# CWL

WIRE ROPE LOAD CELL



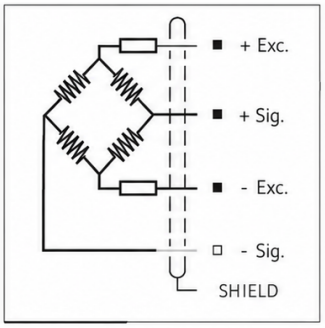

| CL | W | 10 | SS | 2 | 1 | 1 | 1 |
|---|---|---|---|---|---|---|---|
| **Product family** | **Mounting type** | **Capacity (t)** | **Body material** | **Resistance** | **Rope diameter** | **Output** | **Version** |
| CWL<br>Wire rope type | P: Pin type<br>W: Wire rope | 1 / 2 / 3 / 5<br>10 / 15 / 20 / 50 | S: Alloy steel<br>SS: Stainless steel | 2: 350 Ω<br>4: 700 Ω | 1: 8–18 mm<br>2: 12–22 mm<br>3: 22–36 mm | mV<br>I: 4–20 mA<br>V: 0–10 V<br>M: Modbus RTU | 1: Standard<br>2: Special |

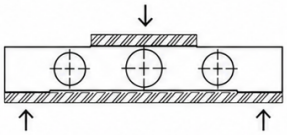
## DESCRIPTION

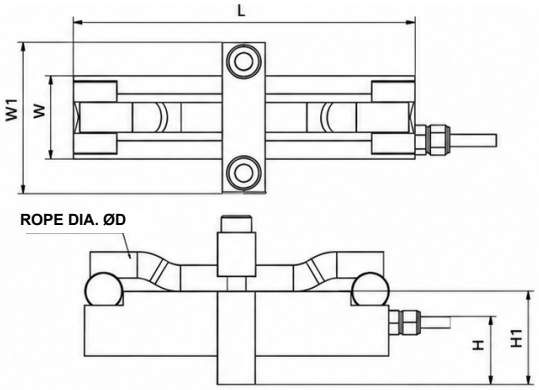
The CWL wire rope load cell delivers accurate, reliable measurements with its rope-type design and four-point sensing. It is designed for cranes, mobile weighing applications and industrial load measurement systems.

CWL is available in different sizes and capacities to suit application requirements. In addition to its standard mV/V output, it offers 4-20 mA and 0-10 V analog outputs and RS485 digital communication for integration with control and automation systems.

## TECHNICAL DIMENSIONS






| Capacity | A | B | C | D | E | H | Rope dia. | Cable |
|---|---|---|---|---|---|---|---|---|
| 1 Ton | 150 | 46 | 20 | 32 | 76.5 | 70-76 | Ø 8 / 14 | 3.5 m |
| 2.5 Ton | 170 | 46 | 25 | 32 | 76.5 | 75-85 | Ø 10 / 20 | 3.5 m |
| 5 Ton | 200 | 53 | 34 | 38.1 | 84 | 96-108 | Ø 12 / 28 | 3.5 m |
| 10 Ton | 220 | 53 | 39 | 38.1 | 100 | 96-113 | Ø 18 / 34 | 3.5 m |
| 20 Ton | 280 | 53 | 40 | 38.1 | 100 | 96-120 | Ø 20 / 36 | 3.5 m |

Rev. 0.0

COTO Engineering

- SALES :coto@coto.com.tr
- TEL : 0850 307 58 58
  0533 580 00 00

SALES :destek@coto.com.tr
TEL : 0850 307 58 58

ISO 9001
ISO 14001

www.coto.com.tr

# CWL
WIRE ROPE LOAD CELL

## MAIN FUNCTIONS

Optional connections

- PC/PLC connection via RS485/RS232
- Remote display connection via RS485/RS232
- 4-20 mA and 0-10 V analog output options
- Four strain gauges for maximum load measurement accuracy.

## COMPLIANCE

CE certification for European Union countries.

IP66 protection against dust and powerful water jets.

Pb free

## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Capacity | From 1 to 200 tonnes |
| Accuracy class | D1 |
| Maximum recommended excitation voltage | 15 VDC |
| Recommended excitation voltage | 10 VDC |
| Minimum measurement interval (Y=Emax / Vmin) | - |
| Total error | ±0.5 %FS |
| Rated output at full scale (FS) | 1.2 ± 0.2mV/V |
| Zero balance | ± 1 %FS |
| Input resistance | 380 Ω ± 20 Ω 720 Ω ± 20 Ω |
| Output resistance | 350 Ω ± 5 Ω 702 Ω ± 5 Ω |
| Insulation resistance | ≤ 5000 MΩ (100VDC) |
| Compensated temperature range | -10˚ + 40 °C (Optional) |
| Operating temperature range | -30˚ + 70 °C |
| IP rating | IP 66 |
| Material | Alloy steel / Stainless steel |
| Safe / ultimate overload capacity | 150 % FS / 300 % FS |

## OPTIONS ON REQUEST





**DESCRIPTION**

CED: Aluminium profile enclosure, IP54 protection, plexiglass front panel.
Dimensions: CED-4X: 770 × 150 × 100 mm; CED-3X: 620 × 150 × 100 mm; four Ø4 mm mounting holes.

- CLL**
- SCM and overload limiter control unit
- For more information, please visit the product page.

**CLB**

- SCM and overload control unit
- For more information, please visit the product page.

OPTIONS

- BLACKBOX functions
- Integrated RF interface for connecting multiple units: 2.4 GHz (128 channels)
- Average range: 100 metres (open area)

Rev. 0.0

The company reserves the right to change technical data, drawings and images without prior notice.

COTO Engineering
• SALES :coto@coto.com.tr
• TEL : 0850 307 58 58
0533 580 00 00
SALES :destek@coto.com.tr
TEL : 0850 307 58 58
ISO 9001
ISO 14001
www.coto.com.tr