

Diffuse reflection distance sensor with teach

ODT53C.3

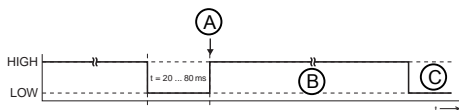
ODT53C.S3

ODT55C.3

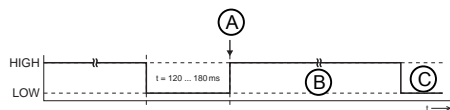
ODT55C.S3



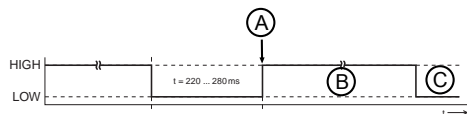
1



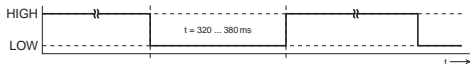
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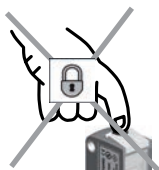
3



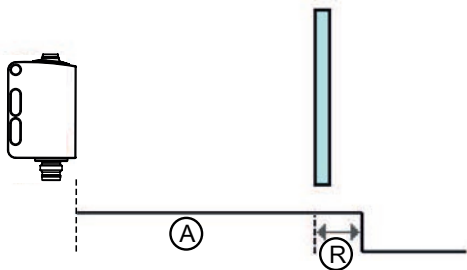
4



5



6



Sensor adjustment (teach) via teach button

This device setting is only available for sensors with one switching output (SSC1). The switching point (SP1) of the sensor is set to 150mm on delivery. Devices with small light spot (ODT53C.S3... and ODT55C.S3...) are set to 80 mm on delivery.

(1) 1-point teach of SSC1 with limited reserve		(2) 1-point teach of SSC1 with medium reserve (approx. 5%)	
Position the object that is to be taught.			
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.
<p>With this teach mode, the switching distance is configured in such a way that the object which is in the beam path during the teach procedure is detected with limited reserve.</p> <p>The reserve R refers to the additional distance by which the operating range is increased with respect to the distance to the teach object. Thus, all objects located up to just beyond the distance of the taught object are detected.</p>		<p>With this teach mode, the switching distance is configured in such a way that the object which is in the beam path during the teach procedure is detected with medium reserve (approx. 5%).</p> <p>The reserve R refers to the additional distance by which the operating range is increased with respect to the distance to the teach object. Thus, all objects located up to just beyond the distance of the taught object are detected.</p>	
(3) Set switching behavior (light/dark switching)			
When the function is activated, the switching output is inverted relative to the previously set state.			
1	Hold down the teach button longer than 12 s until only the green LED flashes.		
2	Release teach button.		
3	<p>The green LED flashes for another two seconds.</p> <p>Behavior of the yellow LED during the continued flashing of the green LED:</p> <ul style="list-style-type: none"> – Yellow LED ON: switching output now light switching (output active if object within the set detection range) – Yellow LED OFF: switching output now dark switching (output active if no object within the set detection range) 		
Device settings are stored fail-safe.			

NOTICE



The behavior of the yellow LED is dependent on the switching behavior setting of SSC1 and always indicates the light path in normal operation.

Sensor adjustment (teach) via teach button (SSC1 and SSC2)

This device setting is only available for sensors with two switching outputs SSC1 and SSC2.

- Devices with warning output have only one teachable SSC1 switching output.
- Switching points SP1 and SP2 of the sensor are set to 150 mm on delivery.
- Devices with small light spot (ODT53C.S3... and ODT55C.S3...) are set to 80 mm on delivery.

(1) 1-point teach of SSC1 with limited reserve		(2) 1-point teach of SSC2 with limited reserve	
Position the object that is to be taught.			
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.
<p>With this teach mode, the switching distance is configured in such a way that the object which is in the beam path during the teach procedure is detected with limited reserve.</p> <p>The reserve R refers to the additional distance by which the operating range is increased with respect to the distance to the taught object. Thus, all objects located up to just beyond the distance of the taught object are detected.</p>		<p>With this teach mode, the switching distance is configured in such a way that the object which is in the beam path during the teach procedure is detected with limited reserve.</p> <p>The reserve R refers to the additional distance by which the operating range is increased with respect to the distance to the taught object. Thus, all objects located up to just beyond the distance of the taught object are detected.</p>	

(3) Set switching behavior (light/dark switching)

When the function is activated, the switching outputs are inverted relative to the previously set state.

- | | |
|---|---|
| 1 | Hold down the teach button longer than 12 s until only the green LED flashes. |
| 2 | Release teach button. |
| 3 | <p>The green LED flashes for another two seconds.</p> <p>Behavior of the yellow LED during the continued flashing of the green LED:</p> <ul style="list-style-type: none"> – Yellow LED ON: switching output now light switching (output active if object within the set detection range) – Yellow LED OFF: switching output now dark switching (output active if no object within the set detection range) |

Device settings are stored fail-safe.

NOTICE

The yellow LED only indicates the switching behavior of SSC1 and is dependent on the setting of the switching behavior. In normal operation, it always indicates the light path.

1**Teach switching point SSC1 with limited reserve**

- A Teaching of switching point SSC1 (with limited reserve) is performed
- B Teach button is locked
- C Teach button may now be operated again

2**Teach switching point SSC1 with medium reserve**

- A Teaching of switching point SSC1 (with medium reserve) is performed
- B Teach button is locked
- C Teach button may now be operated again

3

Dark switching logic

Switching output is dark switching, i.e., output active if no object is present in the set detection range of the sensor.

4

Light switching logic

Switching output is light switching, i.e., output active if an object is present in the set detection range of the sensor.

5

Locking the teach button via the teach input

This device setting is only available for sensors in the ODT53C.../...T... and ODT55C.../...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.

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A Set operating range

R Reserve