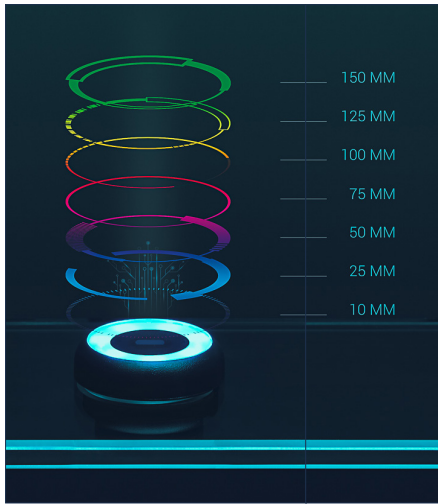


TKO-Smart-001-Case-NO-PF-001



PRODUCT FEATURES

- Particularly suitable for use in hygiene-sensitive areas
- Can be operated without touching
- Push-button functions wear-free as there are no moving parts
- Function control by means of integrated micro-controller
- 3 states signalled by lighting (standard values)
- The illumination colour of the RGB LEDs and the characteristics of the switching output can be adjusted via software (USB).
- Standard installation dimension 22.3 mm / thread M22x1
- Output potential-free contact
- The parameters of the switching output can be adjusted via software (Mirco-USB)
- CE-compliant according to EN 50581:2013

SPECIFICATION

HOUSING:

Height (with connection): 43 mm
 Head diameter: 30 mm
 Colour: anthracite
 Material: PC/ABS
 Diameter of front screen: 25 mm
 Material: PMMA

ILLUMINATION (STANDARD):

RGB LED ring lighting
 Standby blue dimmed
 Approach blue 100%
 Trigger green 100%

SWITCHING PARAMETERS (STANDARD):

Type NO, non-latching (push-button)
 Activation threshold d_{act} approx. 150 mm
 Switch-on threshold d_{on} approx. 20mm
 Switch-off threshold d_{off} approx. 50mm

Switch-on delay t_{on} 100 ms
 Switch-off delay t_{off} 100 ms
 Output hold time t_{hold} infinite

ELECTRICAL PARAMETERS:

Operating voltage: 9 - 24 V DC
 Current demand (max): 50 mA (24 V DC; white 100%)
 Switching output: potential-free contact
 - Max. voltage/current: 36 V DC / 50 mA
 Operating temperature: -20 °C to +70 °C
 Storage temperature: -40 °C to +80 °C

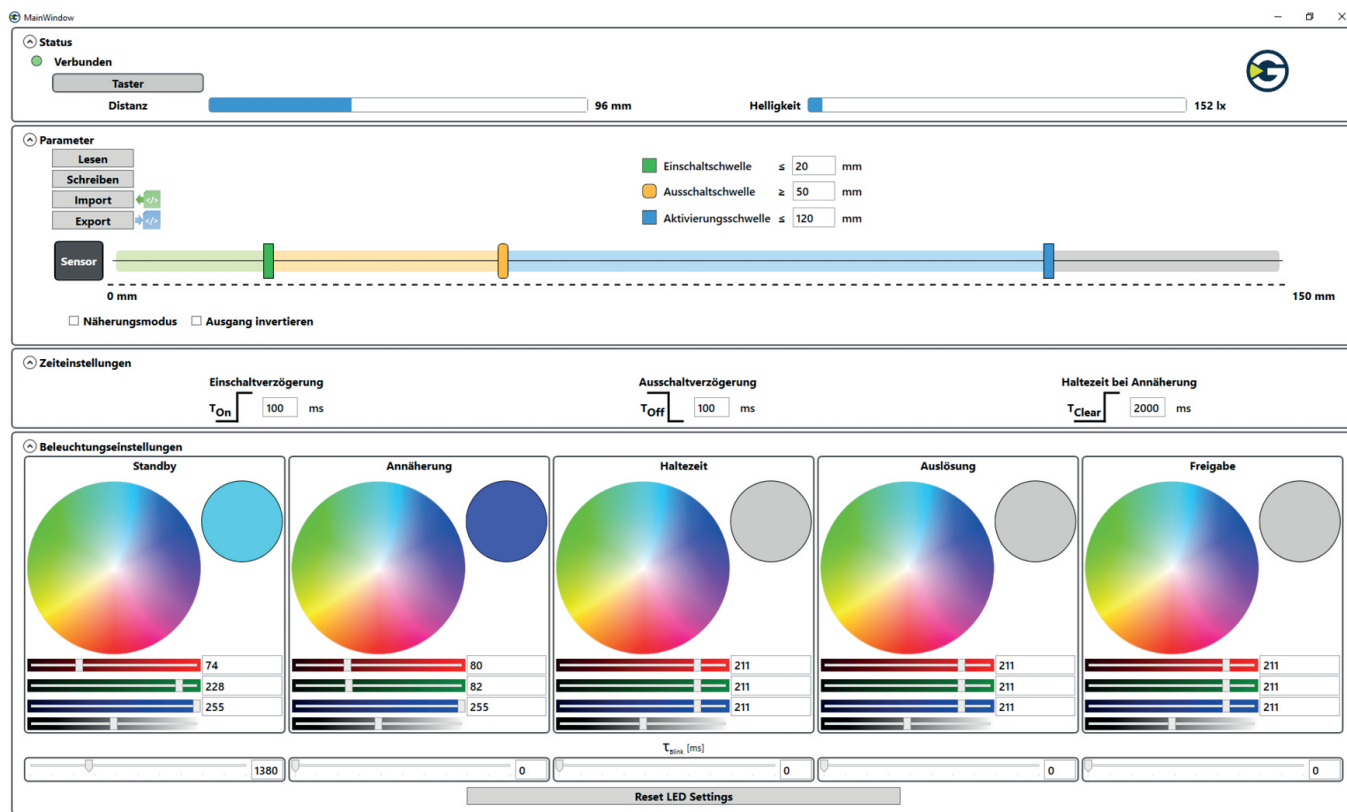
OTHERS:

Protection class: IP65 (at the front)
 Contacting: 4 terminal lugs flat plug
 2.8 x 0.51 mm (assignment visible on housing)
 Weight: apr. 15 g

ORDER INFORMATION

Art.No.	Product description	Output	Included accessories
KO28010	TKO-Smart-001-Case-NO-PF-001	potential-free	Fixing nut and cable
RK29000	Parameteranpassung für optischen Taster		
SW29000	Konfigurationssoftware für TKO-Smart-001		
KO29001	Dev-Kit TKO-001-GETT		

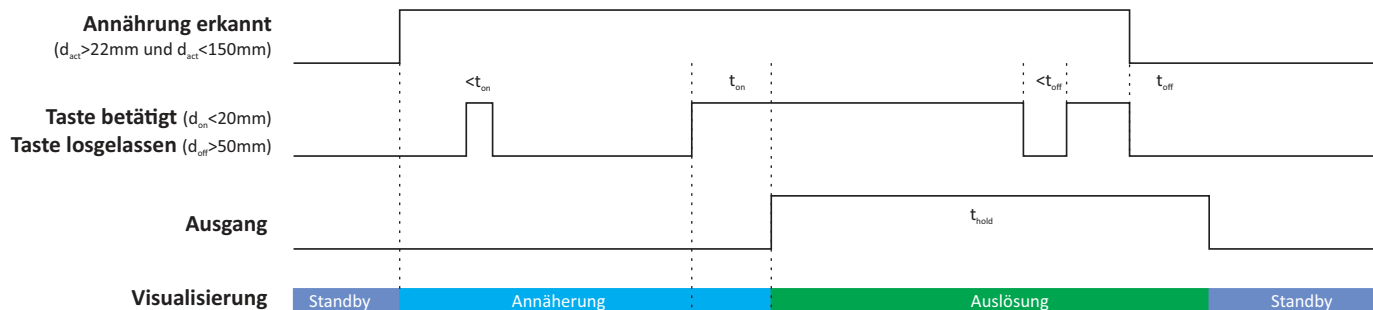
CONFIGURATION SOFTWARE



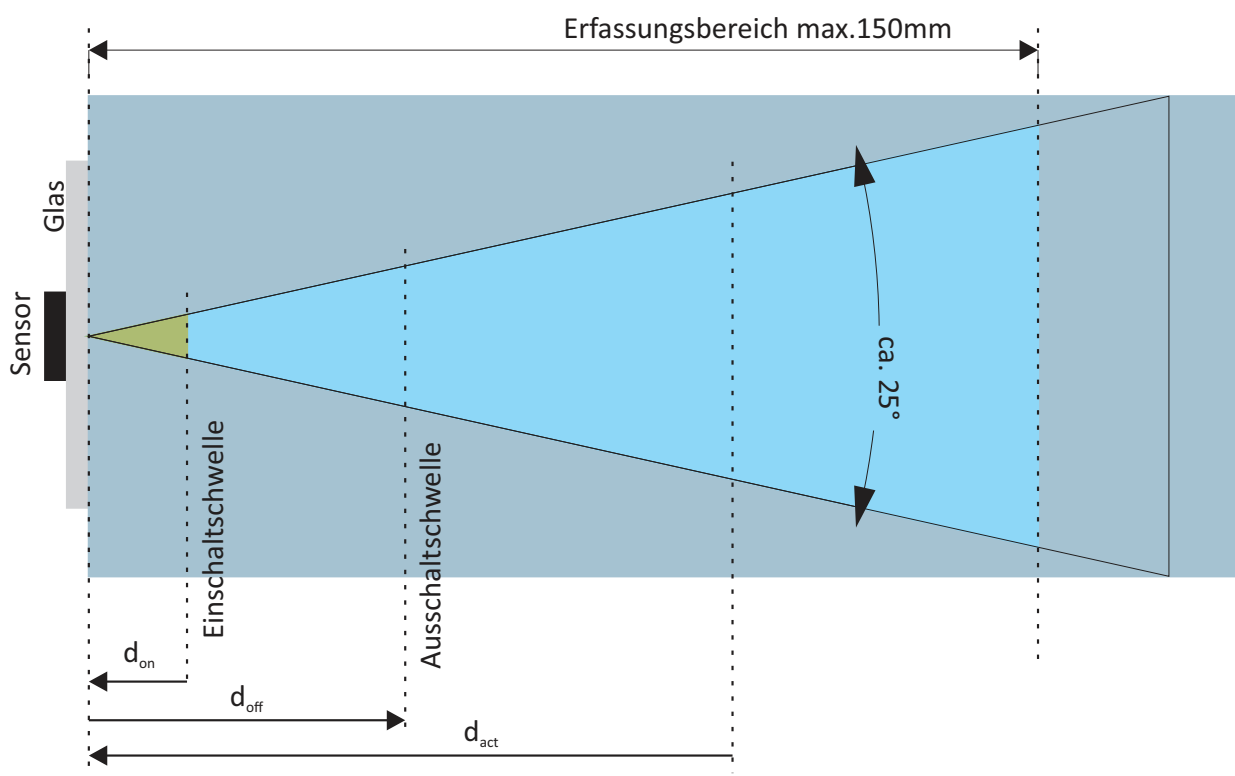
The screenshot shows the configuration software interface for the TKO-Smart-001 optical switch. The interface is divided into several sections:

- Status:** Shows the device is connected (Verbunden). It includes a 'Taster' (Button) status indicator and a 'Distanz' (Distance) slider set to 96 mm. A 'Helligkeit' (Brightness) slider is set to 152 lx.
- Parameter:** Contains buttons for 'Lesen' (Read), 'Schreiben' (Write), 'Import', and 'Export'. It also features a 'Sensor' status indicator and a large horizontal slider for distance, ranging from 0 mm to 150 mm. Three threshold settings are displayed: 'Einschaltswelle' (≤ 20 mm), 'Ausschaltswelle' (≥ 50 mm), and 'Aktivierungsschwelle' (≤ 120 mm). Checkboxes for 'Näherungsmodus' and 'Ausgang invertieren' are present.
- Zeiteinstellungen:** Includes three time delay settings: 'Einschaltverzögerung' (T_{On} = 100 ms), 'Ausschaltverzögerung' (T_{Off} = 100 ms), and 'Haltezeit bei Annäherung' (T_{Clear} = 2000 ms).
- Beleuchtungseinstellungen:** Displays five color calibration wheels for different states: 'Standby', 'Annäherung', 'Haltezeit', 'Auslösung', and 'Freigabe'. Each wheel has associated color bars and numerical values (e.g., 74, 228, 255 for Standby; 80, 82, 255 for Annäherung; 211, 211, 211 for Haltezeit, Auslösung, and Freigabe). A 'Reset LED Settings' button is located at the bottom.

SWITCHING DIAGRAM

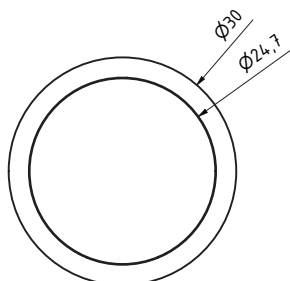


Proximity detection range

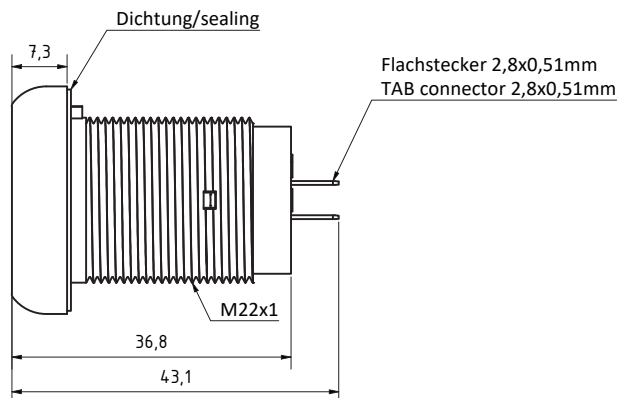


TECHNICAL DRAWINGS

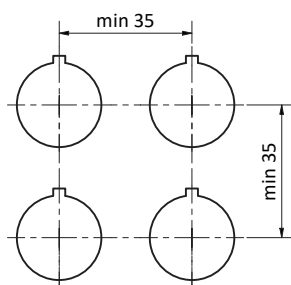
Frontansicht/front view



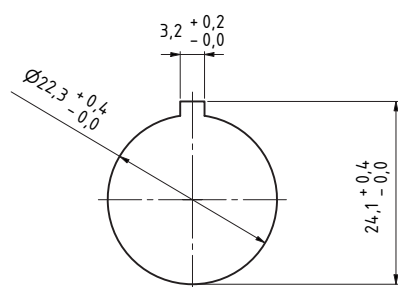
Seitenansicht/side view



Anordnung/arrangement



Einbaumaße/dimensions



Rückansicht/back view

