

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	1500 Hz
Turn-off delay t_{off} max.	0.33 ms
Turn-on delay t_{on} max.	0.33 ms
Voltage drop U_d max. at I_e	2 V

Environmental conditions

Ambient temperature	-10...50 °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) 634 a

General data

Approval/Conformity CE
 cULus
 EAC
 WEEE

Basic standard IEC 60947-5-2

Principle of operation Photoelectric sensor

Series 18KF

Style Flat cylinder
 Straight optics

Trademark Global

Material

Housing material PBT

Material sensing surface PMMA

Mechanical data

Dimension Ø 18 x 81.5 mm

Mounting Screw M3
 Nut M18x1

Tightening torque max. 1.5 Nm

Remarks

Order accessories separately.
 For additional information, refer to user's guide.
 Polarizing filters prevent spurious switching due to reflecting and shiny parts.
 The sensor is functional again after the overload has been eliminated.
 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.

Optical data

Ambient light max. 5000 Lux

Average power Po max. 390 µW

Blind zone 100 mm

Laser class per IEC 60825-1 1

Light type Laser red light

Polarizing filter yes

Principle of optical operation Retroreflective sensor

Pulse duration t max. 6.0 µs

Pulse frequency 25 kHz

Wave length 650 nm

Output/Interface

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

Range/Distance

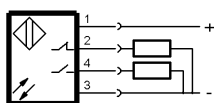
Range 0...16 m

Rated operating distance Sn 16 m Adjustable

Connector Drawings



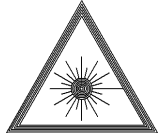
Wiring Diagrams



Opto Symbols



Warning Symbols



LASER CLASS 1 per IEC 60825-1