PULSER II

Single Probe Double Sheet Detector

A COMPLETE SYSTEM REQUIRES:

Control: Model DS210 (Qty 1)
Probes: Model PE36M, PE42M, PE54M, or PE75M (Qty1)
Cables: For Probe Model CBL109-2, For Power Model CBL109-2 or CBL108-2
Bracket: Model BRxxAL

FEATURING:

- Probe Memory: Smart, Electromagnetic Probes with Built-in Memory.
- Remote Calibration
- Compact Design: Small, NEMA 4X Control Packaging for Convenient Mounting and Washdown Safe.
- Diagnostics and Reporting Capability via RS232 Connection.
- Unique sensor doesn't hold on to metal sheets
- Automatically measures thickness, calculates double value and sets threshold.
- Well suited for pick & place and end-of-arm robotic transfer applications.

ABOUT PULSER DS210:

The Pulser DS210 is a Double Metal Sheet Detector, when combined with a specific single probe sensor will detect the presence of two sheets of metal stuck together for steel and tinplate (ferrous metals) with single sheet thicknesses ranging from .25mm-6.35mm (.01"-.25"). It also has the ability to detect no metal, a

single sheet, and less than a single sheet or an under. It is ideal for sheet transfer applications using robotic arms or pick & place machines.

The secret behind Pulser II is its electromagnetic smart probe. It's smart because it remembers calibration values. Once the probe is calibrated, it can be disconnected and reconnected at a later time, all while remembering the last calibration. Each probe can remember up to eight calibration values. This can be a helpful, time saver when switching between applications.

The Pulser II's advanced technology uses a short pulsed signal to take the measurement, releasing the sheet immediately for easy sheet transfer.

With four probes to select from, each handle a different range of metal thicknesses. The probes are housed in watertight and rugged 303 stainless steel housings. Prime's select cables and connectors provide excellent signal integrity and noise immunity in industrial environments.

T 937.435.8659
F 937.435.2091
vip@primecontrols.com
www.primecontrols.com

PRIME CONTROLS
Metal Sensing Solutions

PRODUCT SPECIFICATIONS

POWER INPUT: 20-28 VDC (2A Peak)

OUTPUTS:
Output Response Time
PE36 < 140 msec.
PE42 < 150 msec.
PE54 < 200 msec.
PE75 < 275 msec.

Selectable Input/Output PNP/NPN

Outputs Source/Sink 50 mA max
Metal, Double, Under

FAILSAFE DOUBLE OUTPUT:
Goes OPEN for DOUBLE, Initialization, or FAULT

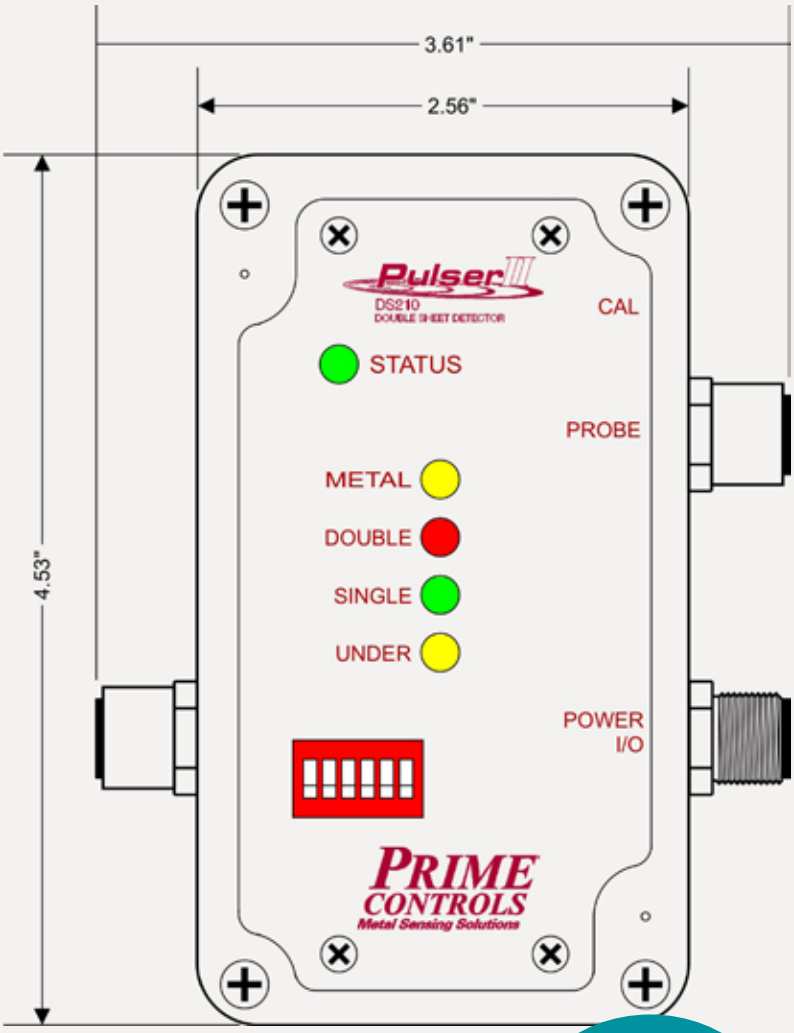
INPUTS:
Calibrate, Reset METAL SENSITIVITY: Ferrous metal (steel, tinplate)

THICKNESS RANGE:
PE36M: 0.25-3.05mm (0.01-0.12")
PE42M: 0.25-4.31mm (0.01-0.17")
PE54M: 0.25-5.82mm (0.01-0.23")
PE75M: 0.25-6.35mm (0.01-0.25")

CALIBRATION:
1 or 2 point calibration using pushbutton or external input

INDICATORS:
Status: Green: RUN, Flashes when reading
Yellow: Initialize / Calibrate
Red: FAULT

Metal Present: Yellow
Double: Red
Single: Green
Under: Yellow



ACTUAL SIZE

THEORY OF OPERATION:
The PE probe is placed in contact with a sample, and an electromagnet used to sense the amount of flux that a sample can accept. At the conclusion of cycle, the probe/sample is degaussed for easy liftoff. If the sample measured is thicker or thinner than the calibrated sample, the appropriate output is changed.

Prime Controls, Inc.
4528 Gateway Circle
Dayton, Ohio 45440-1712

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