

KG5302



Capacitive sensor

KG-3150NBNKG/SL/1P/IO



1 LED yellow Switching status



Product characteristics

Electrical design	NPN
Output function	normally closed
Sensing range [mm]	0.5...30
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	NPN
Output function	normally closed
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...30
Sensing range adjustable	yes
Factory setting sensing range [mm]	15
Real sensing range Sr [mm]	15 ± 10 %

Accuracy / deviations

Hysteresis [% of Sr]	1...15
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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 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	
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, 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]	1269
UL approval	Ta	-25...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	UL approval number	D004
	File number UL	E174191
Mechanical data		
Weight	[g]	71.1
Housing	Threaded type	
Mounting	non-flush mountable	
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
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 colors :
BK = black
BN = brown
BU = blue