ±1%						2mV/V ±0.5%				
Linearity	0.15% R.O.	0.1% R.O.					0.15% R.O.				
Hysterisis	0.1% R.O.						0.1% R.O.				
Repeatability	0.05% R.O.						0.05% R.O.				
Safe Excitation Voltage	15V						15V				
Input Terminal Resistance	425 ±50Ω						425 ±50Ω				
Output Terminal Resistance	350 ±5Ω						350 ±5Ω				
Insulation Resistance	1000MΩ (DC 50V)						1000MΩ (DC 50V)				
Compensated Temperature Range	–10°C to 70°C						–10°C to 70°C				
Permissible Temperature Range	–10°C to 70°C						–10°C to 70°C				
Temperature Effect on Zero Balance	0.05% R.O. / 10°C						0.05% R.O. / 10°C				
Temperature Effect on Output	0.1% R.C. / 10°C						0.05% R.C. / 10°C				
Cable	Φ6, 6-core shielded, 5m direct connection robot cable with bare lead wires						Φ6, 6-core shielded, 5m direct connection robot cable with bare lead wires				
Mounting Method	Screw hole, Base Plate						Male screw (M12)				
Body Material	Stainless Steel						Stainless Steel				

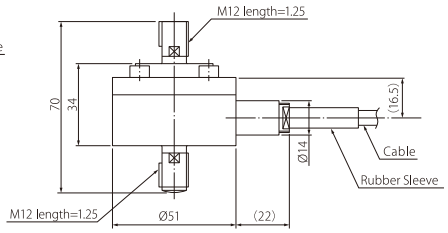
*Please contact us for more details.

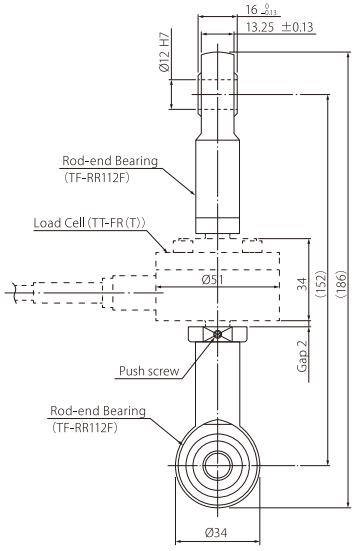
Dimensional drawings (Units: mm)

TC-FR-(T)□□N/KN-G6



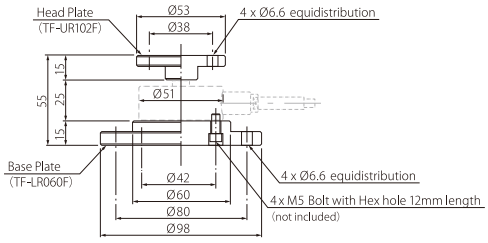
TT-FR-(T)□□N/KN-G6





Rod-end connection

Head Plate and Base Plate



Model No.	Head Plate (Weight)	Base Plate (Weight)	Bolt with Hex hole
TC-FR(T)-G6 500N	TF-UR102F (approx. 0.13kg)	TF-LR060F (approx. 0.6kg)	M5 x 12
TC-FR(T)-G6 1kN			
TC-FR(T)-G6 2kN			
TC-FR(T)-G6 5kN			
TC-FR(T)-G6 10kN			
TC-FR(T)-G6 20kN			

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

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 onto large capacity internal memory.

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.

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.

Weighs 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.

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