

GMA-JB4-Ex

Intrinsic Safety Explosion-proof Junction Box



GMA-JB4-Ex is an intrinsic safety explosion-proof junction box that supports connections for 4 analog or digital load cell in 4-wire. By adjusting the resistance value of the potentiometer, it compensates for angle deviations, effectively resolving inaccurate weight results caused by angle differences in weighing applications. Stainless steel housing with 5 explosion-proof cable glands(BDM-II G1/2)(Ex Marking: Ex db IIC Gb, IP Rating: IP66) . Applicable cable outer diameter: ϕ 5-12mm, delivers enhanced protection and superior anti-interference performance. Certified for intrinsic safety explosion-proof standards, it is ideal for deployment in hazardous environments.

● Ex marking: Ex ia IIC T4 Ga ● IP Rating: IP65



OPERATING INSTRUCTION

Terminal identification

● GMA-JB4-Ex can connect with the analog or digital load cell.

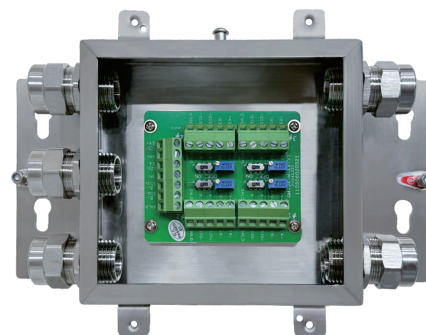
①When applying to the analog load cell:

- EX+: EXCITATION +
- EX-: EXCITATION -
- SIG+: SIGNAL +
- SIG-: SIGNAL -
- SHLD: SHIELD

(When the load cell is six-wire, short-circuit the +excitation and +sense to EX+, short-circuit the -excitation and -sense to EX-.)

②When applying to the digital load cell:

- 12V+: EXCITATION +
- 12V-: EXCITATION -
- SHLD: SHIELD
- A: SIGNAL A
- B: SIGNAL B



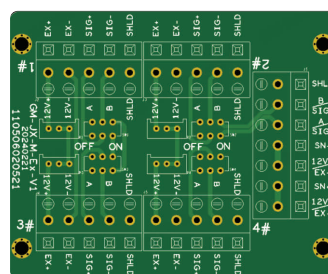
Adjustment Method

①Switches SW1-SW4 can be assigned to control the on-off of each load cell for single-channel load cell adjustment.

②Potentiometer R1-R4 can fine-tune the output signal of each load cell respectively for adjustment of the four corners of the load cell.

Four-Angle Deviation Adjustment Method

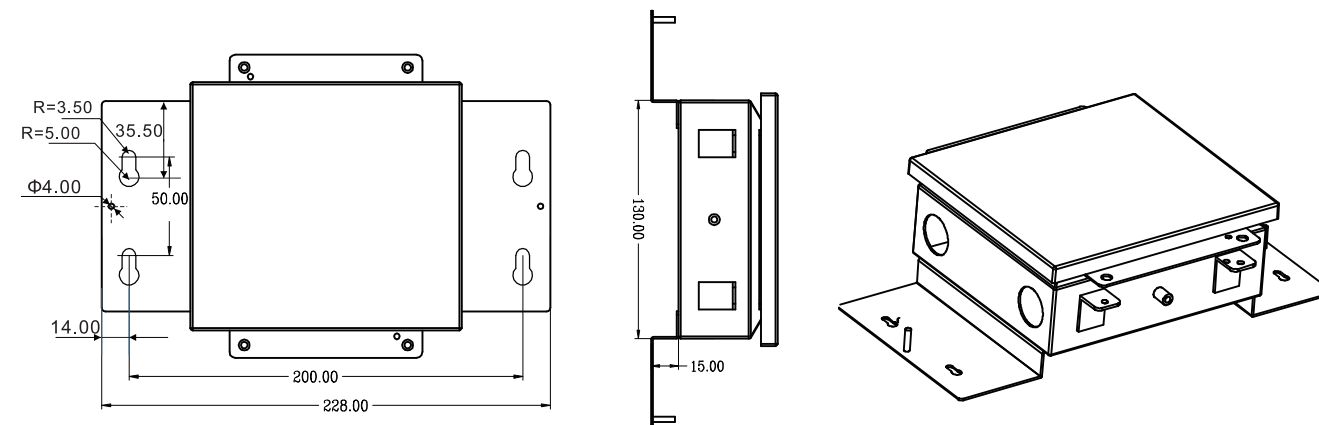
- **Step 1:** Before adjustment, the four-channel potentiometer is gently rotated to the middle position;
- **Step 2:** Fine-tune the channel with large deviation to the average value (close the other three channels when observing one channel);
- **Step 3:** Repeat step 2 until the millivolt signals of four-channel are similar.



Dimensions

Unit:mm

*Cable diameters of waterproof connectors.: ϕ 5-12mm



*Specification and dimension may be upgraded, please consult sales manager for the latest info.

Connection Diagram

Unit:mm

