

- Thin construction and small outer dimensions for easy integration if installation space is tight
- PNP and NPN switching output
- Switch for changing between light and dark switching
- Switch for changing between short response time and higher range
- 20-turn potentiometer for sensitivity adjustment provide for optimal adaptation to the application
- Indicator diode for operation and switching output
- Connection via cable or cable with M8 connector

Dimensioned drawing


Supplied mounting accessories


A Lever for fiber optic clamp
B Green indicator diode - readiness for operation
C Red indicator diode - switching output
Potentiometer for sensitivity adjustment
E Switch operating mode 'Range' / 'Speed'
F Switch light (LO)/dark (DO) switching

## Electrical connection

|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

## Specifications

## Optical data

Operating range/scanning range ${ }^{1)}$
Light source
Wavelength

## Timing

Switching frequency ${ }^{2)}$
Response time
Delay before start-up

## Electrical data

Operating voltage $U_{B}$
Residual ripple
Open-circuit current
Switching output
Function
Signal voltage high/low
Output current
Sensitivity
Indicators
LED green
Red LED

## Mechanical data

Housing
Weight
Connection type
Fiber optic connection

## Environmental data

Ambient temp. (operation/storage)
Protective circuit ${ }^{3}$ )
Protection class
Standards applied

## Options

Operating mode switch

Throughbeam principle
up to 300 mm
LED (modulated light)
680 nm (visible red light)

## Operating mode 'Range' <br> 250 Hz <br> 1 ms <br> $\leq 150 \mathrm{~ms}$ <br> Operating mode 'Speed' 500 Hz 2 ms

$12 \ldots 24 \mathrm{VDC} \pm 10 \%$
$\leq 10 \%$ of $U_{B}$
$\leq 40 \mathrm{~mA}$
antivalent transistor outputs
pin 4/black: PNP, pin 2/white: NPN
light/dark switching, adjustable by means of a switch
$\geq\left(\mathrm{U}_{\mathrm{B}}-2.5 \mathrm{~V}\right) / \leq 2.5 \mathrm{~V}$
$\leq 100 \mathrm{~mA}$
adjustable via 20-turn potentiometer
ready for operation
switching output active
ABS
35 g with 2000 mm cable
65 g with 150 mm cable and M8 connector cable $2000 \mathrm{~mm}, 4 \times 0.25 \mathrm{~mm}^{2}$, or cable 150 mm with M8 connector, 4 -pin clamp
$-10^{\circ} \mathrm{C} \ldots+60^{\circ} \mathrm{C} /-40^{\circ} \mathrm{C} \ldots+70^{\circ} \mathrm{C}$
2, 3
EN 60947-5-2
selection of 'range' or 'speed' operating mode

Scanning principle up to 80 mm

PN

1) Range/scanning range depending on the fiber optics used
2) With a duty cycle of $1: 1$
3) $2=$ polarity reversal protection, 3=short circuit protection for all outputs

## Tables



Detailed specifications on the range/scanning range are enclosed in the data sheets of our fiber optics type KF or KFX.

## Diagrams

## Remarks

- Approved purpose:

This product may only be used by qualified personnel and must only be used for the approved purpose. This sensor is not a safety sensor and is not to be used for the protection of persons.

