Model PD150

Single-Die Press Protection

Missing Ring Detector

- Replaces the Peco FM series Missing Blank Detector
- **Detects** metal can rings up to 6 inch diameter
- **Sensing** window of 6 square inches wide
- **Responds** to ring detection in 3-milliseconds
- Senses ring open center as though it is metal
- **Push-button calibration** memorizes signal with ring and sets detection threshold for output relay





- It detects a ring as one whole piece of metal, even with a large open center. Unlike traditional detectors it will not detect each ring edge or rim as two separate parts. This makes the PLC logic for a missing part detector simple, by eliminating the need to count two rims as one ring or adding time delays.
- It detects a ring within a wide field of view. The opening between probes measures 6 inches or 150-mm wide. It is ideal for detecting a ring ejected through space without the need for guides in a press discharge chute.

The Model PD150 was developed to replace an old analog double sheet detector that was used as a missing part detector on a single die paint can ring press. It spand the opening by adjusting the sensitivity to maximum.

The PD150 is easy to calibrate compared to the old detector. Simply position the ring between the transmitter and receiver probe assembly and push the calibration button on the front of the control once. The detector memorizes the ring signal and sets the detection level threshold. The output relay energizes when the signal falls below the threshold value as the ring passes through the sensor assembly.

Should trouble arise, this smart detector immediately analyzes the problem and provides a flashing light sequence that prompts the operator to action. The PD150 operates on 120 Volts AC or 240 Volts AC @ 50-60 Hz power. The PD150 is an excellent detector for steel, aluminum, tinplate and many other metals.



Specifications

Power input: Jumper select 120 Volts AC Nominal or

0 Volts AC nominal, 50 to 60 Hz

300 m A. operating load

Output: 2 highspeed outputs

Sinking NpN transistor output (5 to 30 V dc

@ 50 mA max sustained, 40 amps momentary, self

reseting fuse)

Sourcing PnP transistor ouput (max. load

source 24 Volts, 100mA max, self reseting fuse)

Max load 10 Amps @ 240 V ac

> 8 Amps @ 24 V dc 1/2 HP @ 240 V ac

Output fail safe: Outputs are active ON for ring Fault Alarm: Indicators flash, outputs are Off

Response time: < 3 m Sec.

Fixed at 22000 Hz Probe frequency:

Probe types: P15T18P (two) PVC housing 18-mm

threaded barrel with 4 pin mini-connec

tor stainless threaded connector

Metal sensitivity: Steel, Tinplate, Aluminum Probe separation: 6 inches, 150 mm maximum Calibration: Push-button teach on a single ring Indicators: Operation: Green on detects ring,

Amber nothing detected

Faults: Green flashing indicates bad trans

mitter

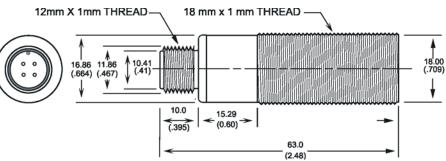
Amber flashing indicates bad receiver.

Green/ Amber alternately = no calibrate

Operating principle: Eddy currents generated by the transmitter, create an electrical field around the ring that impedes signal to the receiver.



(Two required, one transmitter, one receiver)



(0.600) 33.5 165.1 (6.50) 149.2 (5.875) (0.31)0 CONTROLS, INC. 0 Model PD150 Metal Part Detector CALIBRATE 00000 0000000 Model CB101-3 or CBI101-6 cable AC Input 120 AC Volts 240 AC Volts Part Detection Output either sink or source DC switches P15T18PH Probe PVC Housing, 18 mm thread barrel with 4 pin micro-connector

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