



The DSE-31 digital ultrasonic sensor is the smallest ultrasonic sensor available from Fife. Because of its compact size, light weight, and temperature stability, it is used to guide both clear films and most opaque webs.

The DSE-31 uses ultrasonic waves to measure the lateral position of the web material. The proportional band allows significant guide point adjustment. The DSE-31 is often used in pairs for centre guiding when web width variations are limited. The DSE-31 is insensitive to ambient light and it's used to guide most of the opaque material and clear films. When used with acoustically permeable material a calibration between the sensor and the material is necessary.

It is possible to operate the DSE-31 with either a supply voltage of 12V or 24V. The output signal would automatically be switched over in that case.

In 12V supply mode the sensor provides an output signal from 0 to 10 mA and can be connected to all available Fife web guide processors.

In 24V supply mode the sensor supplies an output signal between 4 and 20 mA and can be easily connected to a PLC as well.

The DSE-31 has a built-in LED display, visible from both sides, and shows directly on the sensor information about the operating status like for instance the existence of the supply voltage, position of the edge of the web inside the field of view or error messages.

An optional digital production data acquisition to Fife D-MAXE controller extends the range of applications for the DSE-31 inside the digital network environment. Additional sensor data can be provided to other hardware equipment if the Fife D-MAXE is linked appropriately to the network.

## GENERAL SPECIFICATIONS

### Proportional band

7,6 mm

### Source

Ultrasonic  
150 kHz

### Weight

200 g

### Operating temperature

5° - 60°C

### Protection class

IP54

### Power supply

10 - 28V

### Output signal

0 - 10 mA  
4 - 20 mA optional  
digital data exchange RS-485

### Linearity

5% maximum error (at 10% to 90% of signal)

### Plane change

5% maximum error (at 20% to 80% of gap width)

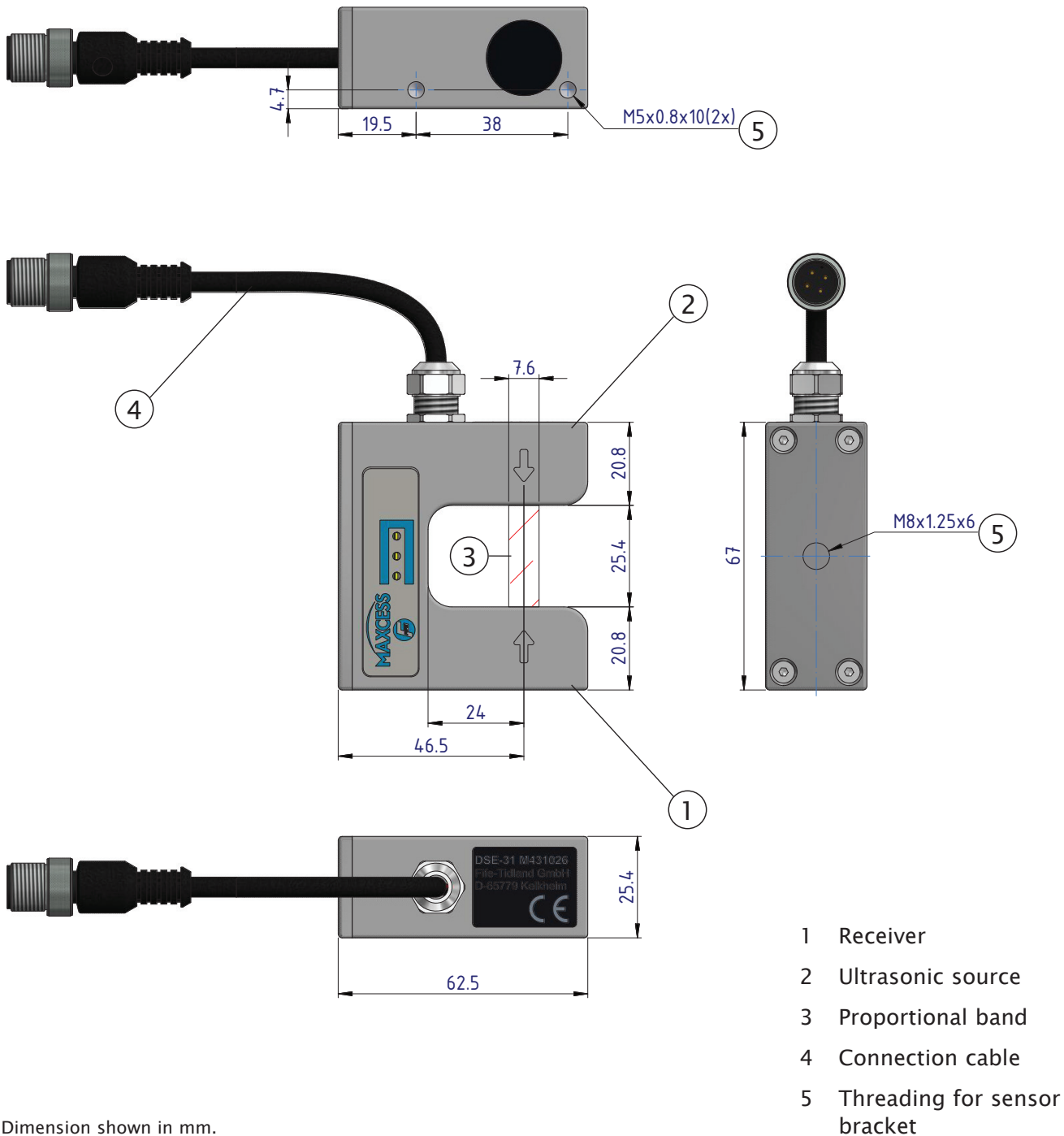
### Temperature drift

5% maximum error (at 10°C to 40°C)

## KEY FEATURES

- Insensitive to ambient light
- Insensitive to electrostatic discharge
- Temperature stabilized
- Low power consumption
- It doesn't affect photosensitive paper or film
- Suitable for thin and clear film or foil
- Can be used for new guiding systems as well as for an upgrade of existing systems
- Fast, easy and robust mounting due to multiple mounting brackets and sensor positioners
- Can be connected to all available Fife web guide processors

### DIMENSIONS



Dimension shown in mm.



EUROPE, MIDDLE EAST  
AND AFRICA  
Tel +49.6195.7002.0  
sales@maxcess.eu  
www.maxcess.eu

NORTH, CENTRAL  
AND SOUTH AMERICA  
Tel +1.405.755.1600  
sales@maxcessintl.com  
www.maxcessintl.com

CHINA  
Tel +86.756.881.9398  
info@maxcessintl.com.cn  
www.maxcessintl.com.cn

JAPAN  
Tel +81.43.421.1622  
japan@maxcessintl.com  
www.maxcess.jp

INDIA  
Tel +91.22.27602633  
india@maxcessintl.com  
www.maxcess.in

