

EKI / EMI Sensing of the edge position

Data Sheet

Function:	Sensing of the edge position of metal strip and metal foil
Mechanical design:	Extruded aluminium section with travelling inductive edge sensors
Connection:	Screwed connections / connector box
Weight:	between kg and ... kg, depending on design

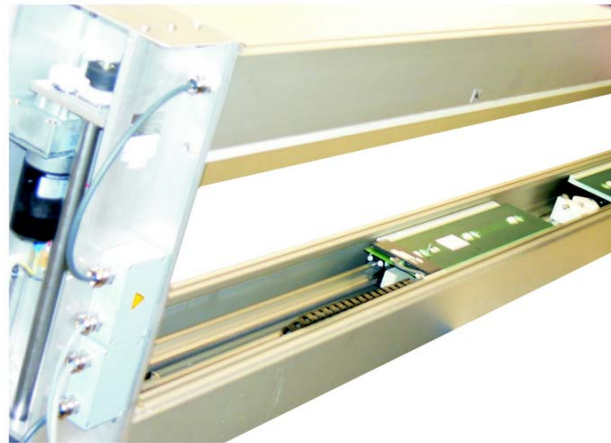
Application

The EKI / EMI inductive sensing system is used for sensing the position of a strip edge of metal strip or foil. Strip edge and strip centre guiding systems on pay off reels, on steering rolls and on tension reels without a mechanical link are available. Edge follow system or mask control systems are also possible.

In the case of strip centre guiding, sensing of the strip width is possible as an optional extra.

The sensing system is maintenance-free and insensitive to dirt and vapours.
The sensing accuracy is $\pm 1\text{mm}$.

View



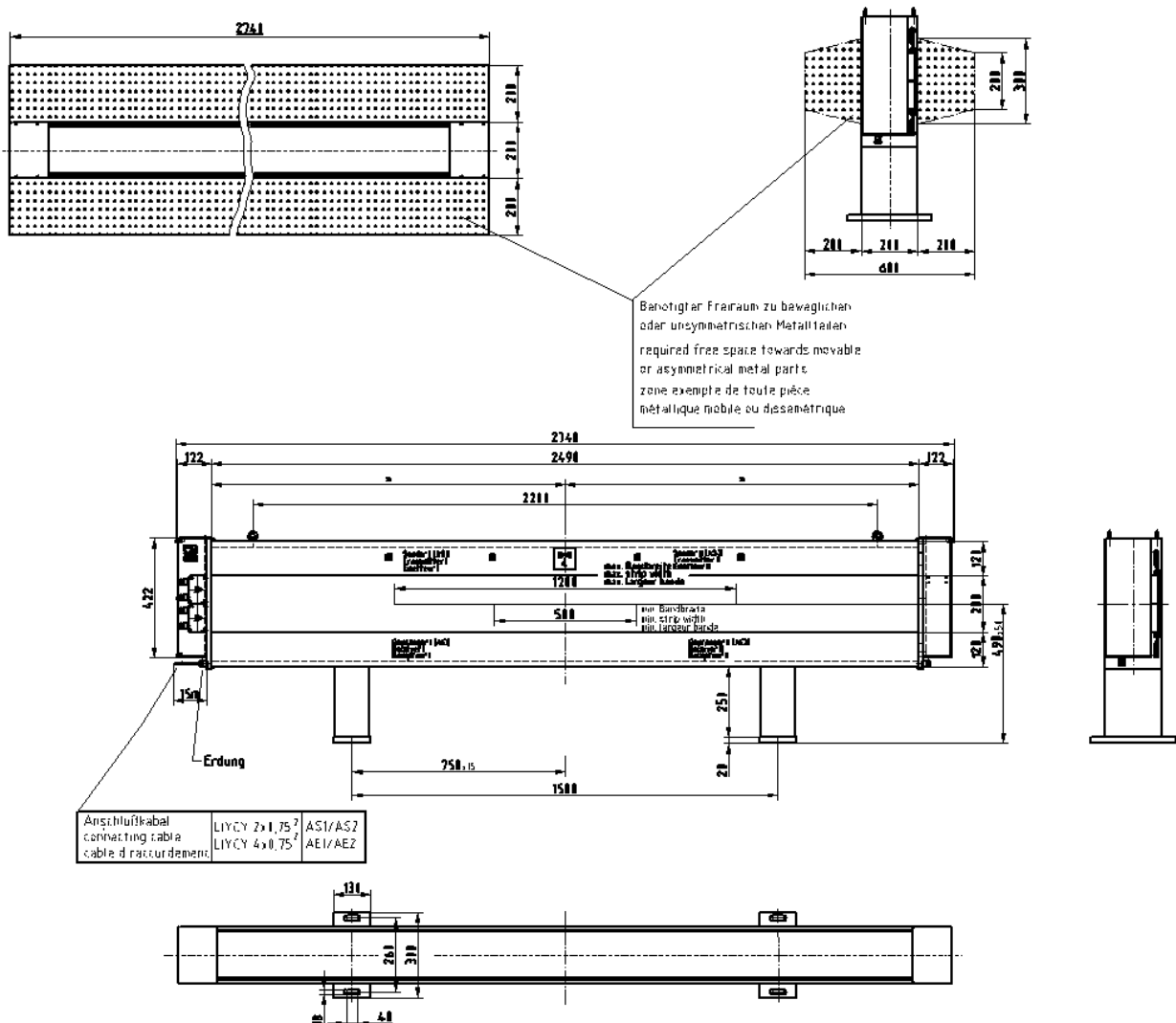
Design

The compact measuring frame made from anodised extruded aluminium section is provided on one or on both strip edges with inductive sensors moved by an electric motor. The two sensors below and above the strip are mechanically coupled laterally, and they follow the strip edge in a rigid position control loop. Their position values are continuously signalled by integral path encoders. Based on these position values and the sensor covering, the positions of both strip edges are calculated. Data output is either via Profibus or analog/digital signals.

Dimension drawing

Example: EMI2
for strip width:

B min. – B max.: 500 – 1200 mm



Technical data

Application:	Sensing of metal strip and foil
Sensor gap opening	200 mm
Strip pass line level:	Frame centre \pm 50 mm
Sensor adjusting stroke:	in steps of 200 mm on either side of the strip
Sensor adjusting speed:	30 mm/s on either side of the strip
Protective system of the frame:	IP 54
Ambient temperature for sensors:	max.: 50 °C
Ambient temperature for electronics:	max.: 50 °C