

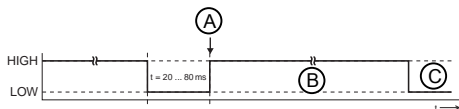
Retro-reflective photoelectric sensor

PRK53CA Autokollimation

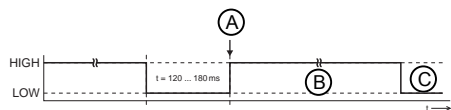
PRK55CA Autokollimation



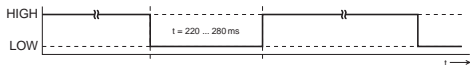
1



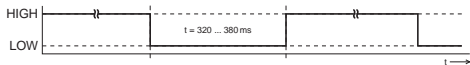
2



3



4



5



Sensor adjustment (teach) via teach button

The sensor is factory-adjusted for maximum operating range. The teach procedure is only necessary if the sensor does not switch when an object enters the light beam.

(1) Standard teach (low sensitivity)		(2) Sensitive teach (increased sensitivity)	
Clear the light path before teaching!			
1	Hold down the teach button (2 to 7 s) until the yellow and green LEDs flash simultaneously.	1	Hold down the teach button (7 to 12 s) until the yellow and green LEDs flash alternately.
2	Release teach button – ready.	2	Release teach button – ready.
The sensor switches when approx. half of the light beam is covered by the object.		Unlike the standard teach mode, the sensor switches when a considerably smaller part of the light spot is covered.	
Device settings are stored fail-safe.			

(3) Teach at max. operating range (factory setting)		(4) Set switching behavior (light/dark switching)	
Obstruct the light path before teaching!		When the function is activated, the switching output is inverted relative to the previously set state.	
1	Hold down the teach button (2 to 7 s) until the yellow and green LEDs flash simultaneously.	1	Hold down the teach button longer than 12 s until only the green LED flashes.
2	Release teach button – ready.	2	Release teach button – ready.
The sensor now operates with the maximum function reserve/operating range.		<p>Behavior of the yellow LED in this operating mode:</p> <p>After releasing the teach button, the yellow LED indicates the set switching behavior for 2 s and then reverts back to the light path.</p> <p>Switching behavior with reflectors:</p> <ul style="list-style-type: none"> – Yellow LED on continuously: switching output now dark switching – Yellow LED remains off for 2 s and is then on continuously: switching output now light switching <p>Switching behavior without reflector:</p> <ul style="list-style-type: none"> – Yellow LED switches on for 2 s and then remains off: switching output now dark switching – Yellow LED remains off: switching output now light switching <p>Note: The yellow LED is not dependent on the switching behavior setting and always indicates the light path in normal operation.</p>	
Device settings are stored fail-safe.			

Sensor adjustment (teach) via teach input (pin 2)

This device setting is only available for sensors in the PRK53C.A3/...T... or PRK55C.A3/...T... variant.

NOTICE



The following description applies to PNP switching logic!

Signal level LOW $\leq 2V$

Signal level HIGH $\geq (U_B - 2V)$

With the NPN models, the signal levels are inverted!

1

Standard teach (low sensitivity)

- A Standard teach (low sensitivity) is performed
- B Teach button is locked
- C Teach button may now be operated again

2

Sensitive teach (increased sensitivity)

- A Sensitive teach (increased sensitivity) is performed
- B Teach button is locked
- C Teach button may now be operated again

3

Dark switching logic

Switching outputs are dark switching, i.e., outputs are active, when there is an object currently in the light path.

With antivalent switching outputs: OUT 1 (pin 4) dark switching, OUT 2 (pin 2) light switching.

4

Light switching logic

Switching outputs are light switching, i.e., outputs are active, when there is no object currently in the light path.

With antivalent switching outputs: OUT 1 (pin 4) light switching, OUT 2 (pin 2) dark switching.

Locking the teach button via the teach input

5

This device setting is only available for sensors in the PRK53C...A3/...T... or PRK55C...A3/...T... variant (teach input via pin 2).

A static high signal (≥ 20 ms) at the teach input locks the teach button on the sensor if required, such that no manual operation is possible (e.g., protection from erroneous operation or manipulation).

If the teach input is not connected or if there is a static low signal, the button is unlocked and can be operated freely.