Application report

Packaging Industry

Proxitron SENSORS MADE IN GERMANY

Application

- Can production
- Can filling

Product

• Surface sensors and sensor strips

Occupation - monitoring of can lines

Every company which acts in the packaging branch needs reliable monitoring of material on conveyor belts. The demands for sensors to guarantee an efficient and undisturbed production are high: material or gaps shall be recognised, the size of the articles are to be checked, jams on the conveyor track need to be announced.

This requirements also had a beverage company: The allocation of the can line should be controlled as well as it was required to receive signals of a possible jam.

The demand was solved with an inductive sensor strip IKU 022.28 G S4 with two integrated response zones. Both response zones (of different sizes) dispose of separate exits which can be evaluated via a SPS. Thus it is possible not only to control the allocation of the can line, but also to get signals regarding jams and velocity.

Besides the inductive sensor strips with two response zones, Proxitron also offers sensor strips with only one response zone, up to a lengths of 500 mm. The bigger housing enables monitoring - with only one sensor - even of wider tins (e.g. grocery tins or tins of paint).



At an entire occupancy of the sensor-surface with tins a signal is released. If this is absent, the can line has a gap and the conveyor speed must be raised. Furthermore sensor strips are also available with the Teach-In function (without surcharge). This variant of the sensor recognises the available installation condition after the key is pressed and adjusts the operating distance optimally.

At a glance:

- Monitoring of roller paths and conveyor tracks
- Recognisation of jams, allocation and supply
- Speed monitoring
- Self-balancing with Proxi Teach-In by one kevstroke
- Connection by plug or cable variations





Technical data (IKU 022.28 G S4)

2x PNP normally open Output: Operating frequency (f): 50 Hz Supply voltage (UB): 10 - 30 V DC 0 - 400 mA

Load current max.: Ambient temperature: -25 to 70 °C Protection class: IP 67

Connection: Connector S4 $(M12 \times 1)$

Accessories

Suitable cables in different lengths and versions.