## URT-20-5K/FS200





Thrust force and Torque are measured simultaneously. Phenomenal safe overload!! URT-20-5K is a dual-axis load cell having 2 kHz high-speed responsivity and high-rigidity.



## Product-specific amplifier

Rated Output is adjusted at ±5 V in both Mz and Fz direction. Just connect a sensor and apply 24 V to it, then adjusted voltage will be outputted simultaneously. Any calibration settings are not required.



Friction measurement test for bolt head





cable Flexible cable



External dimension

| Model                   | Sensor: URT-20-5K, Amplifier: FS200                            |
|-------------------------|--|
| Rated capacity          | Mz: ±20 Nm, Fz: 5 kN   |
| Power supply voltage    | DC 24 V±15%  |
| Consumption current     | 150 mA or less   |
| Load signal output      | Mz, Fz: ±5 V   |
| Load resistance         | 2 k or more  |
| Response                | 2 kHz  |
| I/O signal              | Input: Auto zero command<br>Output: Auto zero response         |
| Safe overload           | Mz: 500% FS, Fz: 400% FS                                       |
| Non-linearity           | Mz: 0.1% FS typ., Fz: 0.5% FS or less                          |
| Hysteresis              | Mz: 0.1% FS typ., Fz: 0.5% FS or less                          |
| Repeatability           | Mz: 0.1% FS typ., Fzv0.5% FS or less                           |
| Cross talk              | Mz (20 Nm) Fz: 0.05 kN or less<br>Fz (5 kN) Mz: 0.2 Nm or less |
| Compensated temp. range | 0 to +40°C   |
| Safe temp. range        | - 10 to +50°C  |
| Temp. effect on zero    | 0.1% FS/°C or below  |
| Temp. effect on span    | 0.05% FS/°C or below   |
| Sensor material         | Stainless steel  |
| Weight                  | Sensor: Approx. 250 g<br>Amplifier: Approx. 180 g              |

**Specifications** 

\* Above specifications are achieved when the sensor (URT-20-5K) is connected with the dedicated amplifier (FS200).

\* Accuracy is not guaranteed in the range of Fz 0 to -5 V.

\* Please note that there are possibilities of individual differences in a color tone on display devices such as LEDs, fluorescent display tubes and LCDs due to manufacturing process or production lots.

## URT-20-5K



FS200





4-M5 (Depth 8)

P.C.D. 32

