

US 01B/04B Series Ultrasonic Edge Sensor

Optimised μ p-controlled ultrasonic transmission

Insensitive against material planarity

Powersupply 24 V, output 0...10 V

Common industry standard

Galvanically isolated

Shielded from electrical noise

2 ms cycle time

Suitable for fast running applications



● Functional description

The ultrasonic sensors US 01B/US 04B are suitable for the detection of all materials with the exception of sound transmissive ones (e.g. no open weave textiles). They are factory set, so that no adjustments are necessary.

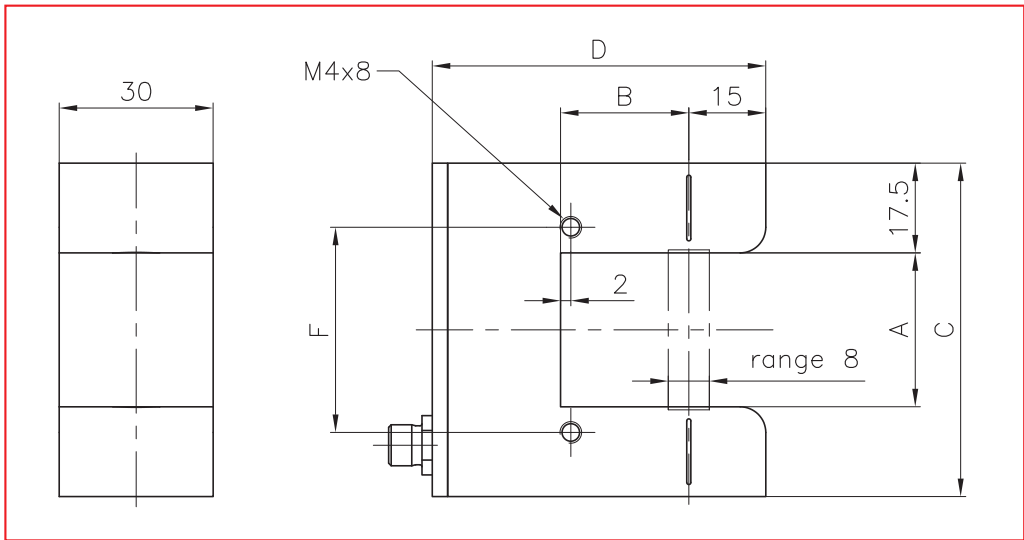
The main advantage of the US series is the detection of transparent films.

This allows easy operation with frequently changing materials.

The sensor is almost insensitive to changes in the plane of the material thanks to an optimised data processing and μ p-controlled ultra-sound transmission.

The sensor's electrical connections are of industry standard. Two standard sizes allow narrow or wide materials to be processed.

US 01B / 04B Ultrasonic sensor • Dimensions in mm



US 01B / 04B Ultrasonic sensor • Dimensions in mm [in]

Sensor Type	A	B	C	D	F
US 01B	30 [1.18]	25 [0.98]	65 [2.56]	65 [2.56]	40 [1.57]
US 04B	90 [3.54]	80 [3.15]	125 [4.92]	120 [4.72]	100 [3.94]

US 01B / 04B Ultrasonic sensor • Technical data

Measuring width	8 mm [0.31 in]
Resolution	0.2 mm [7.8 mil]
Measuring rate	2 ms
Output signal 0...10 V	0 V, when the web fully covers the sensor 10 V, when the web doesn't cover the sensor
Power supply	24 VDC (18...36 VDC)
Connecting cable	3 x 0.14 mm ²
Temperature range	- 10...60 °C [14...140 °F]
Protection class	IP 64

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