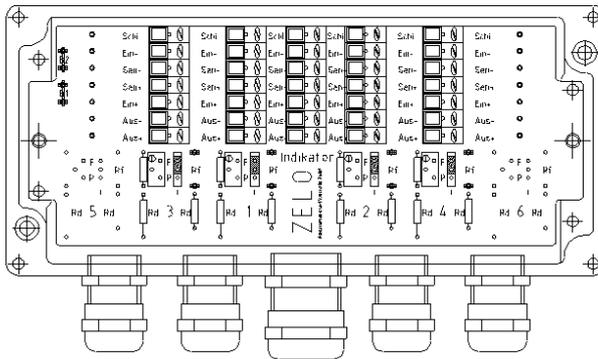


Junction Boxes ZPK4/6

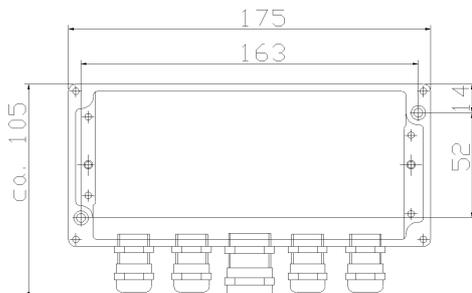


Features

- ? **ZPK4 for max. 4 load cells**
- ? **ZPK6 for max. 6 load cells**
- ? **Wiring connections on screw-clamp terminals**
- ? **Corner correction by using potentiometers, or**
- ? **Corner correction by soldering a resistor into the signal circuit**
- ? **Solid aluminium housing**
- ? **Protection class IP65**
- ? **Nickel plated metal cable glands**
- ? **Dimensions: 175 x 105 x 57mm**

Mounting

The junction box can be fixed with two screws M4 (length 20mm). Dimensions and positions of the holes (163x52mm) are shown in the picture below:



Cable glands which are not required should be replaced with the enclosed covers.

The J-box enclosure satisfies the requirements of IEC 529 (EN60.529) IP65 with load cell cable diameters of 4-8mm and indicator cable diameter 6-12mm.

Electrical Connection

The following designations are used to mark the terminals:

Excitation	Ein+ and Ein-
Sense	Sen+ and Sen-
Signal	Aus+ and Aus-
Screen	Schi

The load cell cables have to be connected to the appropriate terminals. Connect the indicator cable to the terminal designated with "Indikator".

The cable screens should be connected to the individual terminals or, alternatively, should be folded back into the cable gland.

Some load cells have the cable screen connected to the housing (i.e. RTE type RLC). The screen of these load cells should be isolated from the J-box (one reference point only). See for correct connection of a weighing system in the figure below:

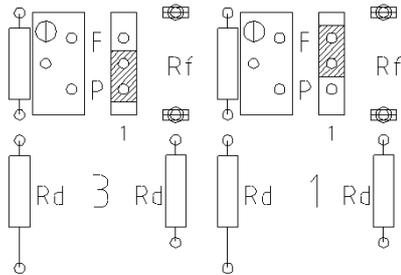
Please note:

If using 6 wire load cells in combination with a 6 wire indicator; bridges B1 and B2 have to be cut.

Junction Boxes ZPK4/6

Corner Correction

Two primary methods of corner correction are given by the position of jumpers:



Left: Jumper pos. „P“ Right: Jumper pos. „F“

Jumperposition	mode of correction
Pos. „P“	corner correction by using the potentiometer
Pos. „F“	no corner correction while the solder flags are not connected
Pos. „F“	corner correction possible by soldering a resistor between the flags at position „Rf“

ATTENTION: The Junction Box uses signal trimming. The interaction between the individual corners and the zero offset is considerable smaller compared to excitation trim. However, depending on various conditions, interactions may still be present.

It is recommended to equalise the resistance of each potentiometer before installation:

Remove all jumpers from the circuit board and turn all potentiometers to a value of about 500 kOhm (by using an ohmmeter). Measure between Pin 1 and the resistor (see drawing).

Corner correction procedure:

1. Put the jumper again on position “P”, connect the load cells and indicator and calibrate the weighing system for a defined weighing range, number of divisions and testload.
2. The corner which shows the lowest value should not be changed. Now change the values of the other corners step by step. These actions may cause a “zero shift” and a change of the shown values. Repeat the corrections until all corners show the same value.
3. When all corners show the same value the weighing system should be recalibrated.

Please contact us in case of further questions:

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