

REAL SIZE



RoHS

TENSION COMPRESSION LOAD CELL

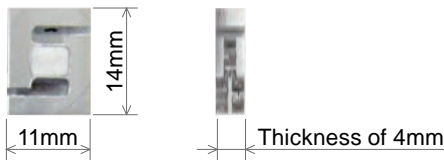
Safe overload of 500%
Compact tension compression type load cell
Ideal to measure tension, connectors mating quality check,
experiments and more!

Tension/compression type load cell

USM

Very compact

Space-saving design. Ideal for side-by-side installation too.



Easy to install

Two tapped holes at both hands
enable easier connections to the actuator.



Great durability

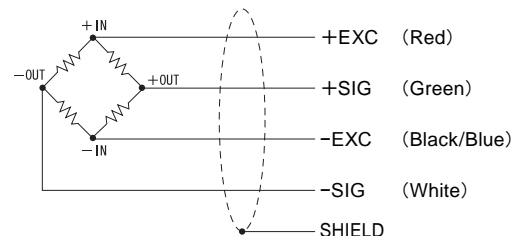
Loadcell frequently gets
damaged especially
in small force measurement,
and cable is easily broken.

Safe overload of 500%!
Using high durability
robot cable!

Specifications

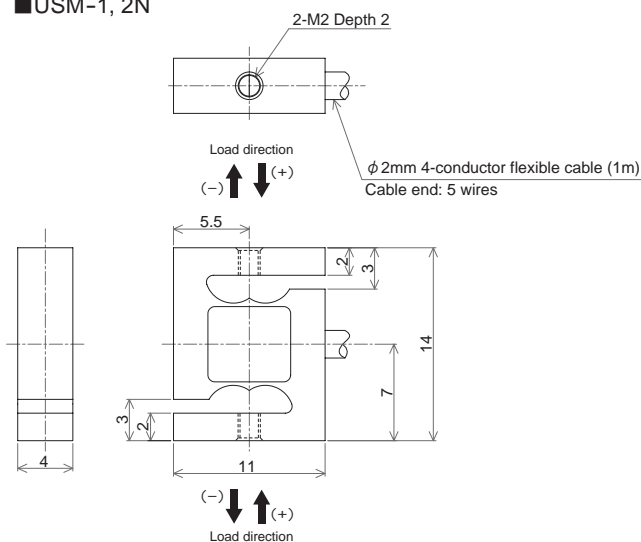
| Model | USM-1N, 2N | USM-5, 10, 20, 50N | |
|--------------------------------|--|------------------------------------|------------|
| Rated capacity | 1, 2 | 5, 10, 20, 50 | N |
| Rated output | Approx. 0.4 | | mV/V |
| Safe overload | 500 | | %R.C. |
| Zero balance | 0.3 | | mV/V |
| Non-linearity | 0.2 | 0.1 | %R.O. |
| Hysteresis | 0.2 | 0.1 | %R.O. |
| Repeatability | 0.1 | | %R.O. |
| Compensated temperature range | -10 ~ +60 | | °C |
| Safe temperature range | -20 ~ +70 | | °C |
| Temperature effect on zero | ±1 | | %R.O./10°C |
| Temperature effect on span | ±1 | | %R.O./10°C |
| Input resistance | Approx. 1000 | | Ω |
| Output resistance | Approx. 1000 | | Ω |
| Recommended excitation voltage | 5 | | V (AC, DC) |
| Insulation resistance | 1000 or more | | MΩ |
| Cable | φ2mm 4-conductor flexible cable (1m) Cable end: 5 wires | | |
| Loadcell material | Aluminum alloy | | |
| Weight | Approx. 2 (Excluding the cable) | Approx. 3 (Excluding the cable) | g |

Wiring Diagram

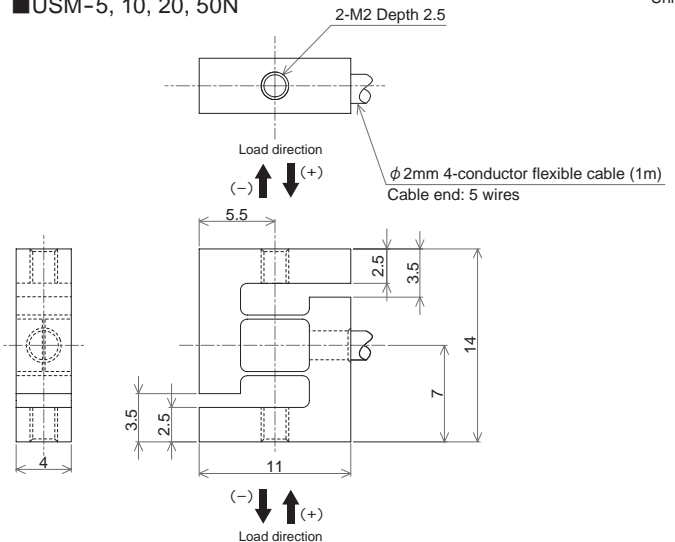


External dimension

■ USM-1, 2N



■ USM-5, 10, 20, 50N



Unit: mm

Please note that specifications or designs shown in this catalog
may vary due to our continuous product improvement activities.

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