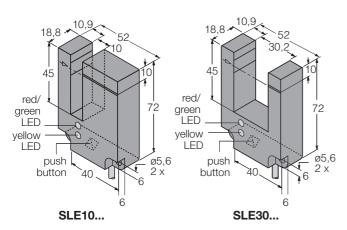
TURCK

Optical slot sensors

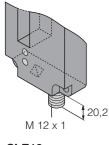


Dimensions [mm]

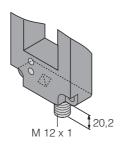
Cable



Connector







SLE30...

BANNER

SLE10/SLE30 Expert[™] series TEACH-mode slot sensors

Wave length

Red 680 nm

Adjustment sensitivity

light/dark operate

Supply

Supply voltage 10...30 V dcRipple V_{pp} $\leq 10 \%$ No load current $\leq 45 \text{ mA}$

Protection reverse polarity

overload short-circuit transient voltages

Output

Continuous load current ≤ 150 mA Switching frequency ≤ 1 kHz

≤ 3,3 kHz (SLE...**Y**)

Material

Housing ABS/polycarbonate

Lens acrylic
Protection class IP67
(IEC 60529/EN 60529)

Temperature range -20...+70 °C

 Cable
 2 m, PVC, 5 x 0,5 mm²

 Connector
 eurocon (M12 x 1)

Indicator LED's

Green power-on
Green flashing output marginal
Yellow (RUN-mode) output state
Yellow (static TEACH-mode) teach ON or OFF condition

Yellow flashing

(dynamic TEACH-mode)

Red

ready for dynamic teach signal strength

Wiring

	BN (1) +
	WH (2)
	BK (4)
	BU (3) -
	GY (5)*
1	J 0—

* external programming cable (TEACH)

Accessories

Bracket

SMBSL 30 583 35 angled bracket

Connectors

WAK4.5-2/P00 80 085 76 straight type WWAK4.5-2/P00 80 085 83 right-angled type

SLE10/SLE30 Expert ¹ TEACH-mode slot senso	rs	Sot width	Light, so.	Output function	Connection	$J_{D\Theta}$	ldent number
Optical slot sensors	150 150 80 80	10 mm 10 mm 10 mm 10 mm	red red red red	pnp, npn pnp, npn pnp, npn pnp, npn	cable connector cable connector	SLE10B6V SLE10B6VQ SLE10B6VY SLE10B6VYQ	30 603 80 30 603 81 30 603 82 30 603 83
	150 150 80 80	30 mm 30 mm 30 mm 30 mm	red red red red	pnp, npn pnp, npn pnp, npn pnp, npn	cable connector cable connector	SLE30B6V SLE30B6VQ SLE30B6VY SLE30B6VYQ	30 554 74 30 554 76 30 554 75 30 554 77

^{*} Typical excess gain: indication of the sensitivity of the sensor. A minimum value of 1 is required to switch the sensor on.

Static and Dynamic Teach features

Setting the sensitivity of the SLE... sensor is performed in Teach mode. The sensor offers two methods for programming: Static Teach and Dynamic Teach. Use the built-in push button or the remote teach input for either method.

Static Teach

The sensitivity is automatically set when the sensor is taught the ON and OFF conditions. (The first condition taught is the ON condition.) Press and hold the push button for minimum 2 seconds to enter Teach mode. Then, when the push button is clicked, the sensor will sample each sensing condition and register this into its memory. After the second sensing condition is registered, the SLE... *Expert* automatically sets the sensitivity to the optimum value for the application, and then returns to RUN mode. If sensing contrast is not acceptable, the sensor will return to the beginning of Teach mode.

Dynamic Teach

This is a method of setting the sensor's sensitivity while the object to be sensed is in motion. When detecting small parts, aligning the objects to the sensor's effective beam can be difficult with the Static Teach method. In this case, Dynamic Teach will allow you to pass individual or multiple parts through the beam; the sensor will detect them and set the sensitivity automatically.

When detecting labels, web flutter may change the amount of light passing through the label and its backing material. Dynamic Teach will sense this variation and adjust the sensitivity accordingly. Dynamic Teach is activated after accessing Teach mode (press and hold the push button for a minimum of 2 seconds), and then double-click the push button. While the object to be sensed is in motion, push in and hold the button. As long as the button is held, the sampling will continue. Upon release of the button, the sensor chooses the optimum setting for the application and returns to RUN mode. If sensing contrast is not acceptable, the sensor will return to Static Teach mode; double click the push button to initiate Dynamic Teach.

Subject to changes without notice • Edition 02.02 • P/N ED060 – excerpt from EC001/0102

