

Fork Sensor for Label Detection

U3HJ301-006-070



- Detection of dark, transparent, metallic or printed labels
- Easy setup via teach-in
- Flexible output settings (PNP/NPN, NC/NO)
- Short response time

Thanks to their functional principle, ultrasonic fork sensors are ideally suited for reliable, contactless label detection. The emitter and the receiver are arranged as a light barrier in a single housing and detect even the smallest change in ultrasound attenuation. Attenuation results from the different material thicknesses of the base material with label and the bare base material. Transparent labels or labels made of paper and plastic can thus be reliably detected on any base material. The emitter and the receiver are slightly recessed into the housing in order to protect them from contact with the objects to be scanned.

Ultrasonic Data

Fork Width	6 mm
Smallest Detectable Gap	2 mm
Reproducibility	0,2 mm

Electrical Data

Supply Voltage	18...30 V DC
Current Consumption (U _b = 24 V)	< 40 mA
Response Time	0,25 ms
Temperature Range	0...60 °C
Number of Switching Outputs	2
Switching Output/Switching Current	100 mA
Protection Class	III
Time delay before availability	180 ms
Belt speed	≤ 250 m/min

Mechanical Data

Setting Method	Teach-In
Housing Material	Aluminum
Degree of Protection	IP67
Connection	M12 × 1; 5-pin
Scope of delivery	1 × initial start-up instructions 1 × sensor

PNP NO/NPN NC

External teach-in input

Suitable Connection Equipment No.

2 35

Complementary Products

IO-Link Master
Software

