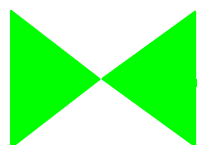


- Specifications

WEIGHTEC JB4-2



Junction box for loadcells



Weegtechniek
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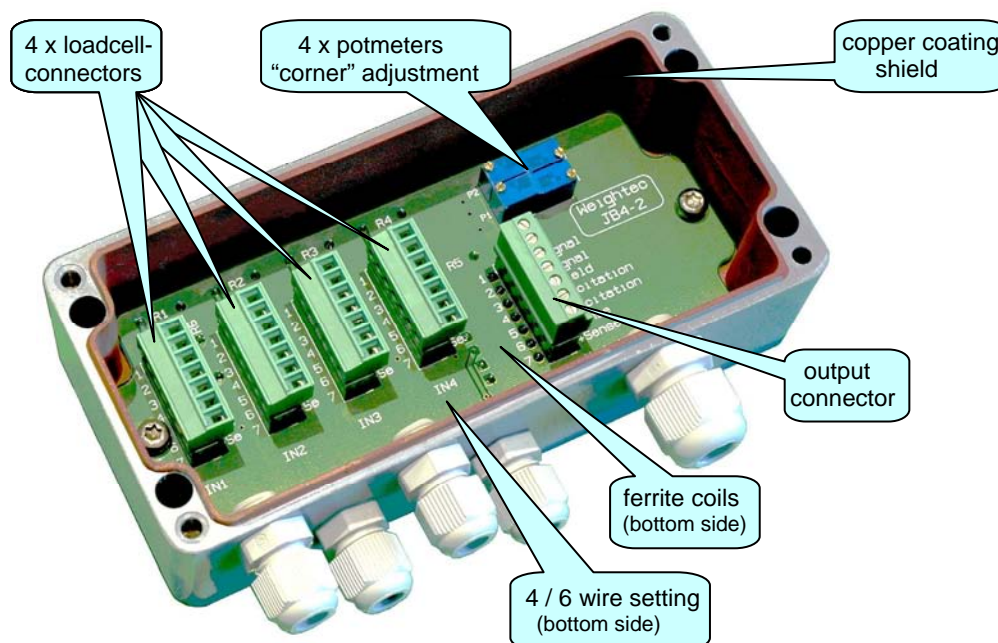
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SPECIFICATIONS WEIGHTEC JUNCTIONBOX JB4-2

Application : Connection of up to 4 loadcells with 4- or 6-wire system, compensation for unequal sensitivity output of the loadcells, HF filters.

Housing : Glassreinforced polyester, copper coating shield at the inside, grey colored outside, IP 65 closed, IP 68 on request. Dimensions (ex glands) 160 x 75 x 56(hg) mm



Printboard : Double layered, 2,4 mm thick glass/epoxy printboard with gold plated connectors

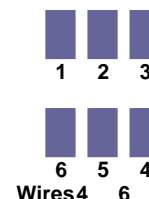
Corner adjustment : Loadcell inputs: IN 1 . . IN 4 correspond with the 25 turns potmeters P1 . . P4, P1 controls IN 1, P2 controls IN 2 a.s.o.. Impedance at 4 loadcells: 3,3 Ω per potmeter

Sense return : On the bottom side of the printboard two shortcuts should be made, by soldering bridges:

- at 4-wire loadcells both the bridges 1-2 en 6-5
- at 6-wire loadcells both the bridges 2-3 en 5-4

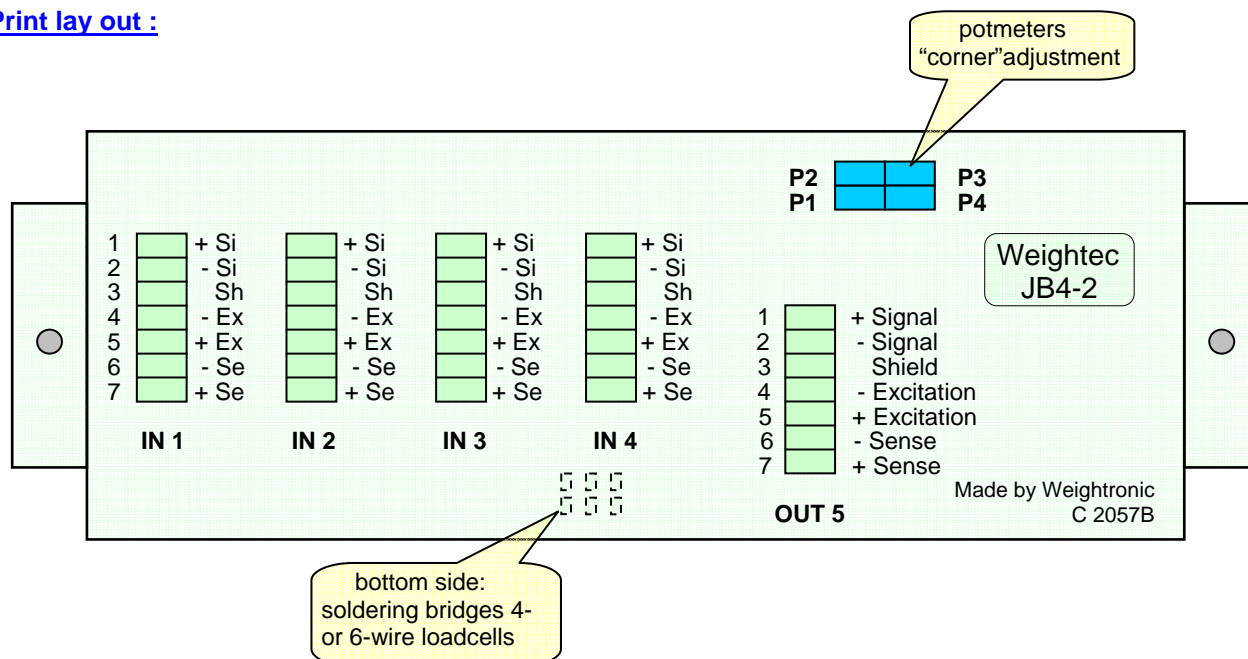
- 6-wires

: At 6-wire loadcells the automatic temperature compensation for the cable is performed until the loadcell itself by a sense return system. Therefore the loadcell cables may be shortened (all cables must keep equal length). In the junctionbox the sense return wires of the loadcells should not be shortcut with the excitation wires, since than the sense return system will not be in operation for the loadcell cables.



- 4-wires

: At 4-wire loadcells the sense return wires have to be shortcut in the junctionbox with the excitation wires via the soldering bridges. The cables of these loadcells are, during the manufacturing process of the cells, already being compensated for temperature deviations. Therefore they never should be shortened ! Loadcell connector pins no. 6 en 7 are not connected.

Print lay out :


Wire colours : Using the standard loadcell cable type 32 TPST, between junctionbox (**OUT 5**) and amplifier, the colour coding of this cable is:

| | | |
|---|----------------|--------------|
| 1 | + Signaal | - red |
| 2 | - Signaal | - orange |
| 3 | Shield | - blank wire |
| 4 | - Excitation | - black |
| 5 | + Excitation | - brown |
| 6 | - Sense return | - yellow |
| 7 | + Sense return | - green |

The colour coding of the connected loadcells is dependent on the applied loadcell brand.

Connectors : All cable connectors, as well as the corresponding print connectors, come with gold plated contacts. This prevents for corrosive problems on these low level signal connections on the long run.

Before delivering, the connectors are treated with a special cleaning fluid: Kontakt-61 (an aerosol from: Kontakt Chemie).

For regular maintenance it is advised to clean these connectors with the same detergent.

In the lid of the housing a flexible foamplate is placed. If the lid is closed it will maintain a slight pressure on to the connectors, thus preventing the connectors from sliding out due to possibly vibrating foundation of the housing.