

UNBF/UNBF2 COMPRESSION TYPE LOAD CELL



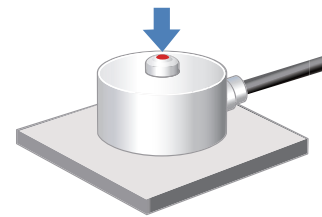
UNBF series is so compact and thin design that it allows easy mounting on existing equipment. Even more compact without a box part, allowing easy wiring.



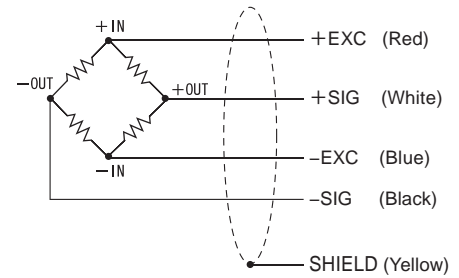
Specifications

| Model | UNBF-300N, UNBF-500N | UNBF2-30KN, UNBF2-50KN |
|---------------------------------|--|---|
| | UNBF-1KN, UNBF-2KN, UNBF-3KN UNBF-5KN, UNBF-10KN, UNBF-20KN | UNBF2-100KN, UNBF2-200KN UNBF2-300KN, UNBF2-500KN |
| Rated capacity | 300 N, 500 N, 1 kN, 2 kN, 3 kN, 5 kN, 10 kN, 20 kN | 30 kN, 50 kN, 100 kN, 200 kN, 300 kN, 500 kN |
| Rated output | 2 mV/V±0.5% | |
| Safe overload | 150% R.C. | |
| Zero balance | ±10% R.O. | |
| Non-linearity | 0.2% or less R.O. | 0.35% or less R.O. |
| Hysteresis | 0.2% or less R.O. | 0.35% or less R.O. |
| Repeatability | 0.1% or less R.O. | 0.20% or less R.O. |
| Compensated temperature range | -10 to +60°C | |
| Safe temperature range | -20 to +70°C | |
| Temperature effect on zero | 0.1% R.O./10°C or below | |
| Temperature effect on span | 0.1% R.O./10°C or below | |
| Input resistance | Approx. 400 | |
| Output resistance | Approx. 350 | |
| Recommended excitation voltage | 10 V | |
| Maximum excitation voltage | 20 V | |
| Insulation resistance (DC 50 V) | 1000 M or more | |
| Cable | φ6 4-conductor flexible cable 3 m Cable end: 5 wires | φ8 4-conductor flexible cable 3 m Cable end: 5 wires |
| Load cell material | Stainless steel | |
| RoHS directives | 2011/65/EU (EU)2015/863 | |

Application example

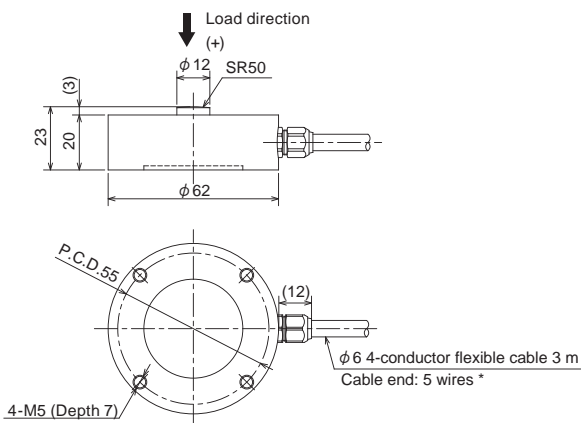


Wiring diagram

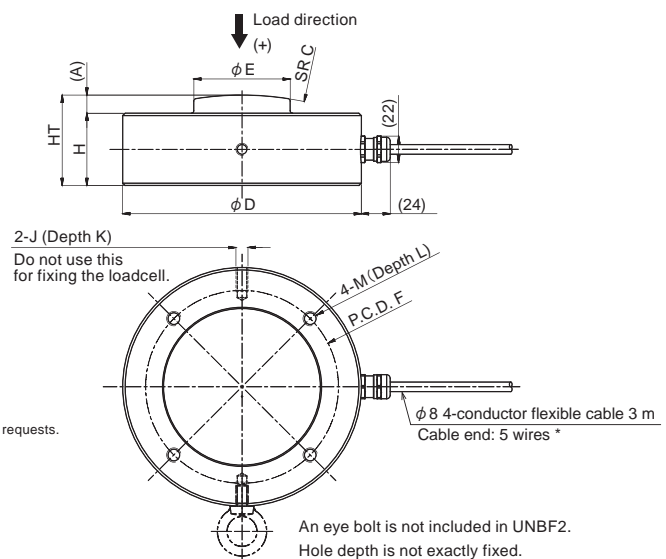


External dimension

UNBF-300N to 20KN



UNBF2-30KN to 500KN



* Connector can be attached to the cable according to your requests.

| Model | Deflection at rated | Natural frequency | Weight | A | φD | φE | H | HT | P.C.D.F | M | L | SRC | J | K |
|-------------|---------------------|-------------------|--------|----|-----|----|----|----|---------|-----|----|-----|----|----|
| UNBF-300N | 0.060 mm | 2.8 kHz | 400 g | | | | | | | | | | | |
| UNBF-500N | 0.040 mm | 3.6 kHz | 400 g | | | | | | | | | | | |
| UNBF-1KN | 0.040 mm | 5.4 kHz | 400 g | | | | | | | | | | | |
| UNBF-2KN | 0.035 mm | 7.8 kHz | 400 g | | | | | | | | | | | |
| UNBF-3KN | 0.035 mm | 9.3 kHz | 400 g | | | | | | | | | | | |
| UNBF-5KN | 0.035 mm | 13 kHz | 400 g | | | | | | | | | | | |
| UNBF-10KN | 0.055 mm | 16 kHz | 400 g | | | | | | | | | | | |
| UNBF-20KN | 0.050 mm | 23 kHz | 400 g | | | | | | | | | | | |
| UNBF2-30KN | 0.130 mm | 9 kHz | 1.6 kg | 5 | 98 | 30 | 33 | 38 | 84 | M6 | 7 | 100 | | |
| UNBF2-50KN | 0.140 mm | 12 kHz | 1.6 kg | 5 | 98 | 30 | 33 | 38 | 84 | M6 | 7 | 100 | - | - |
| UNBF2-100KN | 0.160 mm | 17 kHz | 1.6 kg | 8 | 98 | 30 | 35 | 43 | 84 | M6 | 7 | 150 | | |
| UNBF2-200KN | 0.200 mm | 9.4 kHz | 3.9 kg | 10 | 138 | 50 | 43 | 53 | 110 | M8 | 8 | 200 | | |
| UNBF2-300KN | 0.250 mm | 8.9 kHz | 6.3 kg | 12 | 158 | 60 | 53 | 65 | 130 | M10 | 10 | 250 | M8 | 16 |
| UNBF2-500KN | 0.350 mm | 6.2 kHz | 11 kg | 15 | 198 | 80 | 60 | 75 | 160 | M12 | 12 | 250 | M8 | 16 |

An eye bolt is not included in UNBF2. Hole depth is not exactly fixed.

Unit: mm