TEAC

TU-NR-C□□KN-G TU-GR□□KN-G

Type of product

Shear type

Features

Anti-eccentricity & Strong against lateral load



Tension/Compression Load Cell

Center Hole Type

Load management for injection molding machines and wafer polishers

Sleek Design

Space saving and easy to install on the existing equipment

Mounting Method

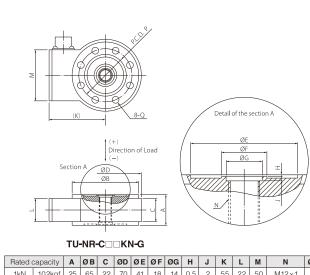
Fix with bolts

Tension/ Compression Compatible

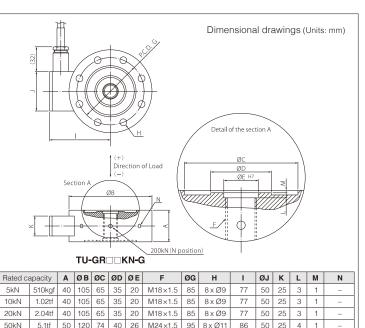
(Actual load) calibrated in the tension and compression direction

Specifications

| Туре | Tension/Compression Load Cell | | | | | | | | | | | | | | | | |
|------------------------------------|--|----------------------|-------|-------|------------------------|-------|-------|-------------------|---|------------------|----------|----------|--------|--------|--------|--------|--|
| Model | TU | RoHS (10 substances) | | | TU-GR□□KN-G RoHS (10 s | | | | | | (10 subs | stances) | | | | | |
| Rated Capacity (R.C.) | 1kN | 2kN | 5kN | 10kN | 20kN | 50kN | 100kN | 200kN | 5kN | 10kN | 20kN | 50kN | 100kN | 200kN | 500kN | 1000kN | |
| Natural Frequency | 6.5kHz | 8kHz | 11kHz | 16kHz | 21kHz | 18kHz | 16kHz | 12kHz | 3.5kHz | 5kHz | 7.6kHz | 8.8kHz | 7kHz | 5.6kHz | 5.9kHz | 3.3kHz | |
| Weight (Approx.) | 0.6kg | 0.6kg | 0.6kg | 0.6kg | 0.7kg | 1.1kg | 2.2kg | 6kg | 2.2kg | 2.2kg | 2.2kg | 3.7kg | 8.5kg | 20kg | 54kg | 140kg | |
| Safe overload rating | | | | 150 % | 6 R.C. | | | | | | | 150 % | % R.C. | | | | |
| Rated Output (R.O.) | 0.75 1 1.5mV/V ±1% ±1% 1.5mV/V ±1% | | | | | | | | 2mV/V ±1% | | | | | | | | |
| Linearity | 0.15% R.O. | | | | | | | | 0.05% R.O. 0.15% R | | | | | | | 6 R.O. | |
| Hysterisis | 0.15% R.O. | | | | | | | | 0.1% R.O. 0.15% F | | | | | | 6 R.O. | | |
| Repeatability | 0.1% R.O. | | | | | | | | 0.03% R.O. 0.1% R.O. | | | | | | | R.O. | |
| Safe Excitation Voltage | 20V (12V recommended) | | | | | | | 20V | | | | | | | | | |
| Input Terminal Resistance | 350Ω ±1% | | | | | | | 350Ω ±1% | | | | | | | | | |
| Output Terminal Resistance | 350Ω ±1% | | | | | | | | 350Ω ±1% | | | | | | | | |
| Insulation Resistance | 1000MΩ or more (DC 50V) | | | | | | | | 1000MΩ or more (DC 50V) | | | | | | | | |
| Compensated Temperature Range | −10 to 60°C | | | | | | | | -10 to 60°C | | | | | | | | |
| Permissible Temperature Range | −30 to 80°C | | | | | | | | −30 to 80°C | | | | | | | | |
| Temperature Effect on Zero Balance | 0.1% R.O./10°C 0.05% R.O./10°C | | | | | | | 0.05% R.O. / 10°C | | | | | | | | | |
| Temperature Effect on Output | 0.1% R.C. / 10°C | | | | | | | | | 0.1% R.C. / 10°C | | | | | | | |
| Cable | Φ8, 4-core shielded cable, 5m Bare lead wires on one end, and PRC03-12A10-7M on another end | | | | | | | | Φ8, 4-core shielded cable, 5m Direct connection cable with bare lead wires | | | | | | | | |
| Mounting Method | Bolt holes | | | | | | | Bolt holes | | | | | | | | | |
| Body Material | Alloy tool steel | | | | | | | | | Alloy tool steel | | | | | | | |
| Remarks | Main unit connector: PRC03-21A10-7F | | | | | | | Eyebolt included | | | | | | | | | |



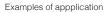
| TU-NR-CULKN-G | | | | | | | | | | | | | | | | |
|----------------|--------|----|-----|----|-----|-----|----|----|-----|---|-----|----|----|---------|-----|-----|
| Rated capacity | | Α | ØВ | С | ØD | ØΕ | ØF | ØG | Н | J | K | L | M | N | ØP | ØQ |
| 1kN | 102kgf | 25 | 65 | 22 | 70 | 41 | 18 | 14 | 0.5 | 2 | 55 | 22 | 50 | M12×1 | 52 | 6.5 |
| 2kN | 204kgf | 25 | 65 | 22 | 70 | 41 | 18 | 14 | 0.5 | 2 | 55 | 22 | 50 | M12×1 | 52 | 6.5 |
| 5kN | 510kgf | 25 | 65 | 22 | 70 | 41 | 18 | 14 | 0.5 | 2 | 55 | 22 | 50 | M12×1 | 52 | 6.5 |
| 10kN | 1.02tf | 25 | 65 | 22 | 70 | 41 | 18 | 14 | 0.5 | 2 | 55 | 22 | 50 | M12×1 | 52 | 6.5 |
| 20kN | 2.04tf | 30 | 65 | 22 | 70 | 41 | 18 | 14 | 0.5 | 2 | 55 | 22 | 50 | M12×1 | 52 | 6.5 |
| 50kN | 5.1tf | 30 | 88 | 27 | 92 | 60 | 30 | 22 | 1 | 2 | 64 | 22 | 50 | M20×1.5 | 74 | 9 |
| 100kN | 10.2tf | 34 | 117 | 31 | 121 | 82 | 46 | 34 | 1 | 2 | 81 | 22 | 50 | M32×2 | 100 | 11 |
| 200kN | 20.4tf | 50 | - | - | 166 | 116 | 60 | 44 | 1 | 2 | 117 | 40 | 70 | M40×2 | 142 | 17 |



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.



M36×2

M50×2

M85×2

M110×3

130 8 x Ø18

180 8 x Ø26

265 8 x Ø33

370 16 xØ33



100kN

200kN

500kN

1000kN

10.2tf 65 160

20.4tf 80 220 140 80 55

51tf



100

100 330 200 135 90

460 280 190

60 40



108.5 55 30 5

140.5

203.5

30 5

70 40 7 2 4x M10



ated Products (Indicators and Signal Conditioners)



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92 x 45 mm Panel opening size



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

CALINK EtherNet/IP

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.

c¶us (€ CC-Link





Weighs only 320g (incl. batteries)

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.

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CC-Link EtherNet/IP*

* Under planning

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.

CE

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TEAC CORPORATION

1-47 Ochiai, Tama-shi, Tokyo 206-8530, Japan

E-mail: cs_ipd@teac.jp Web: https://loadcell.jp/en/ TEAC America, Inc., E-mail: datarecorder@teac.com TEAC EUROPE GmbH.

E-mail: info@teac.eu

TEAC SALES & TRADING (ShenZhen) CO., LTD. E-mail: teacservice3@teac.com.cn

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