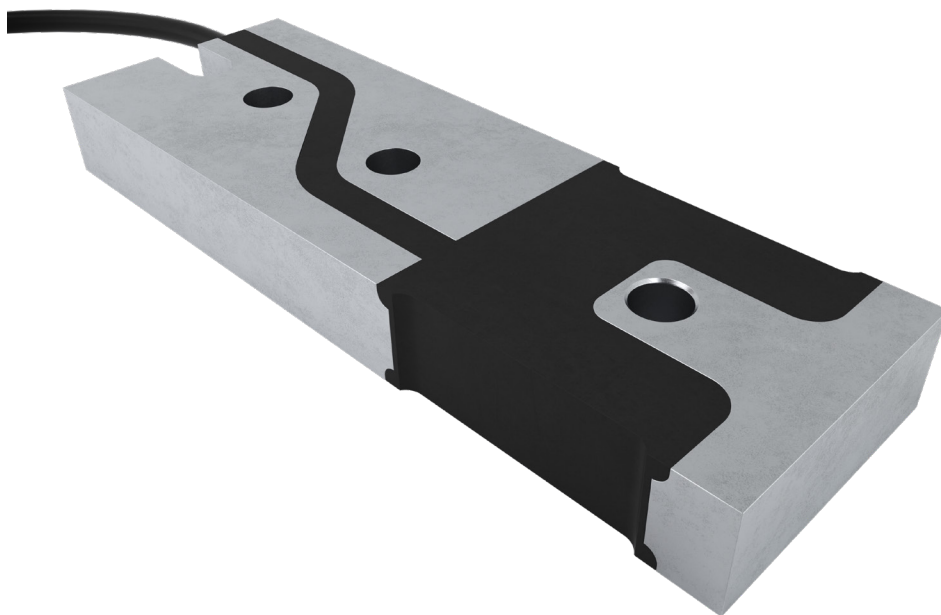


# ZLB planar beam load cell



## product description

The ZLB planar beam offers high accuracy in a low overall height. Bolt hole compatible with the SB8 and SB6 load cells from Flintec. All aluminium construction and environmentally protected using potting material. OIML certified to 3000d.

## applications

Low profile scales, Process Weighing systems.

## approvals

OIML approval to C3 (Y = 10,000)

ATEX hazardous area approval for zones 0, 1, 2, 20, 21 and 22

FM hazardous area approval

## accessories

Load mounts

Compatible range of electronics

## key features

Wide range of capacities from 20kg to 200kg

1000Ω strain gauge bridge for battery powered devices

Aluminium construction

Environmentally sealed by potting to IP67

High accuracy

Bolt-hole compatible with SB6, SB8 and SB61C load cells

Very low profile design

High input resistance

Calibration in mV/V/Ω



RoHS  
compliant



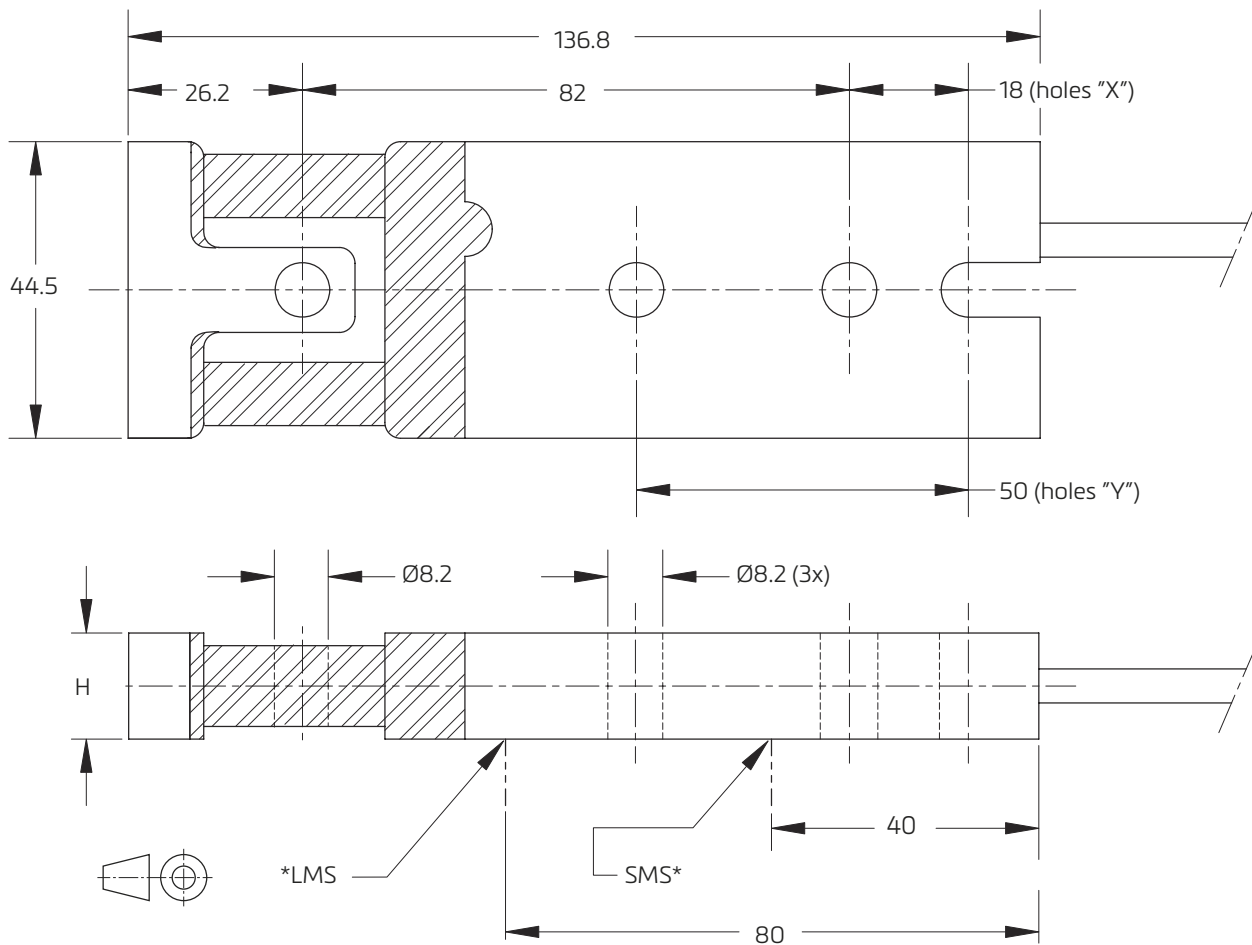
## specifications

Maximum capacity ( $E_{\max}$ )	kg	20 / 50 / 100 / 200		
Accuracy class according to OIML R60		(GP)	C1	C3
Maximum number of verification intervals ( $n_{\max}$ )		n.a.	1,000	3,000
Minimum load cell verification interval ( $v_{\min}$ )		n.a.	$E_{\max} / 5,000$	$E_{\max} / 10,000$
Temperature effect on minimum dead load output ( $TC_0$ )	%*RO/10°C	$\pm 0.0400$	$\pm 0.0280$	$\pm 0.0140$
Temperature effect on sensitivity ( $TC_{RO}$ )	%*RO/10°C	$\pm 0.0200$	$\pm 0.0160$	$\pm 0.0100$
Combined error	%*RO	$\pm 0.0500$	$\pm 0.0300$	$\pm 0.0200$
Non linearity	%*RO	$\pm 0.0400$	$\pm 0.0300$	$\pm 0.0166$
Hysteresis	%*RO	$\pm 0.0400$	$\pm 0.0300$	$\pm 0.0166$
Creep error (30 minutes) / DR	%*RO	$\pm 0.0600$	$\pm 0.0490$	$\pm 0.0166$
Rated Output (RO)	mV/V	$2 \pm 0.1\%$		
Calibration in mV/V/ $\Omega$	%	$\pm 0.05$		
Zero balance	%*RO	$\pm 5$		
Excitation voltage	V	5...15		
Input resistance ( $R_{LC}$ )	$\Omega$	$1,180 \pm 50$		
Output resistance ( $R_{out}$ )	$\Omega$	$1,000 \pm 2$		
Insulation resistance (100 V DC)	M $\Omega$	$\geq 5,000$		
Safe load limit ( $E_{lim}$ )	%* $E_{\max}$	200		
Ultimate load	%* $E_{\max}$	300		
Safe side load	%* $E_{\max}$	100		
Compensated temperature range	°C	-10...+40		
Operating temperature range	°C	-20...+65 (ATEX -20...+60)		
Load cell material		aluminium		
Sealing		potting		
Protection according EN 60 529		IP67		
Packet weight	kg	0.46 (20kg), 0.49 (50kg, 100kg), 0.53 (200kg)		

The limits for Non-Linearity, Hysteresis, and  $TC_{RO}$  are typical values.

The sum of Non-linearity, Hysteresis and  $TC_{RO}$  meets the requirements according to OIML R60 with  $p_{LC}=0.7$ .

## product dimensions (mm)



LMS\* - Edge of long mounting surface  
SMS\* - Edge of short mounting surface

### 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.

Type	H	Mounting bolts	Torque *
ZLB-20 kg	9.5	M8 8.8	25 Nm
ZLB-50/100 kg	12.7	M8 8.8	25 Nm
ZLB-200 kg	15.9	M8 8.8	25 Nm

\* Torque values assume oiled threads.

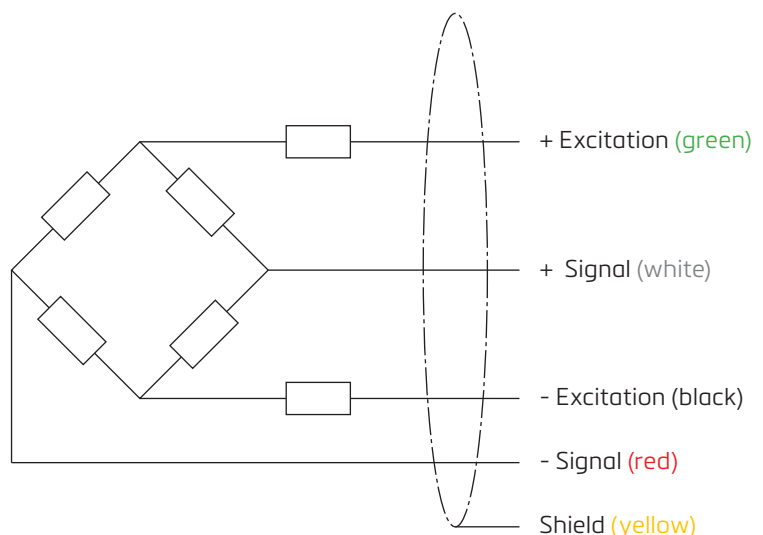
## wiring

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  
(Shield can be connected to the load cell body on request)



Specifications and dimensions are subject to change without notice.