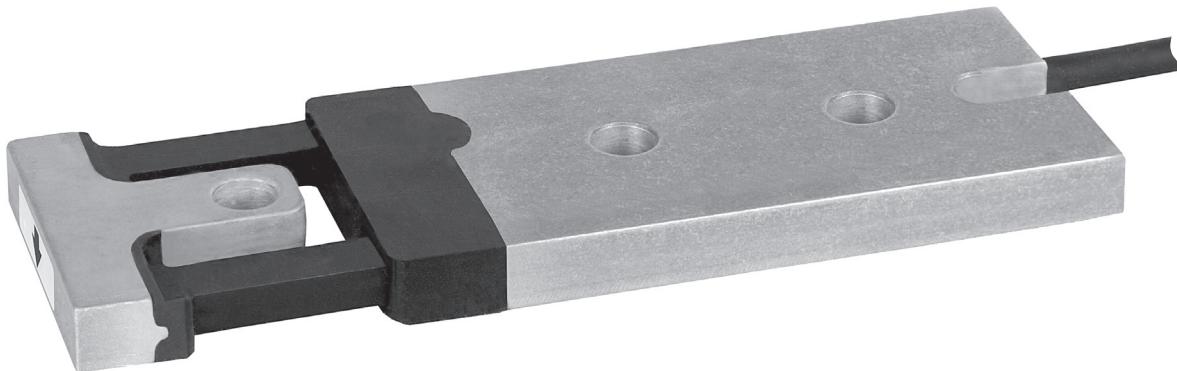


## Type ZLB Load Cell



### Product Description

The type ZLB is a very low profile Planar Beam load cell. Its unique Flintec design allows for an extremely low scale construction. Type ZLB offers an aluminium construction with industrial potting making it suitable for use in industrial environments.

### Approvals

- OIML approval to C3 ( $Y = 7\,500$ )
- ATEX hazardous area approval for Zone 0, 1, 2, 20, 21 and 22
- FM hazardous area approval

### Application

- Compact scales, bench and floor scales, counting scales as well as other special applications

### Packed Weight

|                 |      |      |      |      |
|-----------------|------|------|------|------|
| ■ Capacity (kg) | 20   | 50   | 100  | 200  |
| Weight (kg)     | 0.46 | 0.49 | 0.49 | 0.53 |

### Key Features

- Capacities from 20 kg to 200 kg
- Aluminium construction
- Environmental Protection IP67
- Very low profile design
- High input resistance
- Calibration in mV/V/Ω
- Mounting compatible to SB6 and SB8

### Available Accessories

- Load mounts
- Compatible range of electronics

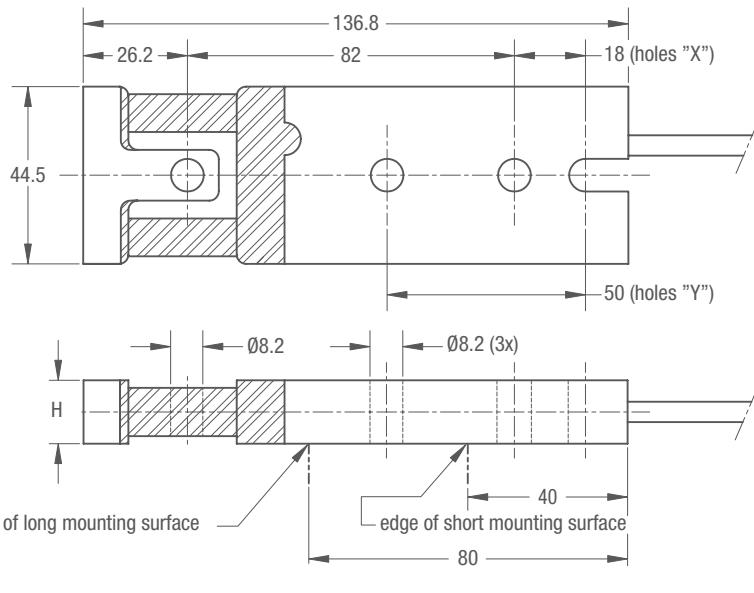
### ZLB Specifications

|  | (E <sub>max</sub> ) | kg                 | 20 / 50 / 100 / 200 |                            |                          |
|--|---------------------|--------------------|---------------------|----------------------------|--------------------------|
|  |                     |                    | (GP)                | C1                         | C3                       |
| Maximum capacity                               | (E <sub>max</sub> ) | kg                 |                     |                            |                          |
| Accuracy class according to OIML R60           |                     |                    | n.a.                | 1 000                      | 3 000                    |
| Maximum number of verification intervals       | (n <sub>max</sub> ) |                    | n.a.                | E <sub>max</sub> /5 000    | E <sub>max</sub> /10 000 |
| Minimum load cell verification interval        | (v <sub>min</sub> ) |                    |                     |                            |                          |
| Temperature effect on minimum dead load output | (TC <sub>0</sub> )  | %*RO/10°C          | ≤ ± 0.0400          | ≤ ± 0.0280                 | ≤ ± 0.0140               |
| Temperature effect on sensitivity              | (TC <sub>RO</sub> ) | %*RO/10°C          | ≤ ± 0.0200          | ≤ ± 0.0160                 | ≤ ± 0.0100               |
| Combined error                                 |                     | %*RO               | ≤ ± 0.0500          | ≤ ± 0.0300                 | ≤ ± 0.0200               |
| Non linearity                                  |                     | %*RO               | ≤ ± 0.0400          | ≤ ± 0.0300                 | ≤ ± 0.0166               |
| Hysteresis                                     |                     | %*RO               | ≤ ± 0.0400          | ≤ ± 0.0300                 | ≤ ± 0.0166               |
| Creep error (30 minutes) / DR                  |                     | %*RO               | ≤ ± 0.0600          | ≤ ± 0.0490                 | ≤ ± 0.0166               |
| Rated Output                                   | (RO)                | mV/V               |                     | 2 ± 0.1%                   |                          |
| Calibration in mV/V/Ω                          |                     | %                  |                     | ≤ ± 0.05                   |                          |
| Zero balance                                   |                     | %*RO               |                     | ≤ ± 5                      |                          |
| Excitation voltage                             |                     | V                  |                     | 5...15                     |                          |
| Input resistance                               | (R <sub>LC</sub> )  | Ω                  |                     | 1 180 ± 50                 |                          |
| Output resistance                              | (R <sub>out</sub> ) | Ω                  |                     | 1 000 ± 2                  |                          |
| 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                        |                          |
| Compensated temperature range                  |                     | °C                 |                     | -10...+40                  |                          |
| Operating temperature range                    |                     | °C                 |                     | -20...+65 (ATEX -20...+60) |                          |
| Load cell material                             |                     |                    |                     | aluminium                  |                          |
| Sealing  |                     |                    |                     | potting                    |                          |
| Protection according DIN 40.050                |                     |                    |                     | IP67                       |                          |

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)



#### Note:

It is recommended to use mounting holes "Y" on an 80 mm mounting surface.

Mounting holes "X" can be used on a short (40 mm) mounting surface.

If so, a steel spacer (80 mm long and 10 mm thick) is required for the 200 kg load cell.

### Wiring

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

