



The Capacitive Sensor GSC-100 is used in processing lines for non-contact detection of the centre position of metallic and metalized strips. As a result

of its operating principle, the sensor is not influenced by extrinsic light, fouling and magnetic fields, does not need maintenance and is non-wearing.

Fife-Tidlands patented Capacitive Sensor contributes towards a reduction in line stoppages in steel mills and improves the economic contributions of your processing line.

The sensor consists of two transmitting and one receiving electrodes, which are mounted inside the sensor frame. The interpreting electronics are located in a well-protected casing within the sensor frame or, depending on application, a defined distance away from the sensor.

As a result of the high-frequency, alternating voltage, the two transmitting electrodes generate an electrical field between the transmitter and the receiver. Depending on the lateral strip position inside the sensor, electrical fields of different strengths are observed by the receiver. After interpretation by a demodulator and a voltage-current transducer, the sensor emits an analogue signal of 0 - 10 mA, depending on the strip position in the sensor.

Should the sensor receive strong interference signals, the interference is shown and the strip guidance is temporarily electrically blocked until the interference is cleared.

## GENERAL SPECIFICATIONS

### Weight

60 - 80 kg

### Gap

150 - 550 mm

### Operating Temperature

0°- 80°C

### Protection classification

IP65 (housing)

### Supply Voltage

+/- 12V

### Output Signal

0 to 10 mA

### Linearity

+ / - 5% max. deviation

### Plane change

+ / - 1% max. deviation

### ESD protected

designed to IEC 801-2

## KEY FEATURES

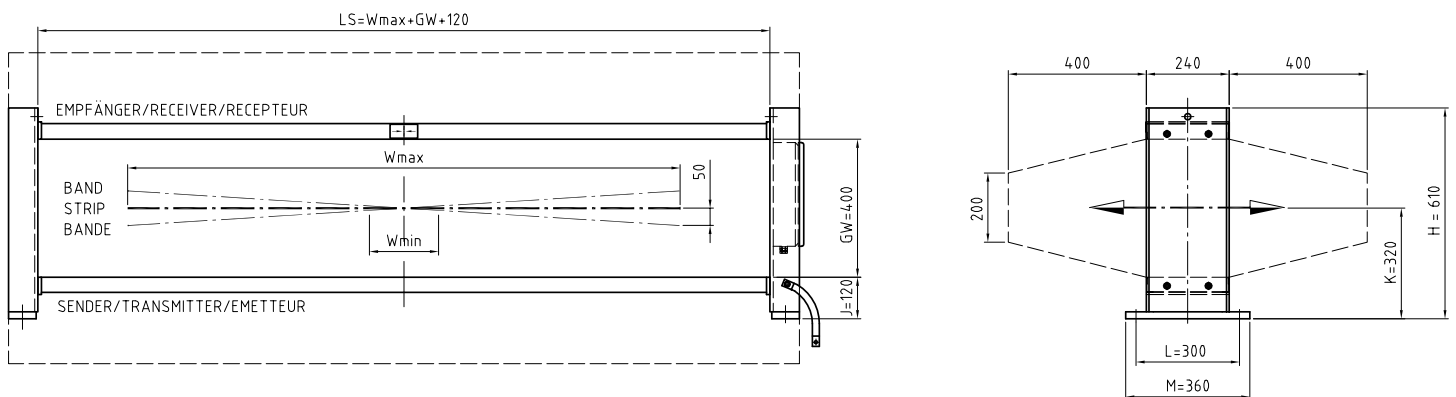
- Absolutely maintenance-free, due to no wear and tear elements
- High Operational Reliability
- Not influenced by:
  - Properties of material
  - Magnetic fields
  - Extrinsic light
  - Dust and grime
  - Gases
  - Wavy strip edges
  - Strip plane changes
- Utilisation at high temperatures:
  - Up to 80°C in standard version
  - Up to 1200°C in special version
- Measurement of extremely narrow strip possible
- Usable for light-sensitive materials

### APPLICATIONS

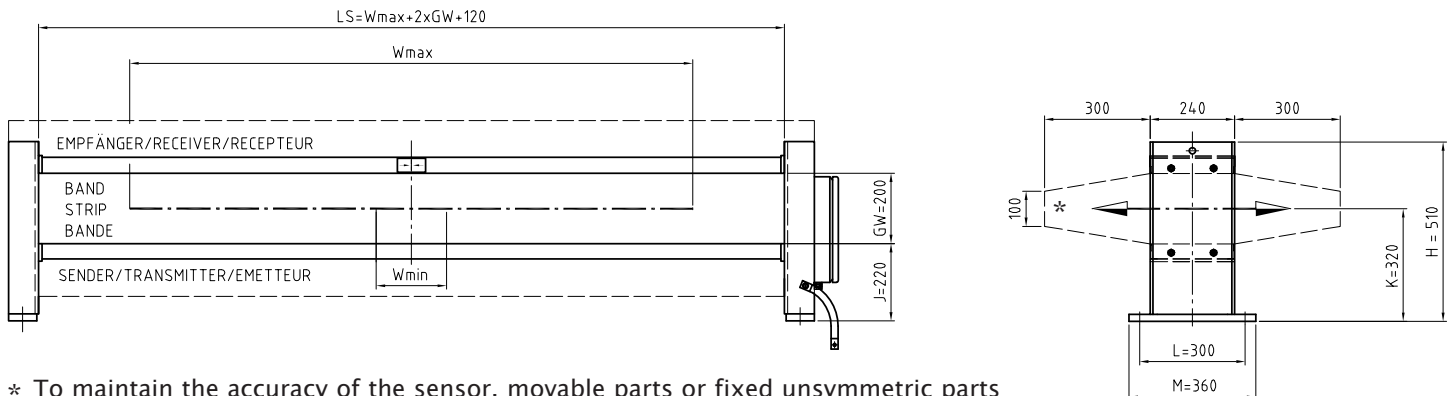
- Steering units
- Uncoiler
- Steering units inside furnaces
- In not easily accessible areas such as in accumulator

### DIMENSIONS

#### STANDARD VERSION



#### HIGH PRECISION VERSION



\* To maintain the accuracy of the sensor, movable parts or fixed unsymmetric parts must not be situated in the specified area.

Dimensions shown in mm.

# MAXCESS



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