

KG5305



Capacitive sensor

KG-3080QBPKG/SL/1P/IO



1 LED yellow switching status



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

Detection zone

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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Switch point drift	[% of Sr]	-10...10	
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]	1269	
UL approval	Ta	-25...60 °C	
	Enclosure type	Type 1	
	power supply	Limited Voltage/Current	
	UL Approval no.	D004	
	File number UL	E174191	
Mechanical data			
Weight	[g]	72.2	
Housing	threaded type		
Mounting	quasi flush		
Dimensions	[mm]	M18 x 1 / L = 92.5	
Thread designation	M18 x 1		
Materials	PBT; PC; POM		
Tightening torque	[Nm]	8	
Displays / operating elements			
Display	switching status	1 x LED, yellow	
Accessories			
Items supplied	lock nuts: 2		
Remarks			
Pack quantity	1 pcs.		

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Electrical connection

Cable: 2 m, PUR, Ø 4 mm; 3 x 0.34 mm²

Connection



BK: OUT / IO-Link
Core colours :
BK = black
BN = brown
BU = blue