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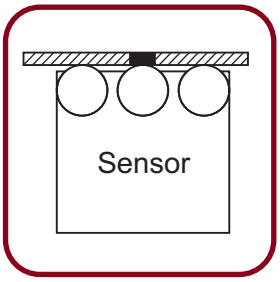
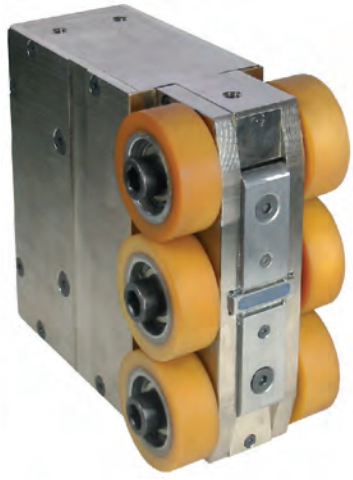
Weld Seam Detection System SND8 - NS9SC



One sided weld seam detection on ferromagnetic and austenitic materials in coils

- For tool protection in front of cutting lines, presses, tube mills, and other metal forming machinery with automatic feed of material
- Filtering and analysis of sensor signal
- Fail - safe operation
- Visual display of signal level
- One constant magnetic field for all sheet thicknesses up to approx. 3 mm (0.12 in)
- Improved dynamic performance at variable surface speeds



WELD SEAM DETECTION SYSTEM SND8 - NS9SC

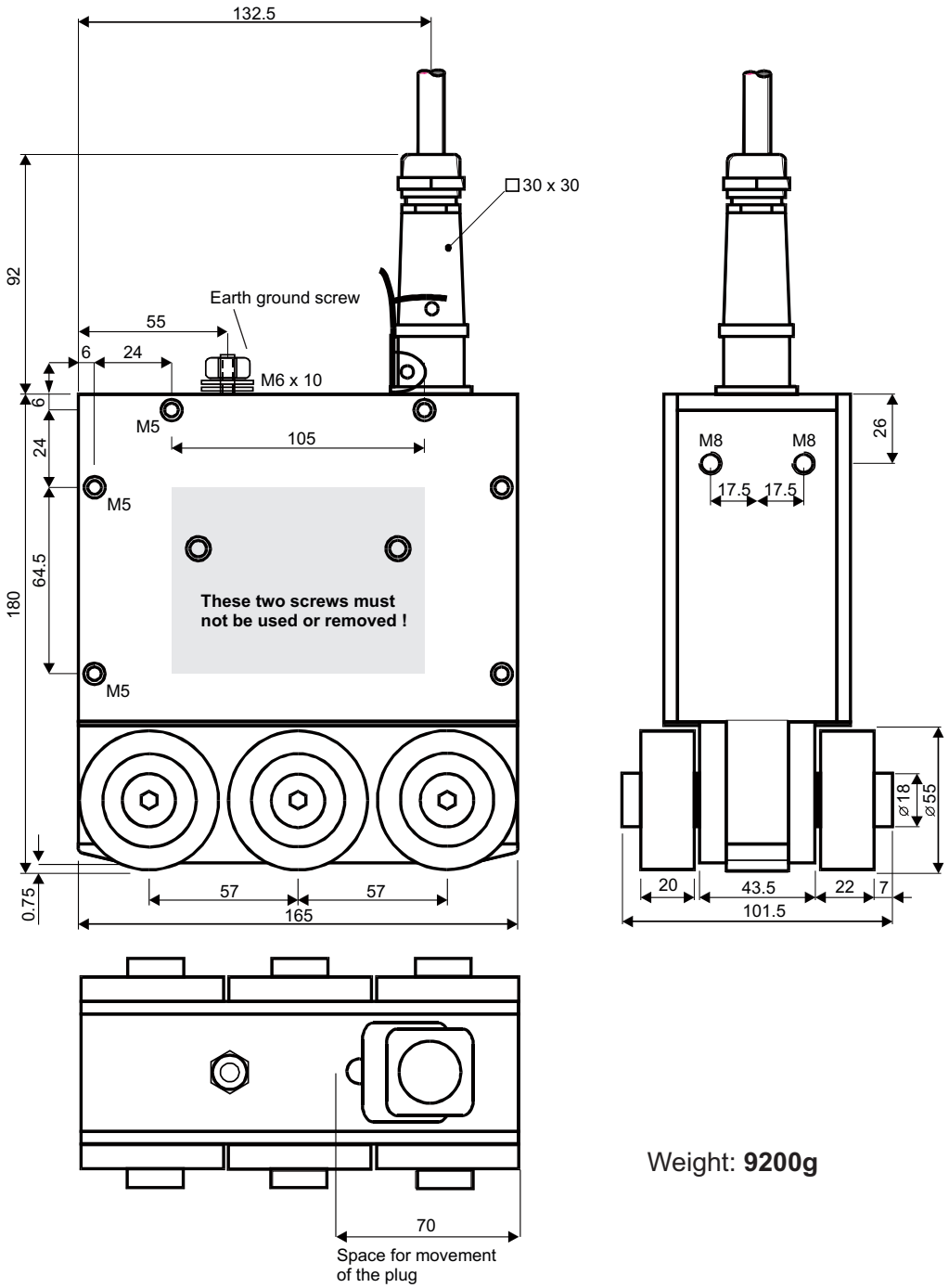
Application

The automatic processing of coils and strips requires the dependable detection of weld seams. This applies to body shops in the automotive industry or the production of welded tubes and similar products.
Weld seams that are not detected in the production process may lead to the destruction of dies and machine break down, faulty production and costly repairs. The Weld Seam Detector SND 8 has been specifically developed for such applications.
The sensor NS9SC was specifically designed for butt welds in coils up to a sheet thickness of approx. 3 mm.

Measuring Principle

The sensor reacts to the magnetic properties of the materials. Weld seams lead to characteristic changes in the magnetic field. These changes are detected by the sensor and processed by the control unit resulting in a switch signal for the machine controls.
Sophisticated methods of signal filtering and analysis are applied to discriminate between noise and the weld seam signal.

Sensor



Weight: **9200g**

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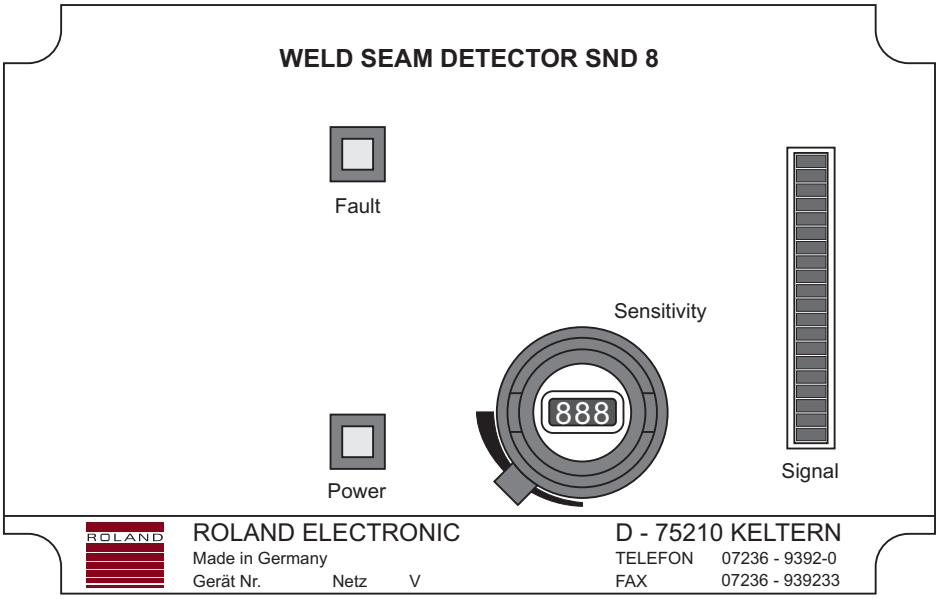
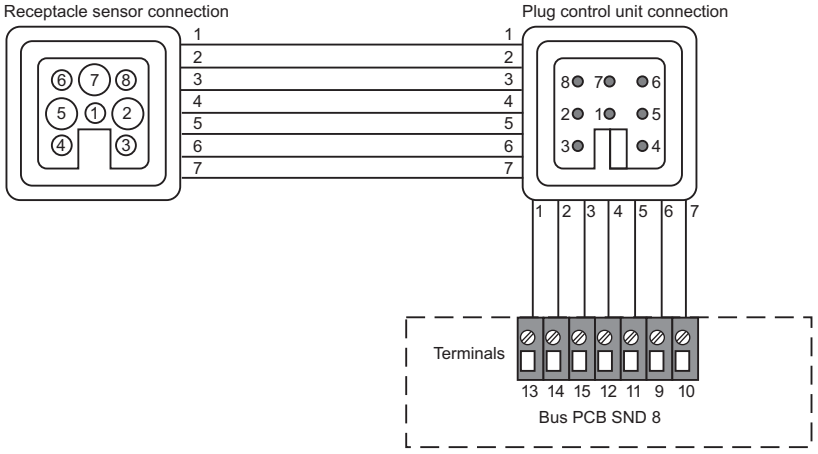


Technical data

Operating voltage	± 10% 230 / 115 VAC, 50-60 Hz
Fuse	1.5 A slow blow
Power consumption	approx. 50 VA
Sensor control	1 LED
Ambient temperature	5 - 45° C
Relay outputs for weld seam and fault	dry two way contacts
Relay switching voltage	250 V
Relay switching current	max. 8 AAC
Relay switching power	max. 400 W / 2 kVA
Contact life (mechanical)	5 x 10^7 operations
Relay on delay	110 ms, ± 20%
Relative motion sensor/object	The velocity can range between 0.1 to 1000 m/min.
Opto coupled inputs for sensor switch and reset	5 - 30 V DC = Sensor ON 0 - 2 V DC = Sensor OFF maximum current < 10 mA
Weight of control unit (without sensor)	4.2 kg

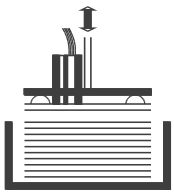
Cable SKNS8S



Order data:

SND8S	Weld Seam Detector
NS9SC	Sensor for coils
SKNS8S-5	Cable between detector and sensor (standard length 5m)
PgdS	Plexiglass cover with lock

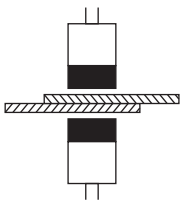
PRODUCT PROGRAM DOUBLE SHEET CONTROL SYSTEM



System with one Sensor

Simple and complex double sheet monitoring systems can be assembled from a broad product programs:

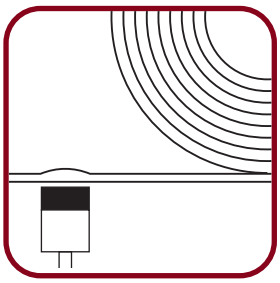
- For ferrous and non - ferrous materials
- Touch and no - touch systems
- With or without force of attraction
- Adjustment via Teach-In or potentiometer
- Standalone systems or remote control via PLC
- One channel or up to 255 pre-programmable channels
- For original equipment or retrofitting



System with two sensors e. g. for transfers

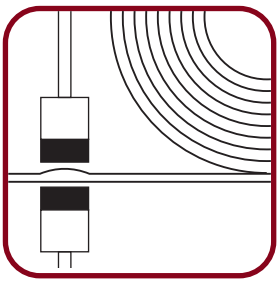
Double Sheet Detection System UDK20

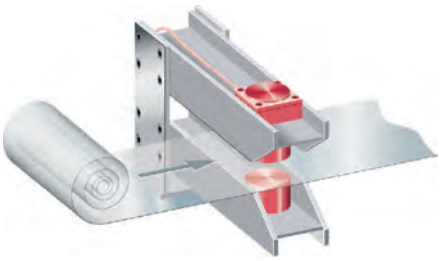
PRODUCT PROGRAM SHEET THICKNESS MEASUREMENT SYSTEM



From a broad product program suitable sheet thickness measurement and sheet thickness control instruments can be selected.

- For ferrous and non ferrous materials
- Non contact or contact measurement
- Simple units for limit control
- Sophisticated systems with elaborate documentation satisfying SPC requirements





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