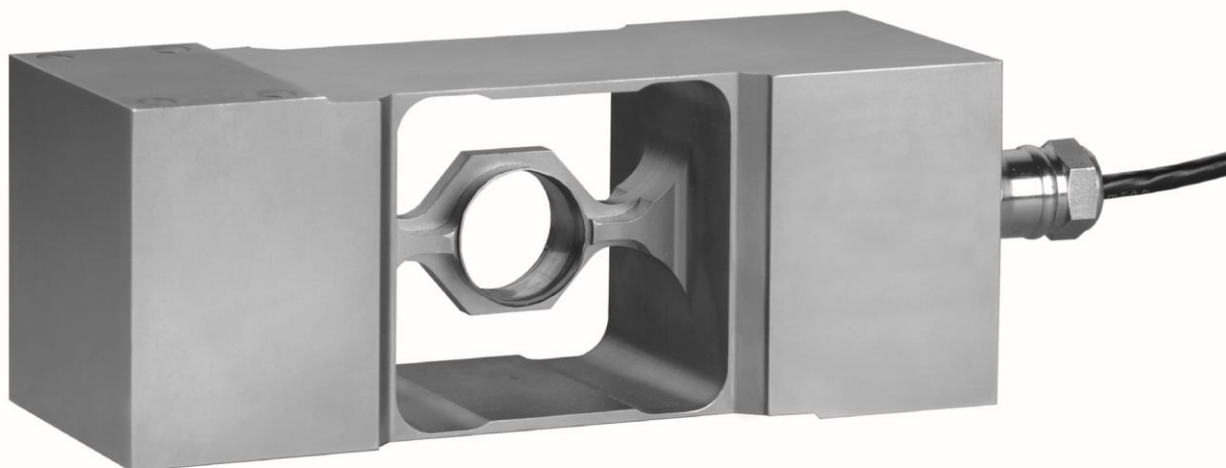




## Product Description

The type PCB is a stainless steel single point load cell with complete hermetic sealing. It is a perfect fit for use in harsh industrial environments.

## Application

- Bench and floor scales, packaging machines and conveyor scales

## Key Features

- Wide range of capacities from 50 kg to 1 000 kg
- Stainless steel construction
- Environmental Protection IP68 with complete hermetic sealing
- Maximum platform size up to 1 000 x 1 000 mm
- High input resistance
- Integral mounting spacer

## Options

- Y = 20 000 for C3 and C3 MI6
- Y = 25 000 for C3 and C3 MI6 (for 250 kg or higher capacities)

## Approvals

- OIML approval to C3 and C3 MI6 (Y = 12 500)
- NTEP approval to 5 000 intervals, Class III
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

## Packed Weight

|                 |     |     |     |     |       |
|-----------------|-----|-----|-----|-----|-------|
| ■ Capacity (kg) | 50  | 100 | 250 | 500 | 1 000 |
| Weight (kg)     | 5.4 | 5.4 | 5.7 | 5.7 | 5.8   |

## Available Accessories

- Compatible range of electronics

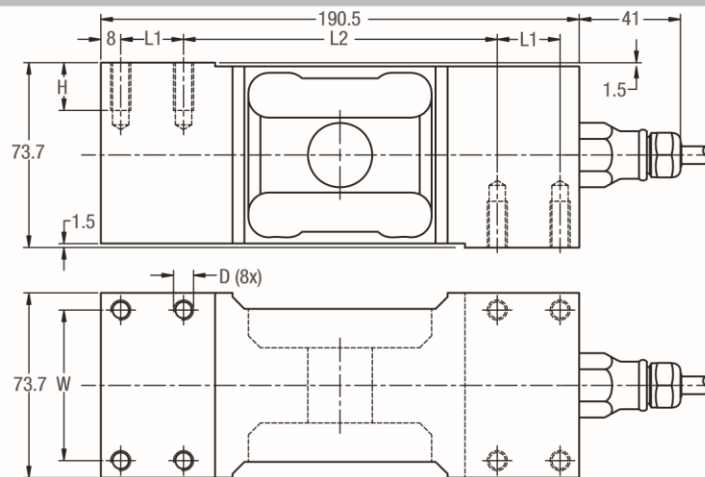
## Specifications

| Specifications                                                    |                                                              |                    | 50 / 100 / 250 / 500 / 1 000                                                  |                                                                        |          |
|-------------------------------------------------------------------|--------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|----------|
| Maximum capacity (E <sub>max</sub> )                              |                                                              | kg                 | (GP)                                                                          | C3                                                                     | C3 MI 6  |
| Accuracy class according to OIML R60                              |                                                              |                    | n.a.                                                                          | 3 000                                                                  |          |
| Maximum number of verification intervals (n <sub>LC</sub> )       |                                                              |                    | n.a.                                                                          | E <sub>max</sub> / 12 500                                              |          |
| Minimum load cell verification interval (v <sub>min</sub> )       |                                                              |                    | n.a.                                                                          | ± 0.0112                                                               |          |
| Temperature effect on minimum dead load output (TC <sub>0</sub> ) |                                                              | %•RO/10°C          | ± 0.0400                                                                      | ± 0.0100                                                               |          |
| Temperature effect on sensitivity (TC <sub>RO</sub> )             |                                                              | %•RO/10°C          | ± 0.0200                                                                      | ± 0.0180                                                               |          |
| Combined error                                                    |                                                              | %•RO               | ± 0.0500                                                                      | ± 0.0200                                                               | ± 0.0166 |
| Non-linearity                                                     |                                                              | %•RO               | ± 0.0400                                                                      | ± 0.0166                                                               | ± 0.0166 |
| Hysteresis                                                        |                                                              | %•RO               | ± 0.0400                                                                      | ± 0.0166                                                               | ± 0.0083 |
| Creep error (30 minutes) / DR                                     |                                                              | %•RO               | ± 0.0600                                                                      | ± 0.0166                                                               | ± 0.0083 |
| Option                                                            | Min. load cell verification interval (v <sub>min opt</sub> ) |                    | n.a.                                                                          | E <sub>max</sub> / 20 000; 250 kg or higher: E <sub>max</sub> / 25 000 |          |
|                                                                   | Temp. effect on min. dead load output (TC <sub>0 opt</sub> ) | %•RO/10°C          | n.a.                                                                          | ± 0.0070; 250 kg or higher: ± 0.0056                                   |          |
| Rated Output (RO)                                                 |                                                              | mV/V               | 2 ± 5%                                                                        |                                                                        |          |
| Zero balance                                                      |                                                              | %•RO               | ± 5                                                                           |                                                                        |          |
| Excitation voltage                                                |                                                              | V                  | 5...15                                                                        |                                                                        |          |
| Input resistance (R <sub>LC</sub> )                               |                                                              | Ω                  | 1 100 ± 50                                                                    |                                                                        |          |
| Output resistance (R <sub>out</sub> )                             |                                                              | Ω                  | 960 ± 50                                                                      |                                                                        |          |
| Insulation resistance (100 V DC)                                  |                                                              | MΩ                 | ≥ 5 000                                                                       |                                                                        |          |
| Safe load limit (E <sub>lim</sub> )                               |                                                              | %•E <sub>max</sub> | 200                                                                           |                                                                        |          |
| Ultimate load                                                     |                                                              | %•E <sub>max</sub> | 300                                                                           |                                                                        |          |
| Safe side load                                                    |                                                              | %•E <sub>max</sub> | 100                                                                           |                                                                        |          |
| Maximum platform size; loading acc. to OIML R76                   |                                                              | mm                 | 600 x 600 for 50 kg / 800 x 800 for 100 kg / 1 000 x 1 000 for 250...1 000 kg |                                                                        |          |
| Maximum off centre distance at maximum capacity                   |                                                              | mm                 | 200 for 50 kg / 250 for 100...500 kg / 300 for 1 000 kg                       |                                                                        |          |
| Compensated temperature range                                     |                                                              | °C                 | -10...+40                                                                     |                                                                        |          |
| Operating temperature range                                       |                                                              | °C                 | -40...+80 (ATEX -40...+60)                                                    |                                                                        |          |
| Load cell material                                                |                                                              |                    | stainless steel 17-4 PH (1.4548)                                              |                                                                        |          |
| Sealing                                                           |                                                              |                    | complete hermetic sealing; cable entry sealed by glass to metal header        |                                                                        |          |
| Protection according EN 60 529                                    |                                                              |                    | IP68 (up to 2 m water depth) / IP69K                                          |                                                                        |          |

The limits for Non-Linearity, Hysteresis, and TC<sub>RO</sub> are typical values.

The sum of Non-Linearity, Hysteresis and TC<sub>RO</sub> meets the requirements according to OIML R60 with p<sub>LC</sub>=0.7.

## Dimensions (in mm)



| Type                         | L1 | L2    | H  | W  | D                   | Mounting bolts                 | Torque <sup>1)</sup> |
|------------------------------|----|-------|----|----|---------------------|--------------------------------|----------------------|
| PCB-50/100/250/500/1 000 kg  | 25 | 125   | 19 | 60 | M8 <sup>2)</sup>    | M8 8.8 / PCB-1 000 kg: M8 12.9 | 25 Nm                |
| PCBB-500/1 000 kg            | 35 | 104,5 | 25 | 57 | M12                 | M12 8.8                        | 90 Nm                |
| PCBC-50/100/250/500/1 000 kg | 35 | 107   | 19 | 50 | M8 <sup>2) 3)</sup> | M8 8.8                         | 25 Nm                |

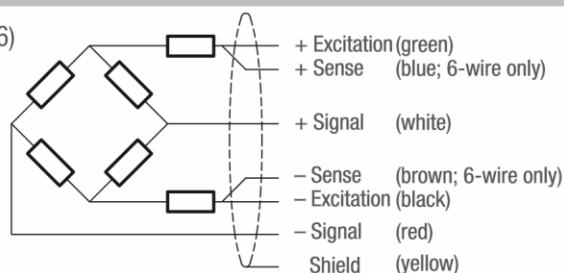
1) Torque values assume oiled thread.

2) Unified thread 5/16-18 is available.

3) OIML approval only valid for M8 threads.

## Wiring

- The load cell is provided with a shielded, 6 conductor cable (AWG 26) or with a shielded, 4 conductor cable (AWG 24). Cable jacket polyurethane.
- Cable length: 3 m
- Cable diameter: 5 mm
- The shield is floating or connected to the load cell body



# **C A M B R I D G E**

## **FLINTEC** **LOAD CELLS**

| <b><u>MODEL</u></b> | <b><u>DESCRIPTION</u></b> | <b><u>CAPACITY</u></b> | <b><u>LIST</u></b> |
|---------------------|---------------------------|------------------------|--------------------|
| <b>PCB</b>          | <b>HERMETICALLY</b>       | <b>50 KG</b>           | <b>\$ 1,300.</b>   |
|                     | <b>SEALED STAINLESS</b>   |                        |                    |
|                     | <b>STEEL LARGE</b>        | <b>100 KG</b>          | <b>\$ 1,300.</b>   |
|                     | <b>ENVELOPE BRICK</b>     |                        |                    |
|                     | <b>LOAD CELL</b>          | <b>250 KG</b>          | <b>\$ 1,350.</b>   |
|                     | <b>IP 68 Rated</b>        | <b>500 KG</b>          | <b>\$ 1,350.</b>   |
|                     |                           | <b>1,000 KG</b>        | <b>\$ 1,400.</b>   |

**F.O.B.: HONEY BROOK, PA**

**PRICES EFFECTIVE: 01/01/18**

**PRICES SUBJECT TO CHANGE WITHOUT NOTICE**