



1) Output function, 2) Operating voltage, 3) Sn, light/dark, 4) Optical axis receiver, 5) Optical axis emitter



Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Principle of operation	Contrast sensor
Series	6K
Style	Square Connection 90°

Display/Operation

Adjuster	button
Display	Output function- LED yellow LED green: Power
Setting	Contrast detection further parameters via IO-Link

Electrical connection

Connection	Connector, M8x1-Male, 4-pin
Polarity reversal protected	yes
Short-circuit protection	yes

Electrical data

Input function	Key disable on/off Same function as button
No-load current I_o max. at U_e	30 mA
Operating voltage U_b	10...30 VDC
Protection class	II
Rated operating current I_e	100 mA
Rated operating voltage U_e DC	24 V
Ready delay t_v max.	300 ms
Ripple max. (% of U_e)	10 %
Switching frequency	10000 Hz
Turn-off delay t_{off} max.	0.05 ms
Turn-on delay t_{on} max.	0.05 ms
Voltage drop U_d max. at I_e	2.4 V

Environmental conditions

Ambient temperature	-20...55 °C
EN 60068-2-27, Shock	Half-sinus, 30 g_n , 11 ms, 3x6
EN 60068-2-6, Vibration	10...55 Hz, amplitude 0.5 mm, 3x30 min
IP rating	IP67, IP69
Storage temperature	-20...80 °C

Functional safety

MTTF (40 °C)	450 a
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Interface

Interface	IO-Link
Switching output	Push-Pull/IO-Link NO/NC

Material

Housing material	ABS
Material sensing surface	PMMA

Mechanical data

Dimension	12 x 34 x 21.6 mm
Mounting part	Screw M3

Optical features

Ambient light	5000 Lux
Light spot size	1 x 4 mm at 12 mm
Light type	LED RGB
Principle of optical operation	Diffuse sensor, focused
Switching function, optical	Light/dark switching
Wave length	633 nm/525 nm/460 nm

Range/Distance

Range	9...15 mm
Rated operating distance Sn	12 mm

Remarks

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

For more information about 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 (Schematic)



Opto Symbols

