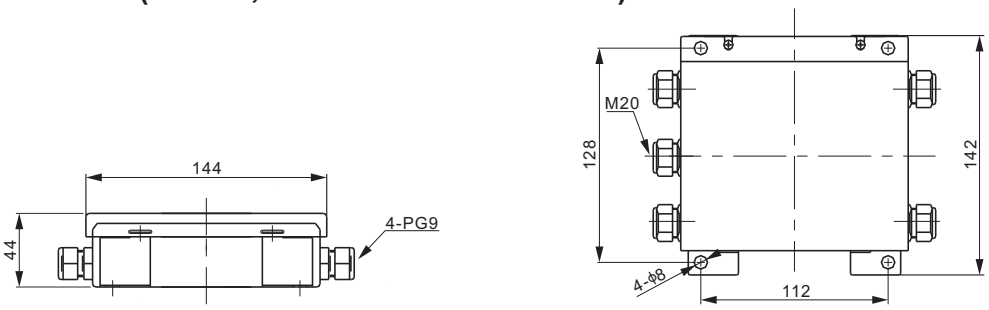
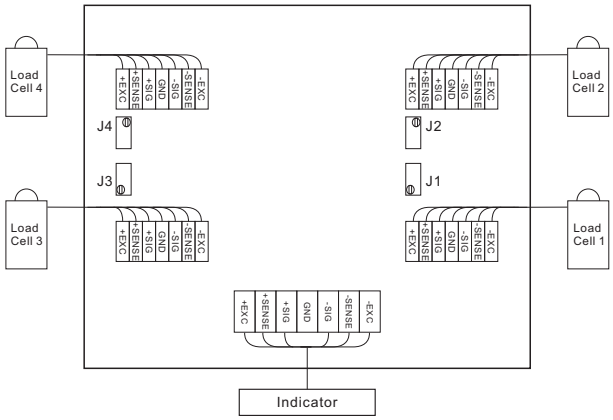
1. Special Features

- Can be connected with 4 load cells
- Each connection has independent adjustable resistance, excitation trim
- Stainless steel casting
- Patented never lost and integrated screw design
- Lightning protection

2. Dimensions (in mm; 1mm=0.03937 inches)



3. Connecting Diagram



4. Technical Data

Type		J04ES-II
Trimming		Excitation trim
Weight, approx	kg	0.7
Max. Permissible Voltage	V	18
Impulse Sparkover Voltage (1kV/ms)	V	700
Impulse Discharge Current (8/20us-1s)	kA	20
Materials		Stainless steel SS304
Outline (L*W*H)	mm	144*142*44
Nominal Temperature Range	°C [°F]	-10...+50 [14...122]
Storage Temperature Range	°C [°F]	-20...+60 [-4...140]
Cable Connection for Cable Diameter		Input: PG9: 4-8mm, Output: M20: 6-12mm
Protection Class According to IEC529		IP65

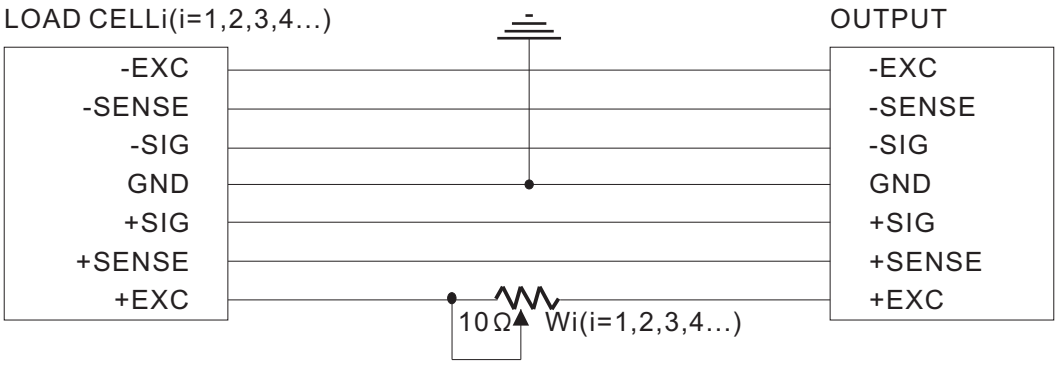
5. Application

4 channel signals generated from the load cells which distributed at the corners of the weighing platform, synthesize into one channel signal and send to the weighing indicator after balance adjustment.

6. Trimming Procedure

Trimming is a process of equalizing the output from multiple individual load cells by adjusting each matched potentiometer.

Tools needed: a) A flat head screwdriver which is good for potentiometer adjustment and a Phillips screwdriver which is good for fasten bolts;
b) A 4.5 digits(at least) multi-meter.



Excitation Trim

6.1 Trimming connection

Refer to above figure, fix one of the multi-meter test pin to +EXC of OUTPUT port, and fix another pin to +EXC of Load Cell port to read the total resistance of Wi(i=1,2,3,4).

6.2 Trimming Steps

1) Each potentiometer was factory setting to 5ohms with counterclockwise up to Max. approximately 9 ohms and clockwise down to approximately 1 ohms.

2) Connect each load cell cable to the matched terminal of J04ES-II through PG9 as "Connecting Diagram" shown above, connect indicator with a cable through M20 with J04ES-II properly as well. Set the indicator to Zero, then place test weights over each load cell(each corner) and on the center point in turn. For a four load cell scale, it's recommended using a weight of 25% of full scale capacity.

3) Record the value displayed on the indicator after test weight is placed in turn on each corner and center. Select the lowest corner value comparing with center value, adjust the potentiometer of the corner by clockwise turn to increase the value of this corner, or select the greatest value comparing with center value, then trim the potentiometer of the corner by counterclockwise turn to decrease the value of this corner.

4) Replace the same test weight over each cell and center in turn. Adjust the potentiometers to trim each load cell up or down to equal the value of each corner to the center. Check all cells again for repeatability, repeat steps 2 and 3 if necessary until all the value is within the required range.

5) Place the box cover on and tighten the cover screws, make sure the gasket is compressed equally in all locations.