

**SAME GREAT CONTROL,
ADDED FEATURES AND FLEXIBILITY**

SD230 FLEX & SD230 MINI

Dual-Function, Configurable
Double Shell & Missing Tab Detector

A COMPLETE SYSTEM REQUIRES:

Control: SD230 FLEX or SD230 MINI (Qty 1)
Probe: P15 Series (Qty 4)
Cable: CBL101 Series (Qty 4)
HMI: MI230 *optional*
Networking: ET230 Gateway EthernetIP
optional

FEATURES:

- Two detectors in one package
- Steel, Tinplate & Aluminum sensitivity
- Dual-function, fully configurable unit, reduces customer inventory needs
- Vertical, DIN-rail mounting for dramatically reduced footprint (SD230 MINI)
- NEW multi-color LEDs for more intuitive status notification
- Functionally the same as previous generation detectors

ABOUT THE SD230 FLEX & SD230 MINI

Prime Controls has enhanced its versatile Double Shell & Missing Tab Detector series, with the introduction of the SD230 MINI, a smaller, vertically DIN-rail mounted unit that reduces space claim in the press' control cabinet. It has also improved its industry leading SD230 control with the next generation SD230 FLEX. The dual-function, fully configurable SD230 FLEX replaces multiple variations of the SD200 Series units, simplifying customer inventory requirements, along with new multi-color LEDs for more intuitive status notifications. *Both detectors function the same as previous generation Double Shell & Missing Tab Detectors.*



FLEX



MINI

Users can quickly and easily change the configuration of the Double Shell & Missing Tab detector to any dual-channel detector function they wish via DIP switch settings. Each channel has two status LEDs (SINGLE/DOUBLE and TAB/No-TAB), indicating the status of what is being detected. Dual three-digit LED displays report relative thickness, probe signal strength, and diagnostic fault conditions. The detectors are housed in a rugged metal chassis. When configured for double shell/missing tab, the infeed (shell) outputs energize for single end, double end and fault conditions. The discharge tab outputs energize for tab presence, no tab presence and fault conditions. Fault outputs indicate failure of internal components or an external probe failure.

Calibrating the detector is simply done by pushing either of the Calibrate push-buttons on the front of the detector. Calibration for the SD230 FLEX and SD230 MINI is made even easier with the option of being able to perform the process remotely through EthernetIP communication gateway, with HMI connectivity through the MI230, or by the remote calibration inputs. The HMI connectivity feature of the SD230 FLEX and SD230 MINI provides operators with visibility into the unit along with diagnostic information to help improve efficiencies and production. Users have the ability to remotely set up and operate the unit; reducing the potential for Arc Flashes by limiting the number of times operators have to open the cabinets.

Once calibration is completed, the detector is ready to protect expensive conversion tooling. There are no additional adjustments or fine tuning.

PRODUCT SPECIFICATIONS

POWER INPUT: 24Vdc

OUTPUTS: Transistor outputs, configure to sourcing or sinking current

MAX LOAD: 100 milliamps at 24Vdc

OUTPUT FAIL SAFE: Sinking output opens. Sourcing output current at zero

OUTPUT RESPONSE: < 5mSec.

PROBE FREQUENCY: Optimized for steel or aluminum

PROBE TYPES: P15 series

CABLE TYPES: CBL101 series - various cable lengths available

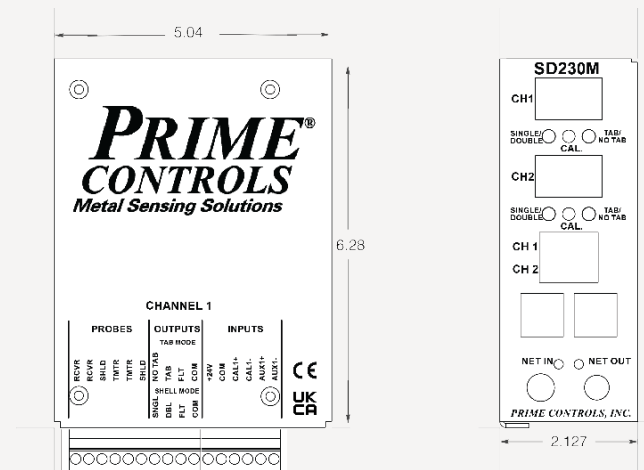
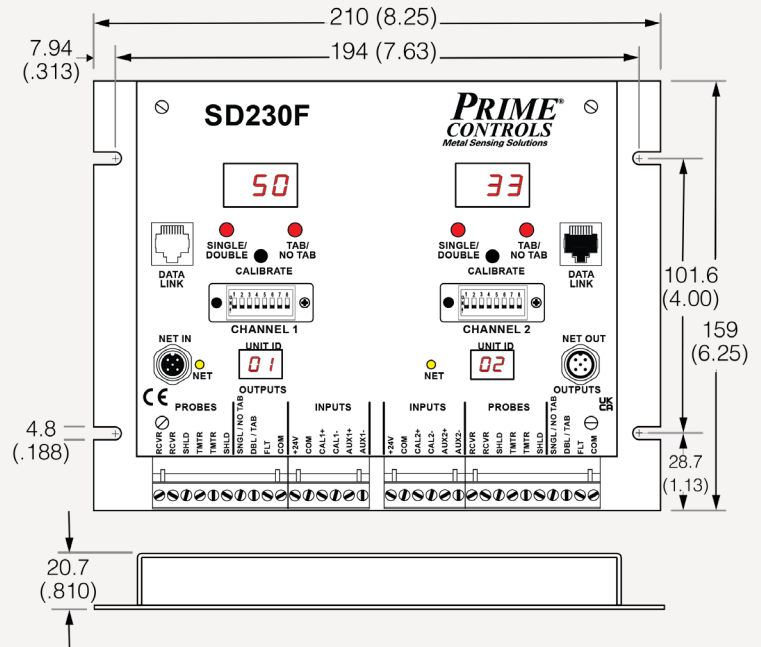
METAL SENSITIVITY: .05mm-1.016mm (.002"-.04")

PROBE SEPERATION: Depends on metal, thickness and probe model

CALIBRATION: Push-button switch on single good sample for each channel. Remote calibration can be performed through Ethernet/IP communication, HMI touchscreen display or remote calibration inputs.

INDICATORS: Each channel has two status LEDs (SINGLE/DOUBLE and TAB/NO-TAB), indicating the status of what is being detected. Dual three-digit LED displays report relative thickness, probe signal strength and diagnostic fault conditions.

THEORY OF OPERATION: Inductive or Eddy Current energy restricts the signal from transmitter to receiver as the metal thickness increases.



IMPORTANT NOTE:

The following previous generation double shell & missing tab detectors are obsolete: SD200, SD122, SD123, SD133, SD220, SD222, SD223, SD230, SD232, SD233. The SD230 FLEX and SD230 MINI replaces these previous generation units.