

RKU 420/2NC.2-S8

Part No. 50132082

Retro-reflective Ultrasonic sensor

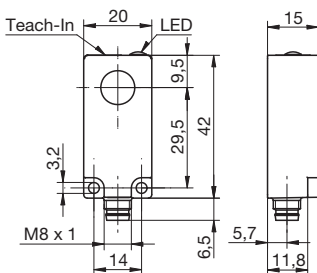


0 ... 400mm

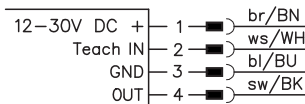


Detailed data sheets:
www.leuze.com

Dimensioned drawing



Electrical connection



Specifications

Operating range	0 ... 400mm
Reflector distance	100 ... 400mm
Reflector size	> 30 x 30mm ²
Ultrasonic frequency	290kHz
Opening angle	standard
Operating voltage U_B 1)	12 ... 30VDC
Bias current	≤ 35mA
Switching output OUT	pin 4: NPN
Output current	< 200mA
Function OUT	break-contact (NC)
Connection type	connector M8, 4-pin
Switching frequency	20Hz
Ambient temperature	-10 ... +60 °C (operation)
Protection class	IP 67
VDE safety class	III

- 1) Observe the safety regulations and installation instructions regarding power supply and wiring; for UL applications: only for use in "Class 2" circuits acc. to NEC

Operate in accordance with intended use!

- This product is not a safety sensor and is not intended as personnel protection.
- The product may only be put into operation by competent persons.
- Only use the product in accordance with the intended use.

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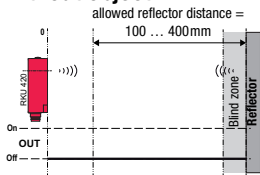
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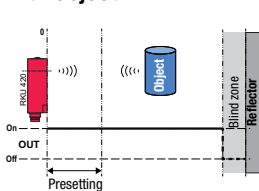
Function

The sensor detects objects from 0mm to the reflector distance minus the blind zone. The blind zone is max. 5% of the selected reflector distance. In the blind zone, the switching behavior of the sensor is undefined.

without object



with object



Presetting
RKU 420/2NC.2-S8
(part no. 50132082):
reflector distance 122mm

Switching output **OUT** = inactive (Off)
Green LED is On (no object detected)

Switching output **OUT** = active (On)
Green LED is Off (object detected)

Reflector distance adjustment via teach-in

Teach button	Teach-in input PIN 2
① Activate teach-in	
Press the teach button for approx. 2s until the LED flashes - then release the button.	U_B for approx. 2s, LED flashes
② Place the reflector at the desired position and conclude the teach event	
LED flashes. Once the reflector is at the desired position, briefly press the teach button once again. The teach event ends after 2s. Now the sensor detects objects, which are located in the acoustic path between the sensor and reflector. While an object is detected, the green LED is off.	Position reflector U_B briefly, ends teach event; green LED on

Teaching error

If the reflector is located outside of the operating range during the teach event, a teaching error occurs. The LED flashes quickly and the switching output is reset to the factory setting (switching point at the max. operating range).

Resetting the sensor to factory setting

Teach button	Teach-in input PIN 2
Restoring the standard operating range	
Press the teach button for at least 6s until the LED flashes quickly - then release the button. The sensor setting now corresponds to the standard operating range.	U_B for at least 6s, LED flashes quickly

Locking the teach button

The sensor automatically locks the teach button after either 5 min. after power-on or 5 min. after the last teach event is ended. A new teach event is only possible after disconnecting the sensor from voltage.



If the **Teach-IN** input is not used, it must be connected to GND!