

# SD222

Double & Missing End Detector For Fast Moving Can Ends

#### A COMPLETE SYSTEM REQUIRES:

Control: SD222 (Qty 1) Probe: P15CBE (Qty 4) Cable: CBL101 (Qty 4)

#### FEATURES:

- Two detectors in one package
- Inspects 2000 ends/minute
- Steel & Aluminum sensitivity
- For single sheet thicknesses ranging from .05mm-6mm (.002"-.100")
- One touch push-button teach calibrate
- System defects easily pinpointed

#### ABOUT THE SD222:

Prime Controls' versatile SD222 controller is fast enough to sense double ends in a conversion press or in the high velocity of a rotating curler. This dual channel, multifunctional detector is also used to monitor sheets entering a strip feed press and at the same time watch for single ends exiting after each stroke. Any end or sheet between the probes for .003 seconds or longer is inspected. Beverage aluminum 202 ends traveling at 25 ft/ second (150 ends/second) are inspected. Food 303 ends are detected even easier. The SD222 holds the output for a minimum of 25 milliseconds to allow a PLC time to recognize the double or to allow a latching relay to respond.



#### TWO DETECTORS IN ONE PACKAGE

The SD222 is two detectors in one package. Use the detector on two different lines or monitor two positions on the same line. It is easy to calibrate. Just press a push-button on the front of the detector, with a single end between the probes. It's that easy. Two alphanumeric displays provide information on signal strength, calibration and detected faults. Pinpointing a system defect is easy with the SD222. Each channel has DIP switch changeable current sink or current source outputs for *Double, Single* and *Fault* warnings that can interface directly with most PLC-DC inputs.

### **RELATED MODELS:**

SD220 - Double Shell & Missing Tab Detecor SD223 - Dual Channel Missing Tab Detector SD122 - Single Channel Double Shell Detector SD123 - Single Channel Missing Tab Detector

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## PRODUCT SPECIFICATIONS

#### POWER INPUT: 24Vdc

OUTPUTS: Transistor outputs, Configure to sourcing or sinking current

MAX LOAD: 100 milliamps at 24Vdc

OUTPUT RESPONSE: < 2mSec.

PROBE FREQUENCY: Optimize for steel or aluminum

PROBE TYPES: All P15 series probes

METAL SENSITIVITY: .05mm-6mm (.002"-.100") Ferrous (steel) and Nonferrous *up to 12mm* aluminum, copper, magnesium

PROBE SEPERATION: Depends on metal, thickness and probe model .1mm-75mm (.004"-3") steel up to 1mm (.040") thick.

CALIBRATION: Push-button switch. Calibrate on single for each channel

**INDICATORS:** *Operation*: Red LED for single and double. *Faults*: Shown on display

THEORY OF OPERATION: Eddy Currents generated in the metal by transmitter impedes the signal to the receiver as the metal thickness increases. The SD222 automatically uses the best method for specific metal types based on calibration sampling.

#### P15CBE PROBE:

Prime Controls developed the P15CBE Double Shell Probe as a direct replacement to the Type "CB" Probe which has an attached cable. The P15CBE Probe features an IP67 NEMA 6P Connector to provide superior resistance to moisture and solvents when mated with Prime's CBL101 molded cable and connector. All were designed to provide a high degree of reliability to last through many years of service. For more details ask for the spec sheet on the P15CBE probe. This information is also available at www.primecontrols.com.







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