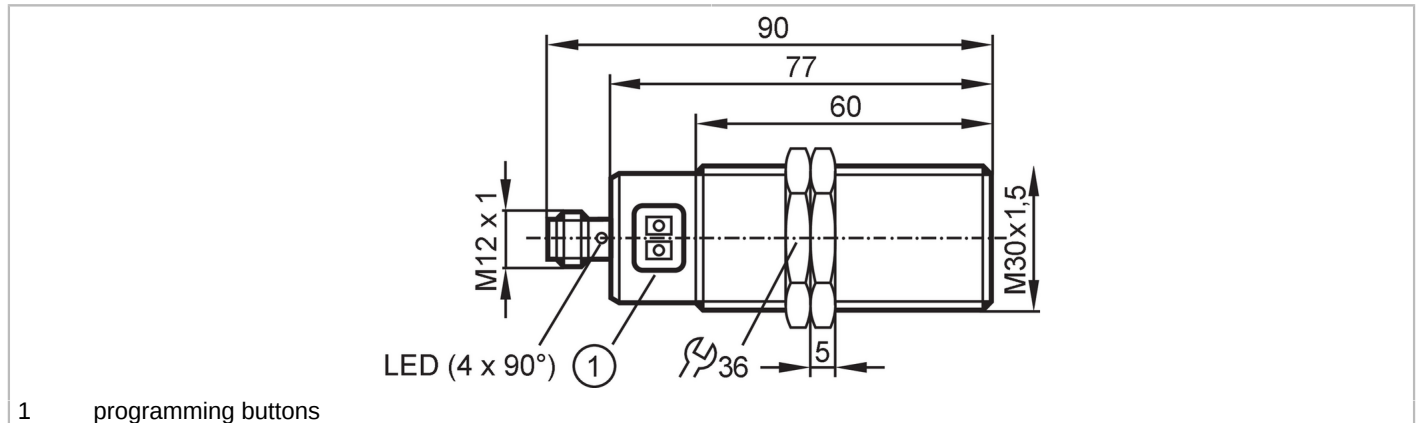


KI5085



Capacitive sensor

KIA3080BFPKG/2T/US



1 programming buttons



Product characteristics

Electrical design	PNP
Output function	normally open / normally closed; (selectable)
Sensing range [mm]	8
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 / 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]	8
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Accuracy / deviations

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

Interfaces

Communication interface	IO-Link
Transmission type	COM1 (4,8 kBaud)

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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, 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]	719	

Mechanical data

Weight [g]	128.8
Housing	threaded type
Mounting	flush mountable
Dimensions [mm]	M30 x 1.5 / L = 90
Thread designation	M30 x 1.5
Materials	housing, Nuts: stainless steel (316L/1.4404); housing: stainless steel (316L/1.4404); 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
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Remarks

Pack quantity	1 pcs.
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Electrical connection - plug

Connector: 1 x M12; coding: A; Contacts: 3



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Connection



4: OUT / IO-Link