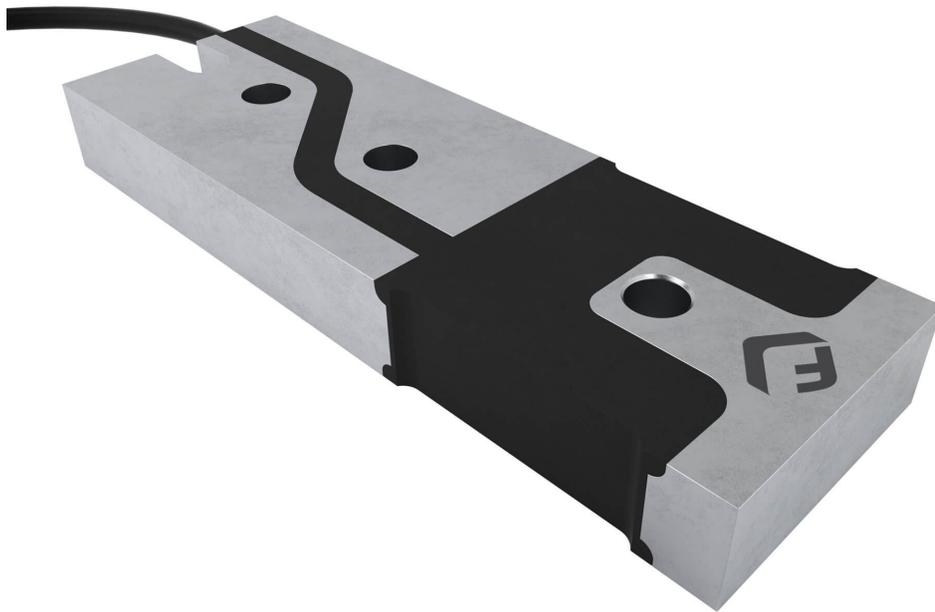


ZLB planar beam load cell



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

1000 Ω 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



 **flintec**
quality + precision

specifications

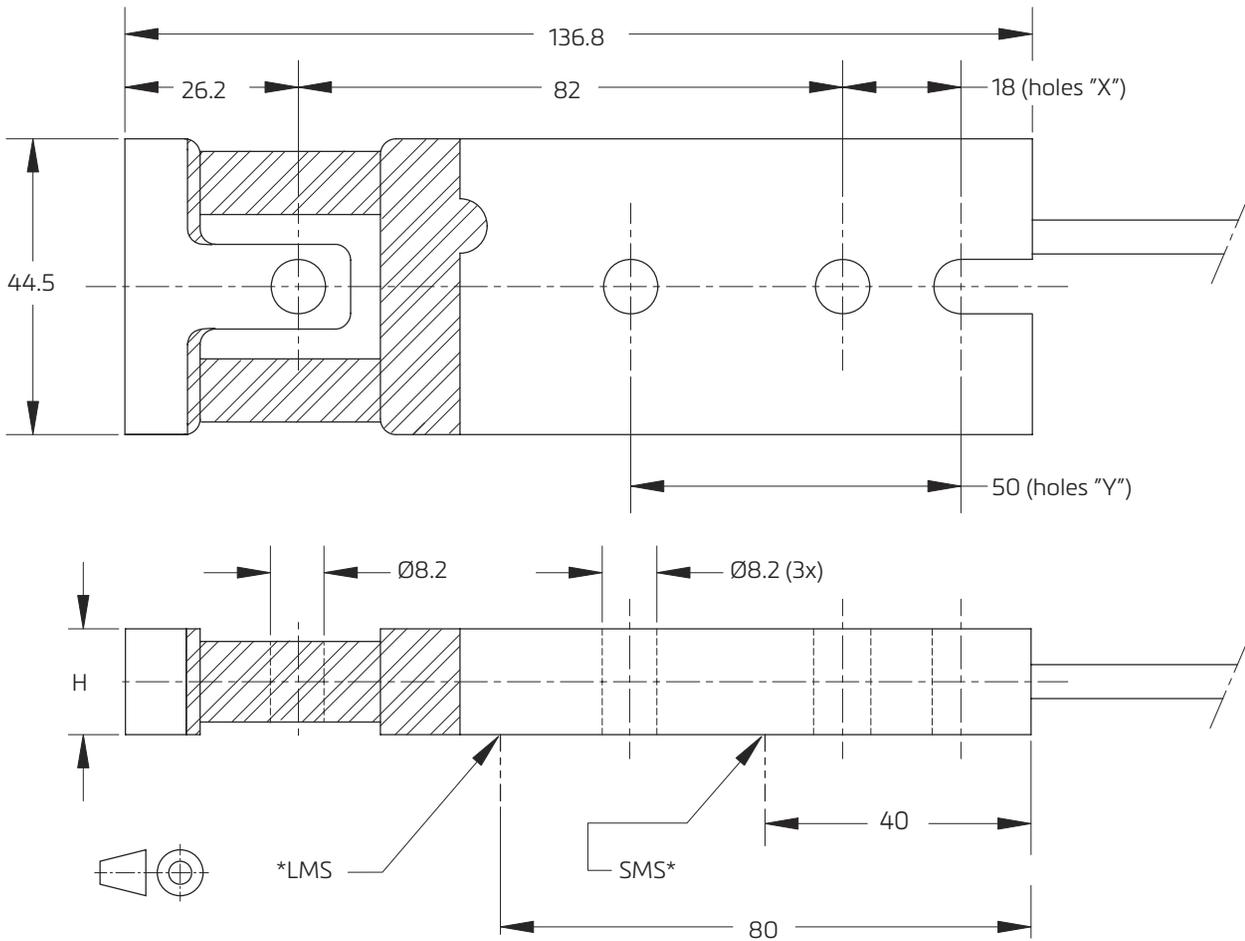
Maximum capacity (E_{max})	kg	20 / 50 / 100 / 200		
Accuracy class according to OIML R60		(GP)	C1	C3
Maximum number of verification intervals (n_{max})		n.a.	1,000	3,000
Minimum load cell verification interval (v_{min})		n.a.	$E_{max} / 5,000$	$E_{max} / 10,000$
Temperature effect on minimum dead load output (TC_0)	%*RO/10°C	± 0.0400	± 0.0280	± 0.0140
Temperature effect on sensitivity (TC_{RO})	%*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_{LC})	Ω	1,180 ± 50		
Output resistance (R_{out})	Ω	1,000 ± 2		
Insulation resistance (100 V DC)	MΩ	≥ 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.

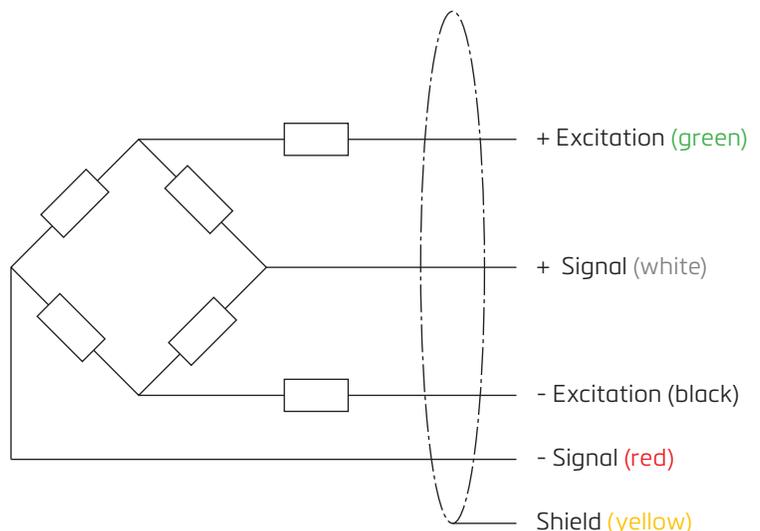
wiring

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.