

## CLL-NA Compression Load Cell 500kN~1MN

Civil engineering design



### Loding test on cylindrical concrete specimen

The CLL-NA with a flat loading platform is used to conduct loading tests on cylindrical concrete test specimens. A cylindrical concrete specimen can be directly set on the surface of the loading platform.

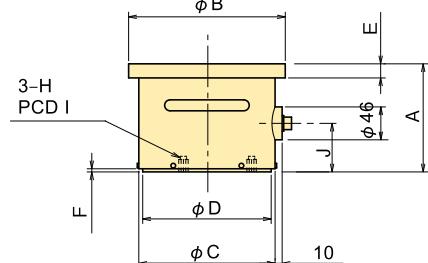
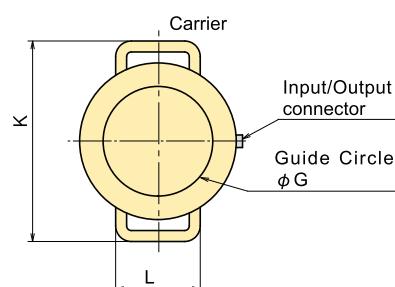
Protection ratings: IP65 equivalent

#### DIMENSIONS

| TYPE       | A   | $\phi$ B | $\phi$ C | $\phi$ D | E  | F | $\phi$ G | H        | I   | J  | K   | L   |
|------------|-----|----------|----------|----------|----|---|----------|----------|-----|----|-----|-----|
| CLL-500KNA | 115 | 160      | 140      | 130      | 25 | 1 | 102      | M10 DP10 | 80  | 45 | -   | -   |
| CLL-1MNA   | 155 | 220      | 190      | 180      | 25 | 2 | 153      | M12 DP15 | 124 | 65 | 280 | 120 |

#### SPECIFICATIONS

| TYPE                          | CLL-500KNA  | CLL-1MNA         |
|-------------------------------|---|------------------|
| Applicable specimen           | $\phi$ 10 x 20cm                                    | $\phi$ 15 x 30cm |
| Capacity                      | 500kN   | 1MN              |
| Rated Output                  | 1.5mV/V ( $3000 \times 10^{-6}$ strain) $\pm 0.5\%$ |                  |
| Non-linearity                 | 0.2%RO  |                  |
| Hysteresis                    | 0.2%RO  |                  |
| Temperature effect on zero    | 0.01%RO/ $^{\circ}$ C                               |                  |
| Temperature effect on span    | 0.01%/ $^{\circ}$ C                                 |                  |
| Compensated temperature range | -10 ~ +60 $^{\circ}$ C                              |                  |
| Allowable temperature range   | -20 ~ +70 $^{\circ}$ C                              |                  |
| Over load                     | 150%  |                  |
| Input/Output resistance       | 350 $\Omega$ $\pm 5\%$                              |                  |
| Recommended exciting voltage  | 10V or less   |                  |
| Allowable exciting voltage    | 20V   |                  |
| Zero balance                  | 5%RO  |                  |
| Weight                        | 9kg   | 22kg             |



Supplied cable :  
CT9-4N10/WP-STB ( $\phi$  9mm 0.5mm $^2$  4-core shielded chloroprene cable 10m)

## CLH-NA Compression Load Cell 1~2MN

Civil engineering design



### Loding test on cylindrical concrete specimen

The CLH-NA is designed mainly to test a cylindrical test specimen made of high-strength concrete. By using this load cell together with the compressometer, it is possible to measure load and strain simultaneously.

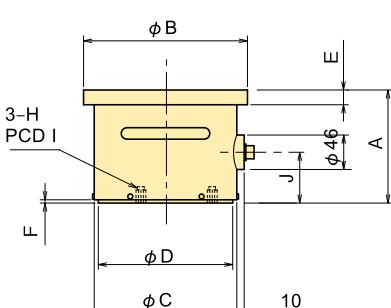
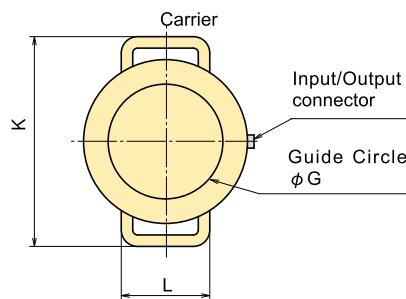
Protection ratings: IP65 equivalent

#### DIMENSIONS

| TYPE       | A   | $\phi$ B | $\phi$ C | $\phi$ D | E  | F | $\phi$ G | H        | I   | J  | K   | L   |
|------------|-----|----------|----------|----------|----|---|----------|----------|-----|----|-----|-----|
| CLH-1MNA   | 115 | 160      | 140      | 130      | 25 | 1 | 102      | M10 DP10 | 80  | 45 | -   | -   |
| CLH-1.5MNA | 137 | 195      | 170      | 160      | 25 | 2 | 127      | M10 DP12 | 96  | 55 | 254 | 114 |
| CLH-2MNA   | 155 | 220      | 190      | 180      | 25 | 2 | 153      | M12 DP15 | 124 | 65 | 280 | 120 |

#### SPECIFICATIONS

| TYPE                          | CLH-1MNA  | CLH-1.5MNA         | CLH-2MNA         |
|-------------------------------|---|--------------------|------------------|
| Applicable specimen           | $\phi$ 10 x 20cm                                    | $\phi$ 12.5 x 25cm | $\phi$ 15 x 30cm |
| Capacity                      | 1MN   | 1.5MN              | 2MN              |
| Rated Output                  | 1.5mV/V ( $3000 \times 10^{-6}$ strain) $\pm 0.5\%$ |                    |                  |
| Non-linearity                 | 0.2%RO  |                    |                  |
| Hysteresis                    | 0.2%RO  |                    |                  |
| Temperature effect on zero    | 0.01%RO/ $^{\circ}$ C                               |                    |                  |
| Temperature effect on span    | 0.01%/ $^{\circ}$ C                                 |                    |                  |
| Compensated temperature range | -10 ~ +60 $^{\circ}$ C                              |                    |                  |
| Allowable temperature range   | -20 ~ +70 $^{\circ}$ C                              |                    |                  |
| Over load                     | 150%  |                    |                  |
| Input/Output resistance       | 350 $\Omega$ $\pm 5\%$                              |                    |                  |
| Recommended exciting voltage  | 10V or less   |                    |                  |
| Allowable exciting voltage    | 20V   |                    |                  |
| Zero balance                  | 5%RO  |                    |                  |
| Weight                        | 10kg  | 14kg               | 26kg             |



Supplied cable :  
CT9-4N10/WP-STB ( $\phi$  9mm 0.5mm $^2$  4-core shielded chloroprene cable 10m)