

## JBOX-LCI

## SMART JUNCTION BOX MONITORING LOAD CELL INTEGRITY

Smart junction box is designed for parallel connecting of 2 to 4 load cells to an electronic device and for ensuring the monitoring of their correct functioning.



JBOX-LCI



### Features

- o Control of:
  - load cell out of pre-set balance range
  - load cell out of pre-set operating range
  - low / high excitation
  - open circuit to any load cell on each connection
  - short circuit on any load cell connection
  - internal load cell fault (bridge imbalance)
- o Ensure the positive safety of load limitation systems based on multiple load cells connected in parallel (hoisting devices)

### Available option(s)

- ABS housing available with DIN rail mounting accessories
- PCB available without ABS housing

### Application(s)

SENSY's JBOX-LCI is perfectly designed for the following applications:

- Overload protection and slack rope detection for hoisting equipment based with multiple anchor points,
- Industrial weighing with improved reliability.

### Function(s)

- Easy calibration by keys and 4-digit display
- Indication of the signal (mV) of each sensor, the average signal and error message (no. of sensors and types of error)
- Relay normally energised
- Parameters protected by a secret code

Specifications	JBOX-LCI	
Type	Smart junction box	-
Input range	1...5 mV/V	-
Sensor excitation	4...12 VDC (**)	-
Non-linearity error	<± 0.03	% F.S.*
Display	4 digits	-
Service temperature range	-10...+85	°C
Storage temperature range	-40...+95	°C
Temperature coefficient of the sensitivity	<± 0.02	% F.S./10°C
Temperature coefficient of zero signal	<± 0.2	% F.S./10°C
Power supply	4...12 VDC***	-
Qty of relay	1	-
Relay type	SPCO relay	-
Contact rating	0.5 A (50 VDC max.) / 1 A (24 VDC / 120 VAC)	-
IP rating	IP65	-

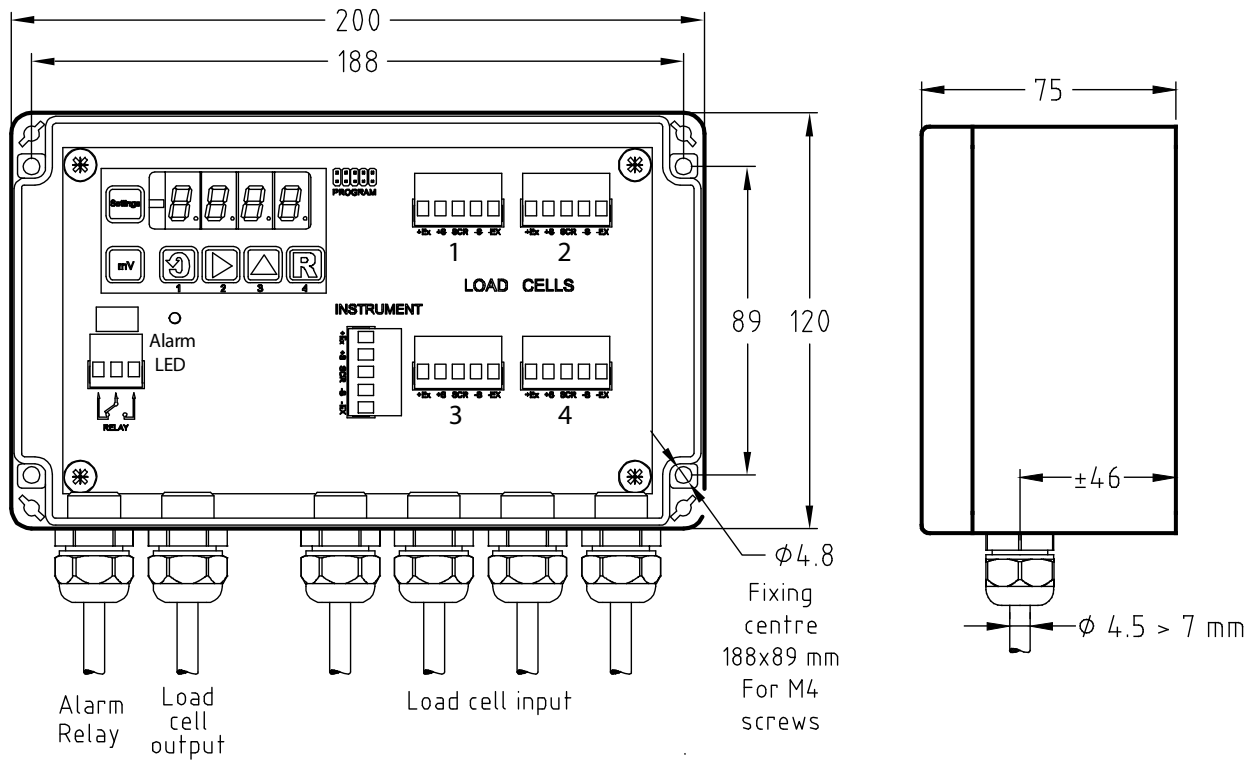
\*F.S. : Full Scale.

\*\* : provided by measurement electronics / 52 mA (except the consumption of the sensors).

\*\*\* : as SENSY JBOX-LCI is powered by the electronics on which it is connected, this electronics has to be able to provide an extra current supply in addition to the one required by the load cells. This means that, if necessary, a higher sensor impedance (e.g.: 700 or 1000 ohms) has to be provided. Example: In the case of use of a load cell with a CRANE-BOY (capacity of 125 mA at 10 V), the remaining current supply for the load cells is 75 mA. This will therefore be sufficient for 2 load cells of 350 ohms but not for 4 load cells of 350 ohms.

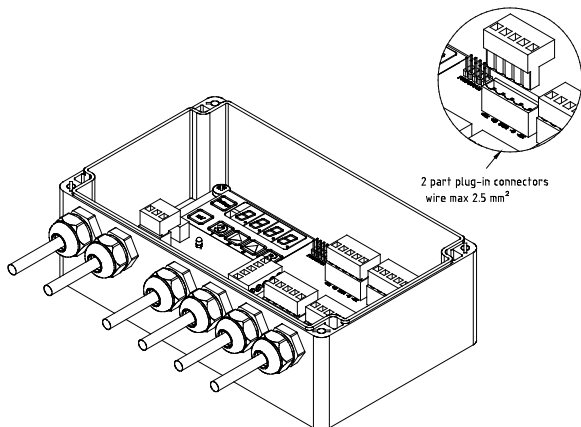
Specifications subject to change without notice.

JBOX-LCI > STANDARD DIMENSIONS



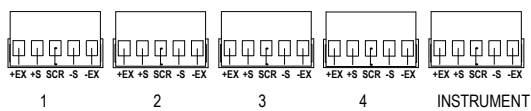
Dimensions in mm

Other view



Terminals

LOAD CELLS



Wiring:  
 +Exc. (Brown)  
 -Exc. (Yellow)  
 +Sig. (Green)  
 -Sig. (White)  
 SCR (Screen cable)

RELAY

