

KCE-NA Center-hole type Compression Load Cell

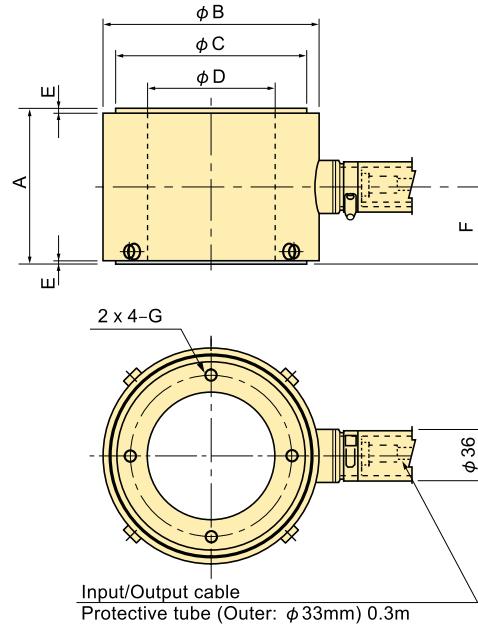
Civil engineering design



The KCE-NA is a center-hole-type load cell designed to use in tension measurement of anchoring strand. It can deliver stable measurement performance under somewhat eccentric load. An extra model with built-in temperature sensor is available.

Protection ratings: IP67 equivalent

Small effect of eccentric load



DIMENSIONS

| TYPE | A | φB | φC | φD | E | F | G |
|------------|------|-----|-----|-----|---|------|----------------|
| KCE-500KNA | 77.5 | 130 | 113 | 82 | 2 | 39 | M8 DP10 PCD 98 |
| KCE-1MNA | 109 | 150 | 134 | 90 | 2 | 54.5 | M10DP12 PCD112 |
| KCE-1.5MNA | 115 | 185 | 160 | 110 | 4 | 57.5 | M12DP15 PCD136 |
| KCE-2MNA | 155 | 215 | 188 | 140 | 5 | 77.5 | M12DP15 PCD164 |

SPECIFICATIONS

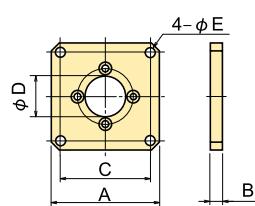
| TYPE | KCE-500KNA | KCE-1MNA | KCE-1.5MNA | KCE-2MNA |
|-------------------------------|--|----------|------------|----------|
| Capacity | 500kN | 1MN | 1.5MN | 2MN |
| Rated Output | 1.25mV/V (2500×10 ⁻⁶ strain) ±10% | | | |
| Non-linearity | 0.5%RO | | | |
| Hysteresis | 0.5%RO | | | |
| Natural frequency | 16kHz | 12kHz | 12kHz | 9.2kHz |
| Temperature effect on zero | 0.1%RO/°C | | | |
| Temperature effect on span | 0.05%/°C | | | |
| Compensated temperature range | -10 ~ +60°C | | | |
| Allowable temperature range | -20 ~ +70°C | | | |
| Over load | 120% | | | |
| Input/Output resistance | 350Ω±1% | | | |
| Recommended exciting voltage | 10V or less | | | |
| Allowable exciting voltage | 20V | | | |
| Zero balance | 5%RO | | | |
| Weight | 4.0kg | 8.5kg | 12.2kg | 21kg |

Input/Output cable : φ9mm 0.5mm² 4-core shielded chloroprene cable 5m

ACCESSORY

FLANGE KCEF-11

This flange is a pressure plate used to secure a load cell to a structure.

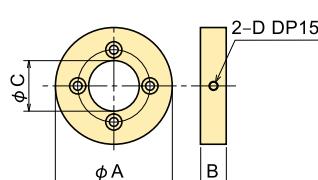


Dimensions

| Type | Applicable Load Cell | A | B | C | φD | φE | Weight |
|-------------|----------------------|-----|----|-----|-----|------|--------|
| KCEF-11-50 | KCE-500KNA | 180 | 20 | 150 | 82 | 12.5 | 4.1kg |
| KCEF-11-100 | KCE-1MNA | 200 | 20 | 170 | 90 | 12.5 | 5.1kg |
| KCEF-11-150 | KCE-1.5MNA | 220 | 35 | 190 | 110 | 12.5 | 10.4kg |
| KCEF-11-200 | KCE-2MNA | 250 | 35 | 220 | 140 | 12.5 | 13 kg |

FLANGE KCEF-12

This flange is a pressure plate used to consistently measure eccentric loads although with limitations.



Dimensions

| Type | Applicable Load Cell | φA | B | φC | D | Weight |
|-------------|----------------------|-----|----|-----|-----|--------|
| KCEF-12-50 | KCE-500KNA | 156 | 26 | 82 | M 8 | 2.8kg |
| KCEF-12-100 | KCE-1MNA | 176 | 35 | 90 | M10 | 4.9kg |
| KCEF-12-150 | KCE-1.5MNA | 206 | 43 | 110 | M10 | 7.9kg |
| KCEF-12-200 | KCE-2MNA | 236 | 47 | 140 | M12 | 10 kg |