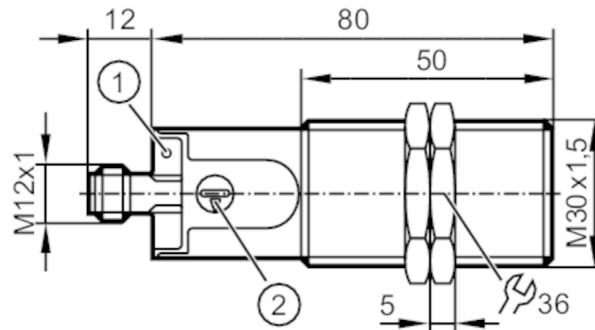


KI5311



Capacitive sensor

KI-3150QBPKG/SL/1P/US/IO



- 1 LED yellow switching status
2 potentiometer Sensing range



Product characteristics

Electrical design	PNP
Output function	normally open
Sensing range [mm]	0.5...24
Communication interface	IO-Link
Housing	threaded type
Dimensions [mm]	M30 x 1.5 / L = 92

Application

Medium temperature [°C]	-25...110
-------------------------	-----------

Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 22
Protection class	III
Reverse polarity protection	yes

Outputs

Electrical design	PNP
Output function	normally open
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	200
Switching frequency DC [Hz]	40
Short-circuit protection	yes
Overload protection	yes

Detection zone

Sensing range [mm]	0.5...24
Sensing range adjustable	yes
Factory setting sensing range [mm]	15
Real sensing range Sr [mm]	15 ± 10 %

KI5311



Capacitive sensor

KI-3150QBPKG/SL/1P/US/IO

Accuracy / deviations		
Hysteresis	[% of Sr]	1...15
Switch point drift	[% of Sr]	-15...15
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)
IO-Link revision		1.1
SDCI standard		IEC 61131-9
Profiles		Smart Sensor: Process Data Variable; Device Identification
SIO mode		yes
Required master port type		A
Min. process cycle time	[ms]	20
IO-Link functions (acyclical)		application specific tag; operating hours counter; normally open / normally closed (configurable); PNP / NPN (parametrierbar); Switch point setting; Hysteresis
Operating conditions		
Ambient temperature	[°C]	-25...80
Protection		IP 65; IP 67; IP 69K
Tests / approvals		
EMC	EN 61000-4-2	30 kV AD / 4 kV CD
	EN 61000-4-3	10 V/m
	EN 61000-4-4	2 kV
	EN 61000-4-6	10 V
	EN 55011	class B
Vibration resistance	DIN EN 60947-5-2	1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz
Shock resistance	DIN EN 60947-5-2	30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF	[years]	903.84
UL approval	UL Approval no.	D001
Mechanical data		
Weight	[g]	54.2
Housing		threaded type
Mounting		quasi flush
Dimensions	[mm]	M30 x 1.5 / L = 92
Thread designation		M30 x 1.5
Materials		PBT; PC; POM
Tightening torque	[Nm]	8
Displays / operating elements		
Display	switching status	1 x LED, yellow
Accessories		
Accessories (supplied)		lock nuts: 2
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Connector: 1 x M12		

KI5311

Capacitive sensor

KI-3150QBPKG/SL/1P/US/IO



Connection



4: OUT / IO-Link