DOUBLE SHEET DETECTION

DS1522

Dual Probe Double Sheet Detector

A COMPLETE SYSTEM REQUIRES:

Control: DS1522 (Qty 1)
Probe: P15, P70 or P1000 series (Qty 2)
Cable: CBL101 series (Qty 2)
Bracket: Dependent on selected probe

FEATURES:

- Ultimate dual probe detector
- Detects ferrous metals (Steel & Tinplate) and non-ferrous metals (Stainless Steel & Aluminum), Brass, etc.
- Provides flexibility for broad range of thickness applications and metals
- Thickness ranging: .05mm-6.35mm (.002”-.250”)
- 64 memory calibration
- Automatically adjust signal based on material type
- Two-digit display
- Over/Under output

ABOUT DS1522

Prime Controls’ DS1522 is the ultimate dual probe detection unit for all types of metal. This detector programs with the same ease as the DS150, yet provides many more features and functions. It offers multi-gauge detection with capability to store and recall 64 different stored calibrations. The DS1522 can alert the user to the detection of a double sheet (over thickness) condition and also the detection of less than a single sheet (under thickness).

Upper and lower tolerance limits are completely adjustable; perfect for ensuring that the correct material has been loaded into the process. Other features include remote calibration, automatic calibration trigger and calibration delay, nominal tracking and adjustable relay delays. All of the specific settings can be individually set for any of the 64 memory calibrations allowing the user to completely custom tailor each specific calibration setting.

Calibration is simple and reliable. Select one of 64 memory positions, place a metal sheet or blank between the probes and push the calibrate button to teach. That’s it. The DS1522 calculates the double thickness and sets the Over and Under output thresholds. An optional two thickness calibration procedure allows precise detection and enables rejection of thickness changes as small as a few percent.

There is no need to worry if power is lost. Nonvolatile memory retains all 64 gauge presets and parameters. This is Prime Controls’ best value detector.

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PRIME CONTROLS
Metal Sensing Solutions

PRODUCT SPECIFICATIONS

POWER INPUT: 100 to 240 VAC, 50/60 Hz, 300 mA operating load

OUTPUTS: 2 SPDT contact relay (over, under)

MAX LOAD: 10 Amps @ 240 V ac, 8 Amps @ 24 V dc, 1/2 HP @ 240 V ac

OUTPUT FAIL SAFE: Defaults to reject with power off or fault

OUTPUT RESPONSE: < .030 or settable in unit

MEMORY STORAGE: Stores up to 64 separate gauge applications

MEMORY RECALL: Recall through front panel, display/ select push button or binary code through external terminal strip

FAULT DETECTION: Error codes are shown on two-digit display

PROBE TYPES: P15, P70 and P1000 series

CABLE TYPES: CBL101 series
Various cables lengths available

METAL SENSITIVITY: .05mm-6.35mm (.002”-.250”)

PROBE SEPARATION: 12mm to 75mm (.5”-3”) or more. Max varies with metal, thickness and probe separation. Max range is realized with the P1000B transmitter and receiver probe.

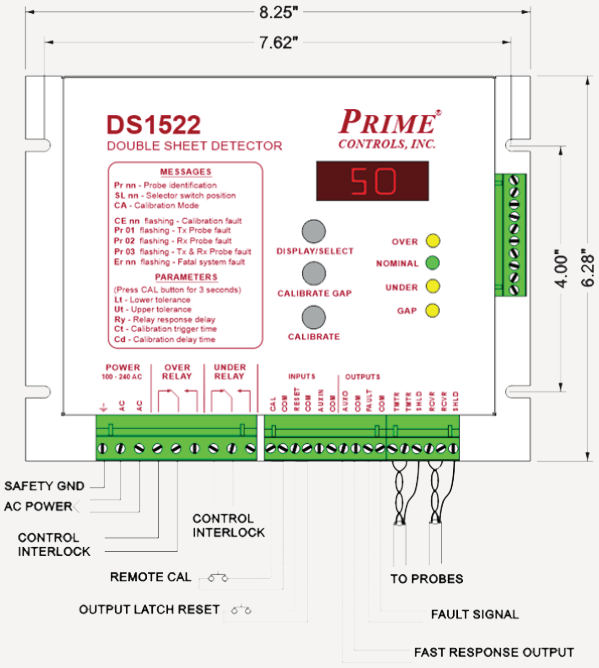
CALIBRATION: Auto calibration after absence of metal for a time between 6 seconds to 24 minutes. Push-button switch used to change time interval or manually initiate calibration. Two sample calibration - manually place two samples between probes, push calibration button.

REJECT THRESHOLD: Adjustable defaults at 25% over single thickness with auto calibration. 50% between two sample calibration

INDICATORS: Green for nominal, amber for over, under and nothing detected

THEORY OF OPERATION: Inductive or Eddy Current in metal impedes signal from transmitter to receiver. Impedance changes as metal thickness changes.

DISPLAY INDICATION: Two-digit LED, alphanumeric, .5” high. Displays setup, calibration mode, operating probe signal strength and fault codes.



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