

## New Product > TWIN PROXIMITY SENSOR

Proximity Technology has been used for decades to detect low vacuum in food cans. However, recent widespread use of bi-metal Easy Open (EZO) ends (steel ends with aluminum pull-tab) has presented a challenge for the traditional technology. The TapTone Twin Proximity Sensor is designed to detect and reject low vacuum and no vacuum steel cans with EZ-Open can ends (pull-tabs) at production speeds up to 525 feet per minute.

The new twin proximity sensor combines the inspections of Proximity-1 and Proximity-2 with an enhanced algorithm offering improved resolution across the lid profile. TapTone offers the twin proximity sensor on both the PRO Series and T550 Systems. (Not supported on HMI)

## Twin Prox

Detects low vacuum and no vacuum steel cans with EZ-open can ends (pull-tabs) at production line speeds up to 525 feet per minute.

## Features

- Line speeds up to 2,000 cpm, detection accuracy to 0.005 in (0.127mm)
- Adjustable Signal profile capture window for improved signal processing
- Four algorithms to calculate Profile, Height, Cocked and Contour.
- Programmable gain and offset parameters for improved inspection range
- Auto-tracking reject limits within the controller accommodate temperature and pressure fluctuations during production

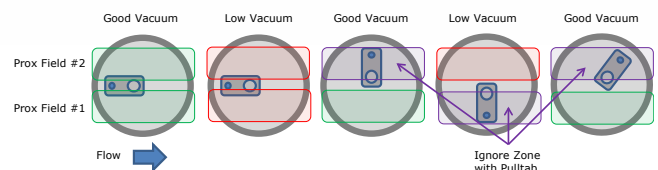
## Applications

- All cans with Easy Open (EZO) can ends
- Bi-metal Easy Open (EZO) ends (steel ends with aluminum pull-tab)

## How It Works

### Theory of Operation

- A passing container on a production line starts the process by triggering a photo beam
- The sensors emit discrete continuous magnetic fields which measure the proximity (distance) of the metal can end to the sensors
- Proprietary software in the controller generates a profile of the container lid as analyzed by each of the sensors
- Using proprietary algorithms, the controller then "decides" which proximity profile to use ignoring the profile with the interfering pull-tab
- In the event the pull-tab is centered under both sensors, analysis of both profiles is used
- By comparing the profile of both sensors, accurate vacuum inspection of the EZO end is maintained



# SYSTEM SPECIFICATIONS

## Inspection Specifications

## TapTone Twin Proximity Sensor

Operating Speed	2,000 containers/min maximum
Detection Accuracy	0.005 in (0.127mm)
Conveyor Rail Settings	2mm to 5mm maximum for best inspection results
Can Spacing	None required for inspection
Vacuum Resolution	One to two inches of vacuum. Accuracy may vary depending on lid stock thickness and vacuum range. Mechanical line conditions may affect the resolution performance.



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