

1) Optical axis, 2) Output function, 3) Sn



IND. CONT. EQ  
 1TD4  
 for use in the secondary of  
 a class 2 source of supply



## Display/Operation

Adjuster	Potentiometer 270°
Display	Output function- LED yellow
Setting	Sensitivity (Sn)

## Electrical connection

Connection	Connector, M12x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

## Electrical data

No-load current $I_0$ max. at $U_e$	35 mA
Operating voltage $U_b$	10...30 VDC
Rated insulation voltage $U_i$	75 V DC
Rated operating current $I_e$	100 mA
Rated operating voltage $U_e$ DC	24 V
Ripple max. (% of $U_e$ )	8 %
Switching frequency	1000 Hz
Turn-off delay $t_{off}$ max.	0.5 ms
Turn-on delay $t_{on}$ max.	0.5 ms
Voltage drop $U_d$ max. at $I_e$	2 V

## Environmental conditions

Ambient temperature	-25...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 gn, 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67

## Functional safety

MTTF (40 °C)	774 a
--------------	-------

## General data

Approval/Conformity	CE cULus EAC WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Photoelectric sensor
Reference reflector	BOS R-1
Series	18KW
Style	Flat cylinder Optics 90°
Trademark	Global

## Material

Housing material	PBT
Material sensing surface	PMMA

## Mechanical data

Dimension	Ø 18 x 93.5 mm
Mounting	Screw M3 Nut M18x1
Tightening torque max.	1.5 Nm

## Optical data

Ambient light max.	5000 Lux
Blind zone	100 mm
Light type	LED, red light
Polarizing filter	yes
Principle of optical operation	Retroreflective sensor
Special optical feature	Transparency detection
Switching function, optical	dark-on
Wave length	660 nm

## Output/Interface

Switching output	PNP normally open (NO) PNP NC Pins 4-2
------------------	---

## Range/Distance

Range	0...1.7 m
Rated operating distance Sn	1.7 m Adjustable

## Remarks

The sensor is functional again after the overload has been eliminated.

Polarizing filters prevent spurious switching due to reflecting and shiny parts.

For additional information, refer to user's guide.

Order accessories separately.

Actuation object (target): gray card, 200 x 200, 90 % remission, lateral approach, approach direction vertical to lens axis plane.

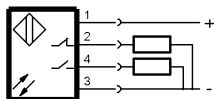
For further information about the MTTF and B10d see MTTF / B10d certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

## Connector Drawings



## Wiring Diagrams



## Opto Symbols

