

**UGKB0170****ULTRASONIC SENSORS • THROUGH-BEAM SENSOR, FORK-SHAPED**

Ultrasonic sensors are non-contact and wear-free position switches which can also be used under rough environmental conditions. A key advantage of these devices lies in the fact that the material and the surface characteristics of the objects to be detected can be almost anything. Solids, liquids, grainy materials and powdery materials can be identified without the shape or the color of the object having any influence to the measured result. In addition, the ability to detect transparent materials such as films and fluids is of particular importance. The shape and color of the objects do not influence the result of the detection. The capability to detect transparent films or liquids is also of special importance. Ultrasonic sensors are used for distance measurement (e.g. detection of diameters, loop control), for fill level detection (e.g. silo detection), for positioning and presence detection (e.g. glass pane positioning, film tear check, glass bottle detection)

**MECHANICAL DATA**

Ambient temperature	-15 °C ... 60 °C
Degree of protection (IP)	IP67
Fork width	114 mm
Furcate	Yes
Housing design	Cuboid
Housing material	Aluminium
Housing material, detail	Aluminium
Sensor height	140 mm
Sensor length	13 mm
Sensor width	90 mm

**ELECTRICAL DATA**

Carrier frequency	300 kHz
Max. output current	500 mA
Measuring range length	114 mm ... 114 mm
No-load current	40 mA
Response time	1 ms
Response/decay time	1 ms
Sound outlet	Lateral
Supply voltage	18 V ... 30 V
Switching frequency	150 Hz
Synchronization possible	No
Type of electrical connection	Connector M8
Type of switching function	Normally open contact (NO)
Type of switching output	PNP
Voltage type	DC
With LED display	Yes

## OTHER DATA

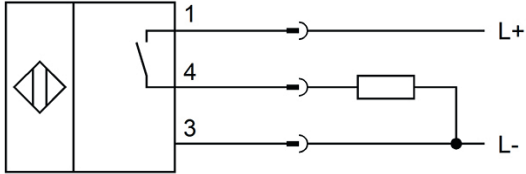
Object detection on conveyor systems

Version

Yes

Fork

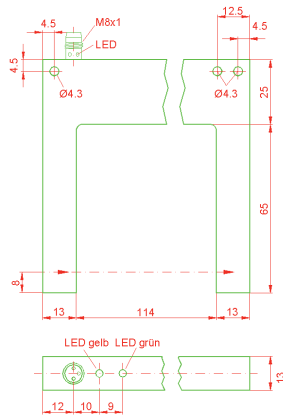
## CONNECTION



**Colors:** 1 = BN (brown), 3 = BU (blue), 4 = BK (black)

**Functions:** 1 = L+, 3 = L-, 4 = PNP NO

## DIMENSIONAL DRAWING



## INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!

## DISPOSAL



## SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!