



Capacitive sensor

KIA3150NFAKG/2T/US



1 programming buttons



Product characteristics		
Electrical design		PNP/NPN; (automatic load detection PNP/NPN)
Output function		normally open / normally 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/NPN; (automatic load detection PNP/NPN)
Output function		normally open / normally 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
Detection zone		
Sensing range	[mm]	15
Accuracy / deviations		
Hysteresis	[% of Sr]	1...15
Switch point drift	[% of Sr]	-20...20



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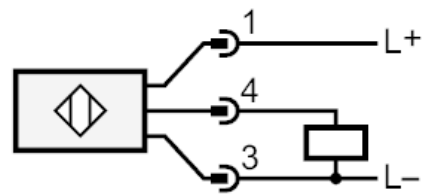
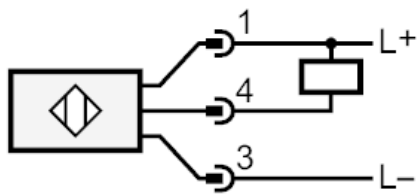
Interfaces		
Communication interface	IO-Link	
Transmission type	COM1 (4,8 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	Smart Sensor	
SIO mode	yes	
Min. process cycle time [ms]	101	
Supported DeviceIDs	Type of operation	DeviceID
	Default	388
Operating conditions		
Ambient temperature [°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, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF [years]	622	
Mechanical data		
Weight [g]	118.8	
Housing	threaded type	
Mounting	non-flush mountable	
Dimensions [mm]	M30 x 1.5 / L = 90	
Thread designation	M30 x 1.5	
Materials	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



4: OUT / IO-Link
automatic load detection PNP/NPN
when using a resistive load < 20 kΩ