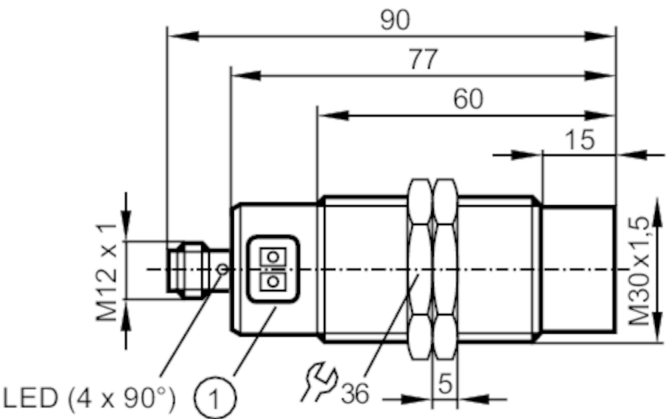




Capacitive sensor

KIA3150NFPKG/2T/US



1 programming buttons



Product characteristics	
Electrical design	PNP
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
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
Real sensing range Sr [mm]	15 ± 10 %
Accuracy / deviations	
Hysteresis [% of Sr]	10...25

KI5090



Capacitive sensor

KIA3150NFPKG/2T/US

Switch point drift	[% of Sr]	-20...20	
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]	719	
Mechanical data			
Weight	[g]	119.1	
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 (316L/1.4404); pushbuttons: TPE-U; cover: PBT; LED window: PEI		
Displays / operating elements			
Display	switching status	4 x 90° LED, yellow	
Teach function	yes		
Electronic lock	yes		
Accessories			
Items supplied	lock nuts: 2		
Remarks			
Pack quantity	1 pcs.		

KI5090

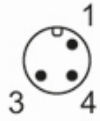


Capacitive sensor

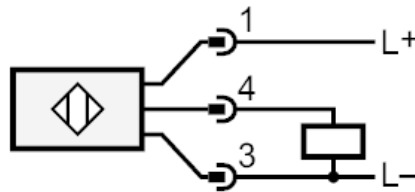
KIA3150NFPKG/2T/US

Electrical connection - plug

Connector: 1 x M12; coding: A



Connection



4: OUT / IO-Link