

## JBOX-LCI

# SMART JUNCTION BOX WITH MONITORING OF THE INTEGRITY OF THE LOAD CELLS

Smart junction box designed for parallel connecting of 2 to 4 load cells to a measurement electronics and ensuring the monitoring of their proper functioning.

JBOX-LCI



### Features

- o Control of
  - Load Cell out of preset balance range
  - Load Cell out of preset 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 for load-limitation systems based on multiple load cells parallel connected (hoisting devices)
- o Options
  - ABS housing available with Din rail mounting accessories
  - PCB available without ABS housing

### Applications

- Load limitation for hoisting equipment based on several load cells
- Industrial weighing with improved reliability

### Functions

- Easy calibration by keys and 4 digits display
- Indication of the signal (mV) of each sensor, the average signal and error message (nr of sensor and type of error)
- Relay normally energized
- Protection of parameters by secret code

Specifications	JBOX-LCI	
Type	Smart junction box	-
Input range	1...5mV/V	-
Sensor excitation	10 VDC $\pm$ 20%*	-
Display	4 digits	-
Linearity error	$< \pm 0.0015$	% F.S.
Temperature coefficient of zero signal	$< \pm 0.005$	% F.S./10 C
Temperature coefficient of the sensitivity	$< \pm 0.005$	% F.S./10 C
Service temperature range	-40...+85	C
Storage temperature range	-40...+95	C
Power supply	8.2...10 VDC	-
IP Rating	IP65	-
Qty of relay	1	-
Relay type	SPCO relay	-
Breaking capacity relay	0.5A / 50 VDC max.	-

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

F.S.: full scale - Specifications subject to change without notice

# JUNCTION BOX

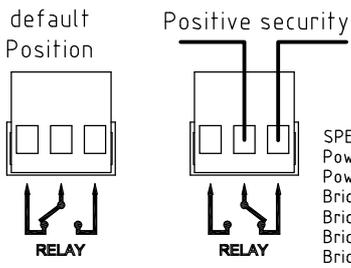
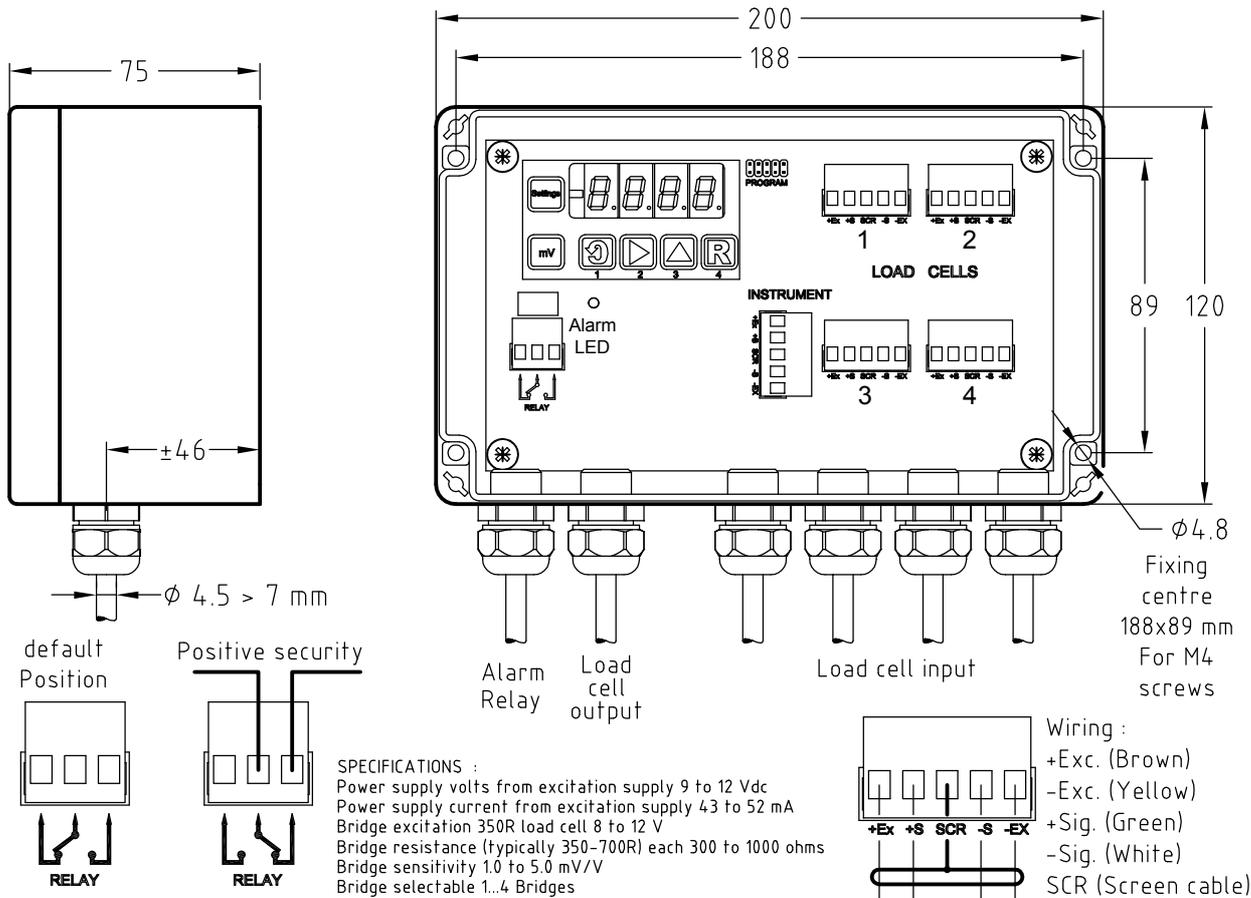
model JBOX-LCI for 1 to 4 Load cells



Load cell integrity alarm & junction box , IP 65 enclosure ABS

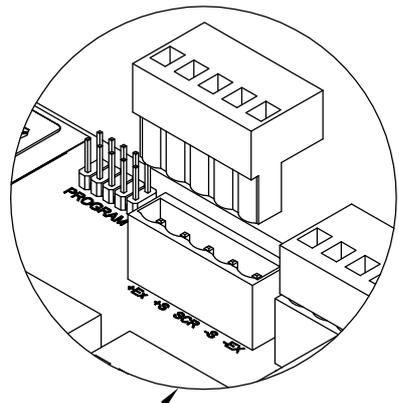
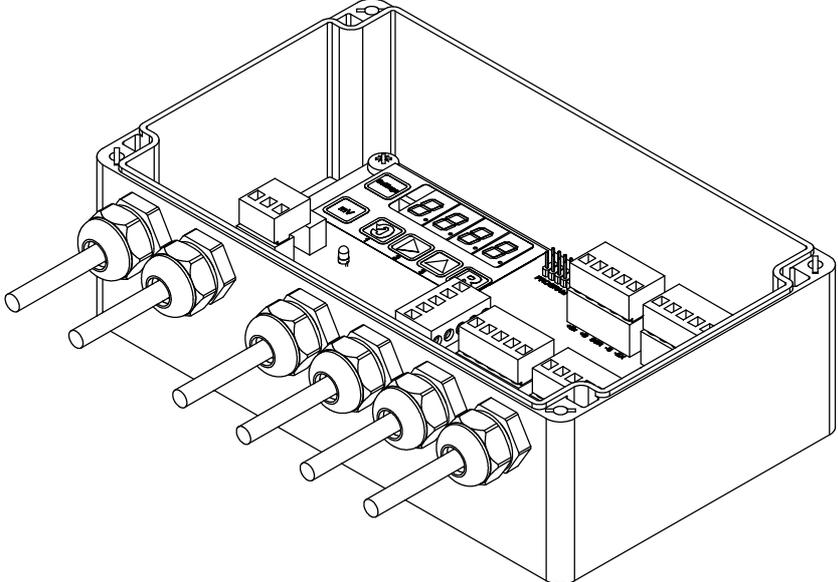
Faults monitored :

- Load Cell out of preset balance range
- Load Cell out of pre-set operating range
- Open circuit to any load cell on each connection
- Short circuit on any load cell connection
- Internal load cell fault (Bridge Imbalance)



SPECIFICATIONS :

- Power supply volts from excitation supply 9 to 12 Vdc
- Power supply current from excitation supply 43 to 52 mA
- Bridge excitation 350R load cell 8 to 12 V
- Bridge resistance (typically 350-700R) each 300 to 1000 ohms
- Bridge sensitivity 1.0 to 5.0 mV/V
- Bridge selectable 1..4 Bridges



2 part plug-in connectors wire max 2.5 mm<sup>2</sup>