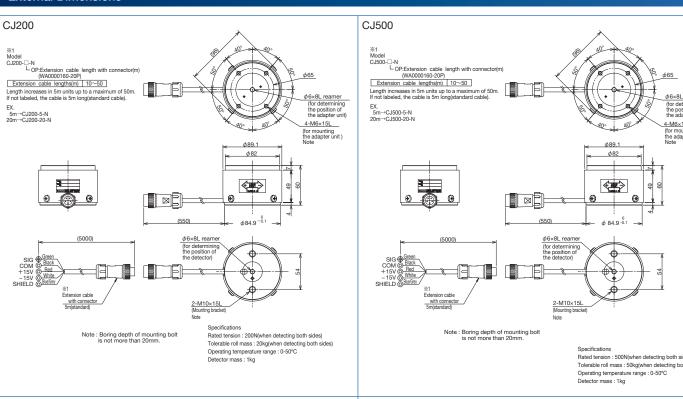
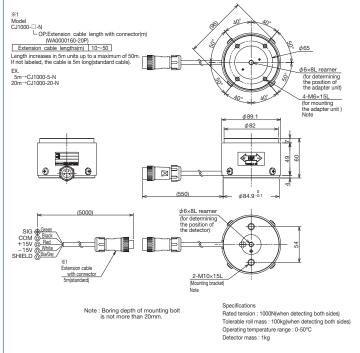


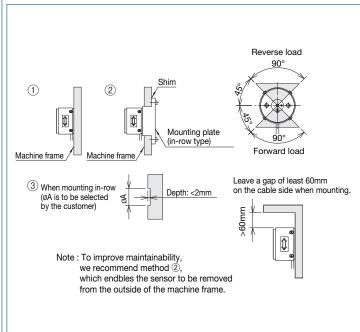
External Dimensions







Mounting Example



We reserve the right to change the specifications in this catalog without prior notice to improve and update our products.

MIRECO

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Compact Tension Sensor

Introducing a bearing-type tension sensor that can be cleaned with water.





The birth of a tension sensor that combines high performance, compact design and greater durability than ever.

The CJ sensor is essential for tension control of sophisticated plastic films used in leading-edge industries, including flat-screen TVs, rechargeable batteries, thin and light solar cells, and organic EL lighting which is expected to become the next generation of lighting.

The CJ series of tension sensors are bearing-type sensors, so they can easily be installed on existing lines.



A tough tension sensor

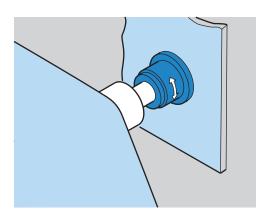
The CJ tension sensor has an IP66-compliant, highly-durable protective housing.

We maximized robustness to enable tension to be stably detected even under the harshest conditions. The high-precision protective housing makes it difficult for water droplets and dust to penetrate, allowing the sensor to be washed with water without constraint when washing a production line.



(drip-proof and dust-proo (optional)

The Successor to the CD type, with improved stability and robustness



The CJ tension sensor is the successor to the CD tension sensor which has proven popular since it was launched in 1993. While inheriting the performance of its predecessor, the CJ Tension sensor is even more robust, and can be used stably for long periods, even in harsh environments that contain water and dust. The CJ tension sensor is suited to high-precision and high-speed lines.

High Spring-Steel Rigidity

The CJ tension sensor has excellent dynamics, and its high spring-steel rigidity provides a high resonance point, making it ideal for high-speed lines.

Effective for Thin Webs

The load displacement of the MJ tension sensor is extremely low, making it effective for thin web lines (i.e., film, foil, etc.).

IP66-Compliant Protective Housing (Option)

The stainless version has an IP66-compliant protective housing that can handle being splashed with water when cleaning a production line.

Simple Construction

The use of a mono-block structure provides outstanding linearity and hysterisis.

Compact Design

Because the bearing unit and sensor are integrated, the sensor has a low profile and requires minimal installation space, enabling it to easily be installed even in confined spaces.

CJ Series Specifications

| | Model | CJ200 | CJ500 | CJ1000 |
|------|--------------------------------------|---|-----------|-----------|
| | Diagram number | MD0000360 | MD0000370 | MD0000380 |
| | Diagram number with adapter unit | MD0000450 | MD0000460 | MD0000470 |
| *1 | Rated tension (N) | 200 | 500 | 1000 |
| *1 | Maximum roll load (N) | 200 | 500 | 1000 |
| *1,5 | Maximum overload | 2000 | 5000 | 10000 |
| | Roll displacement (µm⋅N) | 0.12 | 0.06 | 0.035 |
| *2 | Resonance frequency (Hz) | 143.8 | 128.6 | 119.1 |
| *3 | Frequency response (Hz) | 300 | | |
| *4 | Main unit mass (kg) | 1.0 (1.6) | | |
| | Direction of resultant tension force | Forward or reverse | | |
| | Mounting angle | Any desired angle | | |
| | Supply voltage | ±15VDC ±1V (+15V/50mA, -15V/10 mA) | | |
| | Ambient temperature/humidity | 0 to +50°C, 35 to 85%RH (No condensation permitted) | | |
| | IP Protection Rating | IP30 | | |

Notes:

- *1. The figures for rated tension, maximum roll load, and maximum overload are for double-sided detection.
- *2. The resonance frequency figures are for the tension load during double-sided detection and at maximum roll load.
- *3. The frequency response figure is with respect to a change of 1/10 in the rated tension.
- $\ensuremath{^{\star}} 4.$ The figure in parenthesis is the mass including the adapter unit.
- *5. The maximum overload represents the maximum value of the force exerted in the direction of the resultant force.