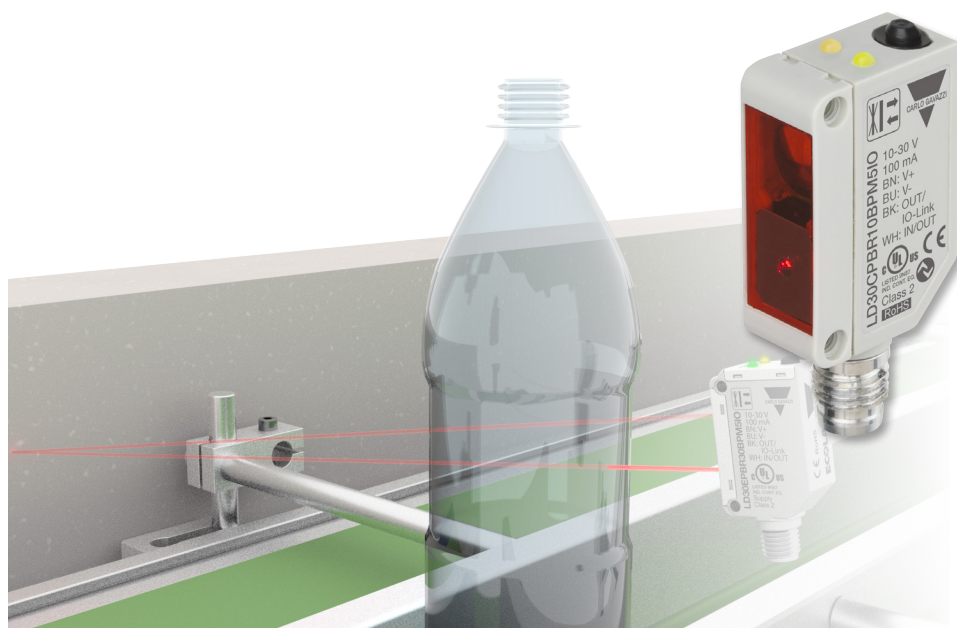


Application note



Subject:
Transparent or translucent bottle detection

Industry:
Bottling conveyors in materials handling
Product:
LD30xPBR..IO

Customer:
OEMs, System integrators

CUSTOMER ISSUE

In production filling lines it is necessary to detect transparent PET bottles to monitor the constant flow of bottles.

If the feeding line is interrupted, it must be detected immediately. The bottles can be transparent, translucent or colored.

OUR SOLUTION

The LD30CPBR...IO or the LD30EPBR...IO can be set to background suppression or, in this case, to dual detection mode via an IO-Link master or our SCTL55 Smart Configurator.

The visible, round, 1 mm red laser spot is aligned to the background surface and the reflected distance and light intensity of the background are saved in the sensor as reference.

A change in the reflected light position or intensity caused by bottle presence will be detected by the sensor.

By means of IO-Link the sensor can be configured to a variety of functions.

BENEFITS

- The dual detection mode, with the small visible red laser spot, allows reliable detection of transparent bottles even without the use of a reflector. Change of transparency does not require new settings of the sensor
- In IO-Link mode, valuable downtime can be avoided thanks to the predictive maintenance functions such as Quality of Run, Quality of Teach, Temperature and dust alarms, Excess Gain, and Auto Adjustment
- In addition, the IO-Link allows easy customization of distances, timers, logic functions as well as different output configurations