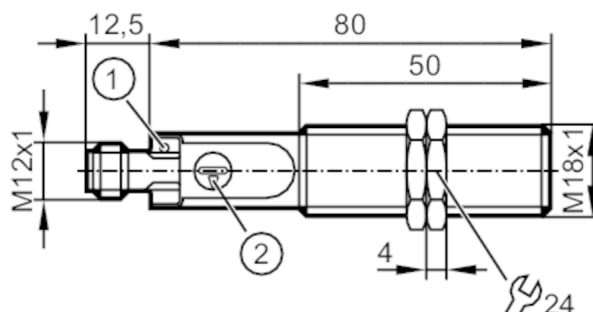


KG5311



Capacitive sensor

KG-3080QBPKG/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...9
Communication interface	IO-Link
Housing	Threaded type
Dimensions [mm]	M18 x 1 / L = 92.5

Application

Medium temperature [°C]	-25...110
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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]	30
Short-circuit protection	yes
Overload protection	yes

Monitoring range

Sensing range [mm]	0.5...9
Sensing range adjustable	yes
Factory setting sensing range [mm]	8
Real sensing range Sr [mm]	8 ± 10 %

Accuracy / deviations

Hysteresis [% of Sr]	1...15
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Capacitive sensor

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Switch-point drift	[% of Sr]	-15...15
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Interfaces

Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1	
SDCI standard	IEC 61131-9	
Profiles	Smart Sensor - SSP 0	Generic Profiled Sensor
	Function	Device identification
	Function	Multiple switching signal
	Function	Process data variable
	Function	Device diagnosis
SIO mode	yes	
Required master port class	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	
Supported DeviceIDs	Type of operation	DeviceID
	default	800

Operating conditions

Ambient temperature	[°C]	-25...80
Protection	IP 65; IP 67; IP 69K	

Tests / approvals

EMC	EN 61000-4-2	8 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, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance	DIN EN 60947-5-2	30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF	[years]	1204
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	D003
	File number UL	E174191

Mechanical data

Weight	[g]	26.1
Housing	Threaded type	
Mounting	quasi flush	
Dimensions	[mm]	M18 x 1 / L = 92.5
Thread designation	M18 x 1	
Material	PBT; PC; POM	
Tightening torque	[Nm]	8

Displays / operating elements

Display	Switching status	1 x LED, yellow
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Capacitive sensor

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Accessories	
Items supplied	lock nuts: 2
Remarks	
Pack quantity	1 pcs.
Electrical connection - plug	

Connector: 1 x M12; coding: A



Connection

4: OUT / IO-Link