



SND8-NS9SC

WELD SEAM DETECTION

- For single head 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



SND8-NS9SC

Description

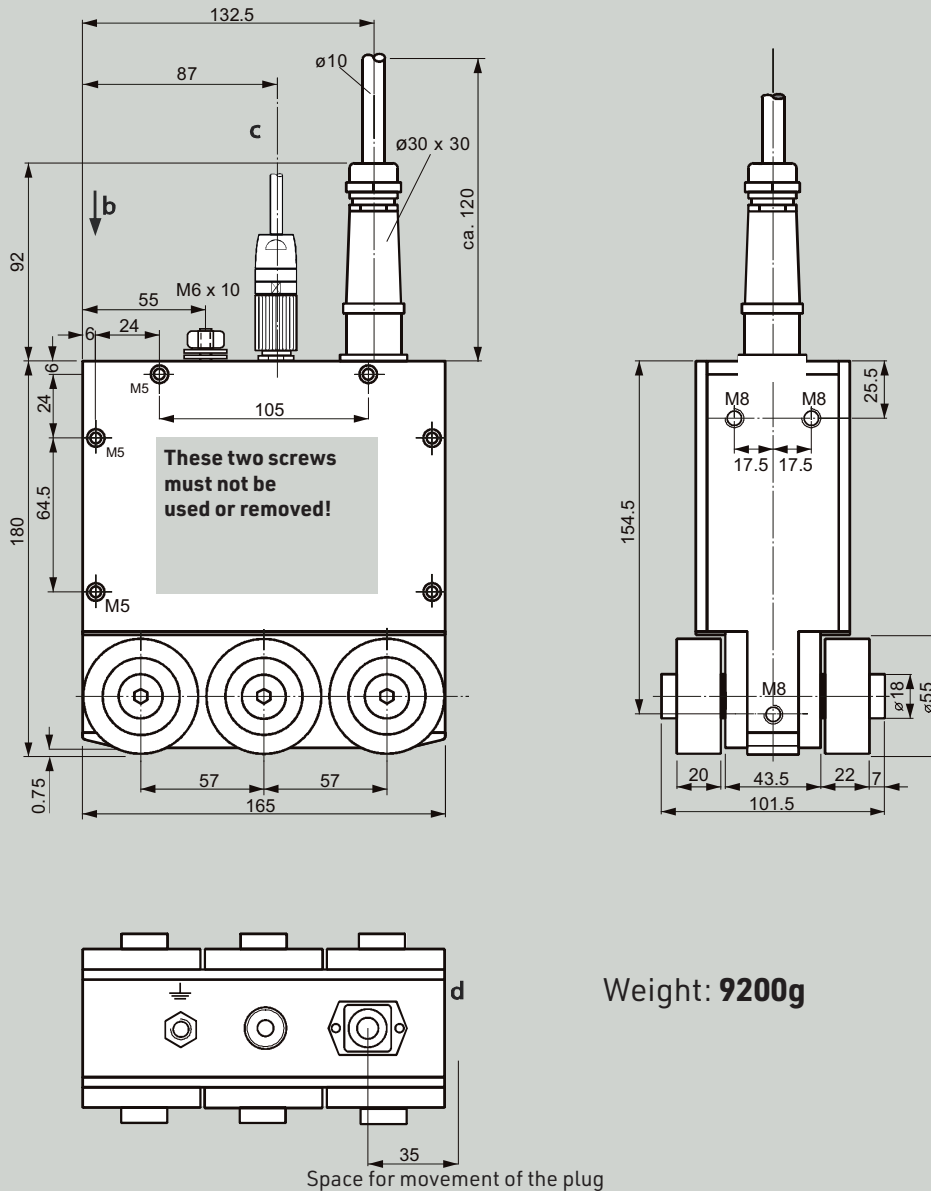
The automatic processing of coils and strips requires the dependable detection of weld seams. This applies to body shops in the automotive industry or the production of welded tubes and similar products.

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.

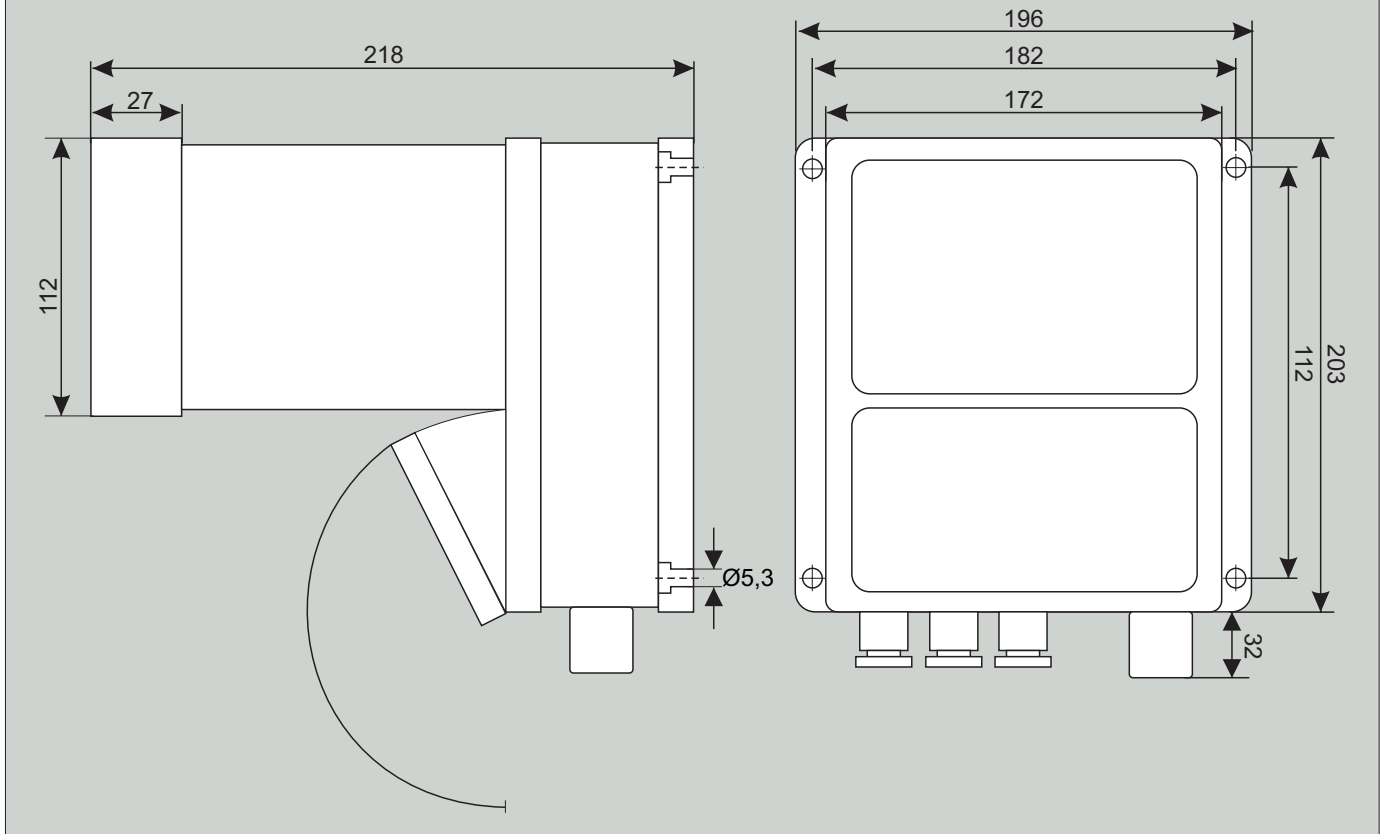
Function

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.

Dimensions of NS9SC



Dimensions of SND8

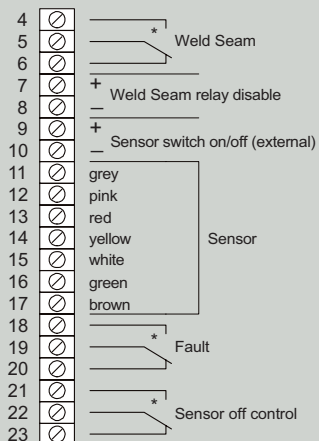


Connection scheme

After serial number P1762

Central ground wire (PE)

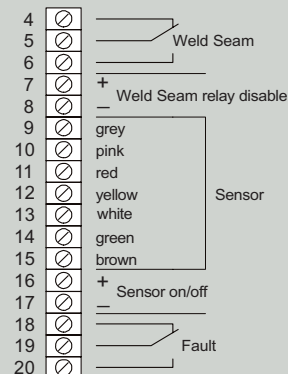
- 1 L (POWER)
- 2 N (POWER)
- 3 PE (internal)



Up to serial number P1761

Central ground wire (PE)

- 1 L (POWER)
- 2 N (POWER)
- 3 PE (internal)



Relay contacts:

*position unit without power or switched
 "Weld Seam", "Fault", "Sensor off".



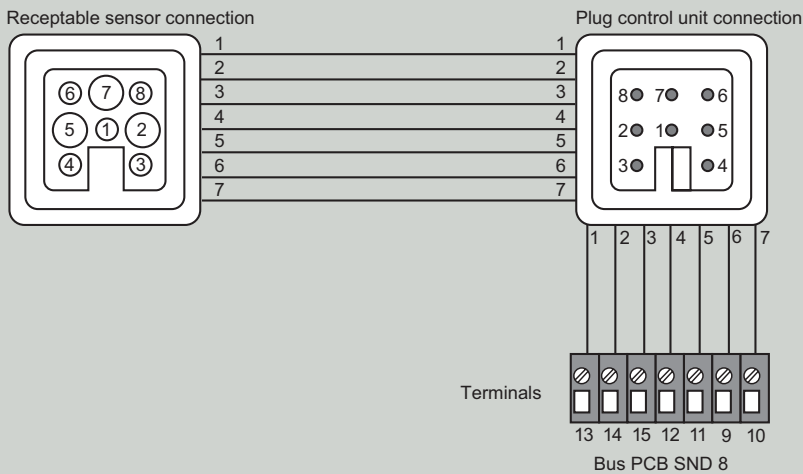
Technical Data

SND8

Operating voltage $\pm 10\%$:	230 / 115V AC, 50-60 Hz
Fuse (5 X 20):	0.5A slow blow
Power consumption:	approx. 25 VA
Ambient temperature:	5° - 45° C
Relay outputs for weld seam and fault:	dry two way contacts
Relay switching voltage:	250 V max.
Relay switching current:	8 A max.
Relay switching power:	200 W / 2000 VA max
Relay on delay:	110 ms, $\pm 20\%$
Relative motion sensor / object	The minimum speed is 0.1 m/s, max. The maximum speed is unlimited.

Cable SKNS8S

Cable SKNS8S



Revision 1.3, April 2024 - Subject to technical modification and error

Order Information

SND8-NS9SC

Part no.	Description
SND8-NS9SC	Weld Seam Detection System
NS9SC	Weld Seam Sensor for Coils
SKNS8S-5	Cable (Standard length 5 m), between detector and sensor
PgdS	Plexiglass cover with lock

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