



Capacitive sensor

KIA3150NFPKG/2T/US



1 Programming buttons



IO-Link



Product characteristics

Electrical design	PNP
Output function	normally open / closed; (selectable)
Sensing range [mm]	15
Communication interface	IO-Link
Housing	Threaded type
Dimensions [mm]	M30 x 1.5 / L = 90

Electrical data

Operating voltage [V]	10...30 DC; (10...36 DC (60 °C))
Current consumption [mA]	< 18
Protection class	III
Reverse polarity protection	yes
Measuring principle	capacitive

Outputs

Electrical design	PNP
Output function	normally open / closed; (selectable)
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Switching frequency DC [Hz]	10
Short-circuit proof	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	15
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Accuracy / deviations

Hysteresis [% of Sr]	1...15
Switch-point drift [% of Sr]	-20...20

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Interfaces		
Communication interface	IO-Link	
Transmission type	COM1 (4,8 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Multiple switching signal
	Function	Process data variable
	Function	Teach channel
SIO mode	yes	
Min. process cycle time [ms]	100.8	
Supported DeviceIDs	Type of operation	DeviceID
	default	388
Operating conditions		
Ambient temperature [°C]	-25...80	
Protection	IP 65; IP 67	
Tests / approvals		
EMC	EN 61000-4-2 ESD	8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	(10...55 Hz) / 1 mm amplitude, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF [years]	719	
Mechanical data		
Weight [g]	119.2	
Housing	Threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M30 x 1.5 / L = 90	
Thread designation	M30 x 1.5	
Material	housing: stainless steel (1.4404 / 316L); Pushbuttons: TPE-U; cover: PBT; LED window: PEI	
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Teach function	yes	
Electronic lock	yes	
Accessories		
Items supplied	lock nuts: 2	
Remarks		
Pack quantity	1 pcs.	

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Electrical connection - plug

Connector: 1 x M12; coding: A



Connection



4: OUT / IO-Link