
Instructions for Material flow detector
ZAXLL-L V1.0



Zax Technology Co., Ltd

1. Overviews

Material flow detector is a device to detect whether there is material in belt conveyor. Connect the cable to the main control room, and the staff can observe the material feeding status through the indicator light. This product can also be used together with automatic sprinkler to realize the function of automatic sprinkling when there is material. Staff can take corresponding measures according to different situations of conveyor operation.

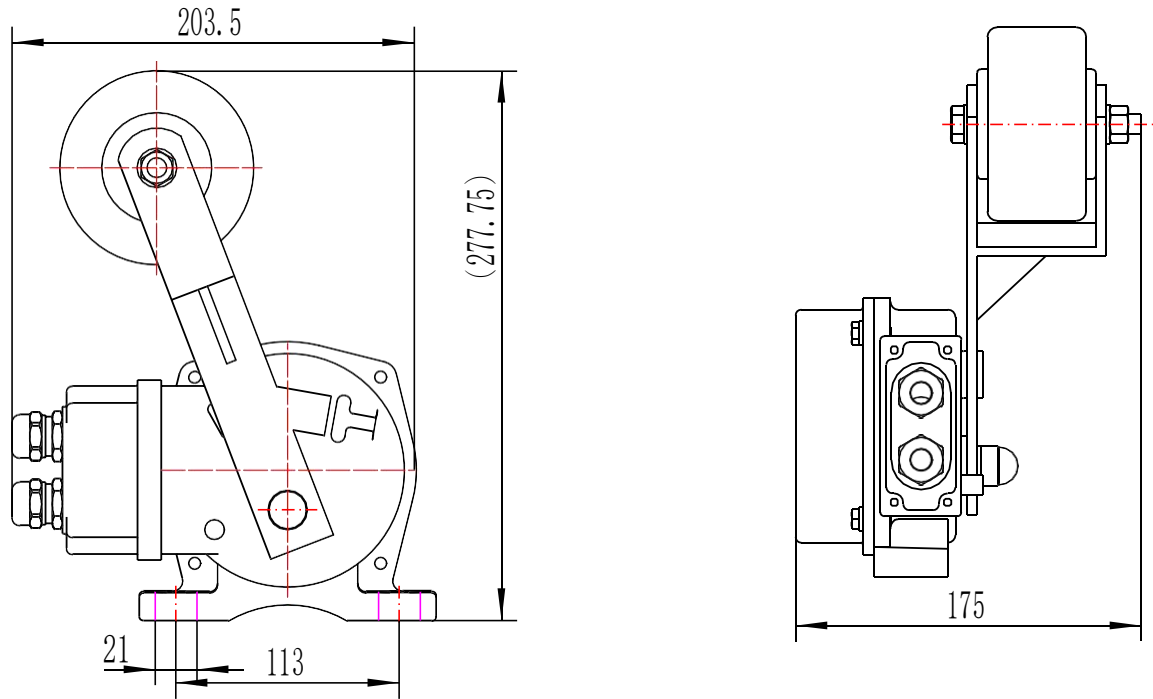
2. Characteristic

- 2.1. Adopt high-strength A-alloy precise die-casting shell, with strong impact resistant capability.
 - 2.2. The shell has high protection level, good sealing, and can be used in harsh environment.
 - 2.3. Large contact capacity, sensitive action and reliable performance.
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3. Parameter table

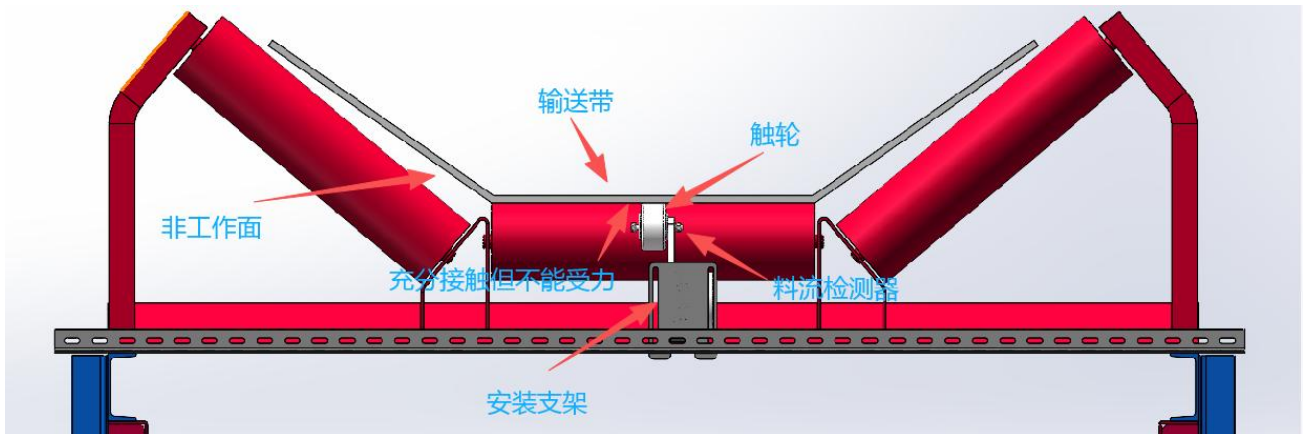
Ambient temperature	-20°C~50°C
Relative humidity	0~95%
Atmospheric pressure	80 kPa ~110kPa
Output mode and quantity	2×SPDT
Contact rating	AC380V 5A DC24V 5A
Initial position	Touch the lower surface of the upper conveyor belt with the trolley wheel)
Action angle	20° ± 2°
Limit angle	75°
Reset mode	Automatic
Protection level	IP65
Applicable cable diameter	6~10mm

4. Structure features and main dimensions



Appearance size chart (Units: mm)

5. Installation indication



Installation indication diagram

6. Installation instructions

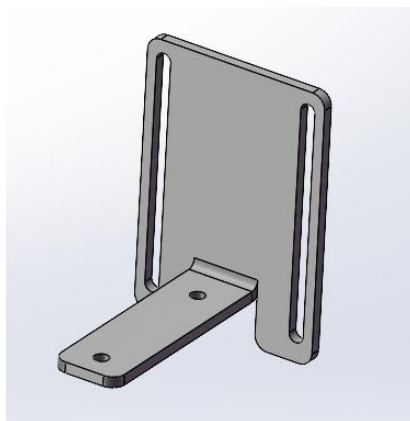
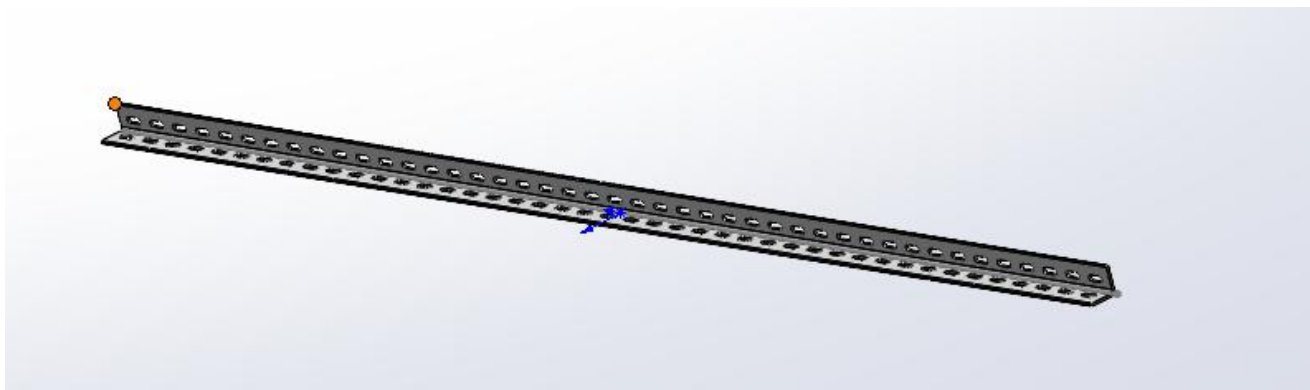
6.1. WARNING :

6.1.1. Do not live operation.

6.1.2. This product is non explosion proof products, please do not use in inflammable and explosive environment.

6.2. Prepare materials :

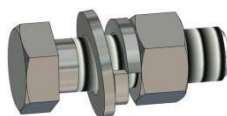
6.2.1. Mounting bracket



6.2.2. Material flow detector

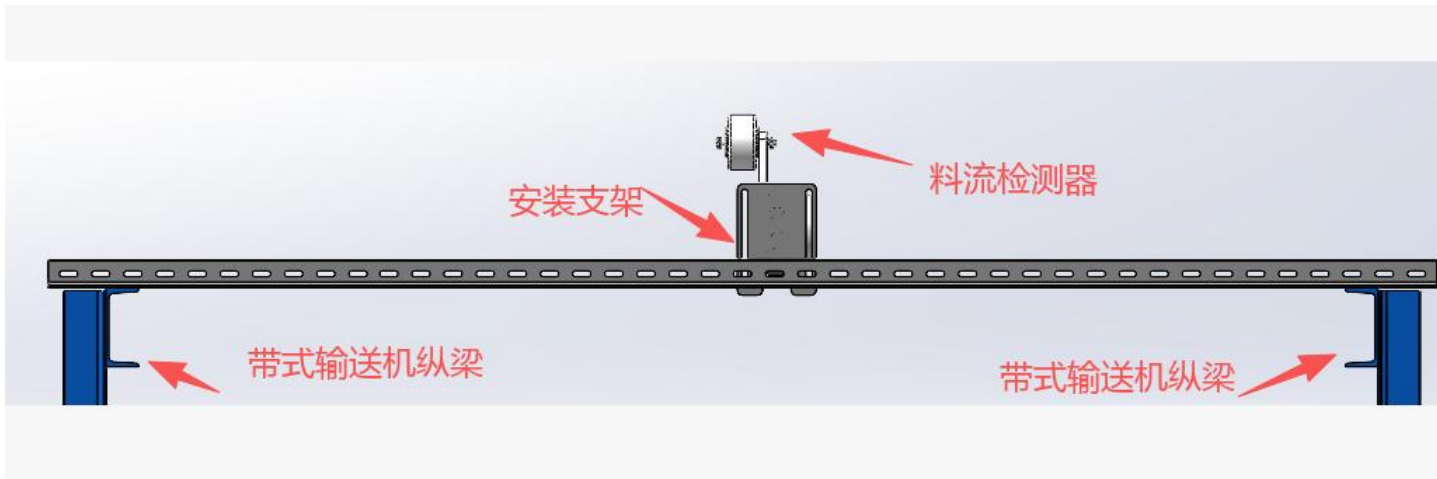


6.2.3. Fastener ×2(M10×35)



6.3. Installation steps :

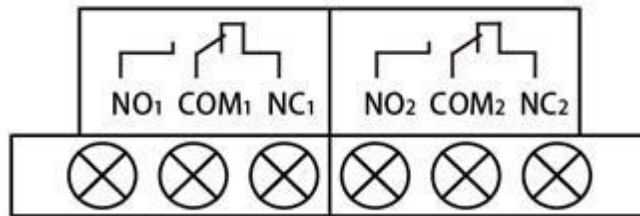
6.3.1. Install the mounting bracket on the longitudinal beam of the conveyor, and fix the material flow detector on the bracket with bolts, and fix it after the position is determined.



6.3.2. The product shall be installed at a location with a large amount of material sinking, preferably in the middle between the two idlers, and the detector shall be installed on the non-working surface (lower surface) of the upper conveyor belt. When there is no material, the trolley wheel should be in full contact with the non-working surface (lower surface) of the conveyor belt, but it cannot be stressed, tighten the bolt after adjusting the position.

6.3.3. Wiring principle

Detector built-in wiring cavity, open the side cover, have a row of 6P wiring terminals, wiring terminals marked with schematic diagram, as shown in the figure, if there is any exception, please refer to the circuit diagram on the switch.



Material flow detector wiring diagram

7. Working principle

This product adopts Load type detect. When there is material on the conveyor belt, the conveyor belt will sink accordingly due to the weight of materials. When the conveyor belt sinks, the detector's trolley wheel will be pressed down, through the internal transmission mechanism of the device to make the position switch action, send out signals to achieve the detection function.

8. Maintain

- 8.1. Check and tighten bolts and nuts in all parts regularly;
- 8.2. Regular check wear condition of the trolley plate (trolley wheel), serious wear please replace in time.

