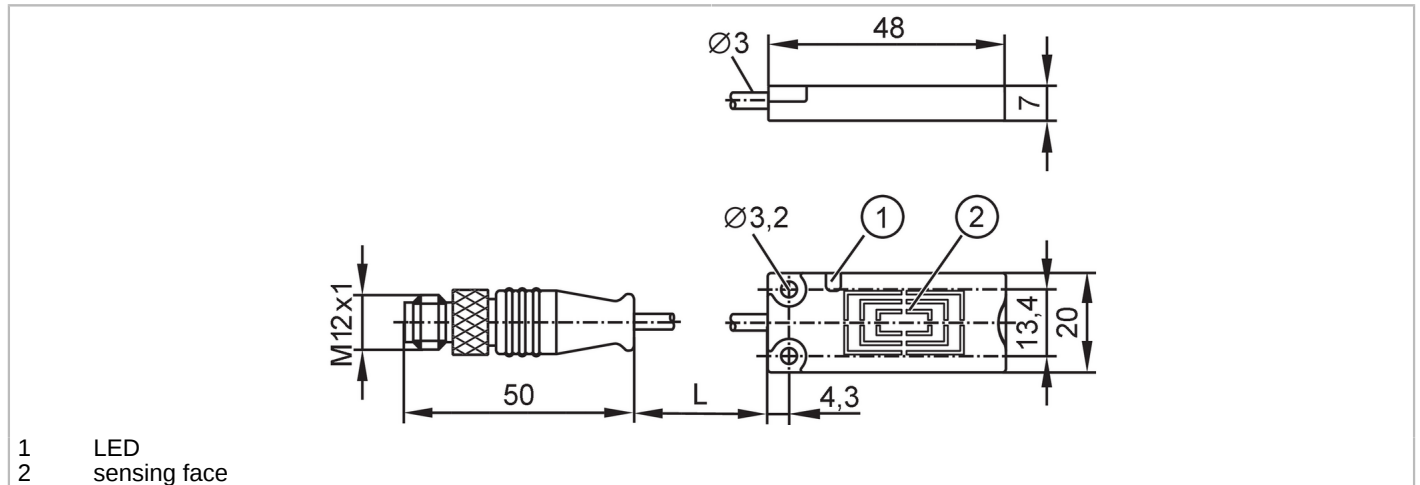


KQ5101



Capacitive sensor

KQ-3120NFPKG/0,1M/US



Product characteristics		
Electrical design		PNP
Output function		normally open / closed; (selectable)
Sensing range	[mm]	12
Communication interface		IO-Link
Housing		rectangular
Dimensions	[mm]	20 x 7 x 48
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 17
Protection class		III
Reverse polarity protection		yes
Measuring principle		capacitive
Outputs		
Electrical design		PNP
Output function		normally open / 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 protection		yes
Overload protection		yes
Monitoring range		
Sensing range	[mm]	12
Real sensing range Sr	[mm]	12 ± 10 %
Accuracy / deviations		
Hysteresis	[% of Sr]	1...15
Switch-point drift	[% of Sr]	-20...20

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Software / programming		
Parameter setting options	only via IO-Link	
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 - SSP 0	Generic Profiled Sensor
	Function	Multiple switching signal
	Function	Process data variable
	Function	Teach channel
SIO mode	yes	
Min. process cycle time [ms]	100.8	
Supported DeviceIDs	Type of operation	DeviceID
	default	371
Operating conditions		
Ambient temperature [°C]	-25...80	
Note on ambient temperature	for UL application: ...50 °C	
Protection	IP 65; IP 67; IP 69K	
Tests / approvals		
EMC	EN 61000-4-2	8 kV AD
	EN 61000-4-3	10 V/m
	EN 61000-4-4	2 kV
	EN 61000-4-6	3 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	(10...55 Hz) / 1 mm amplitude, vibration duration 5 min., 30 min. per axis with resonance or 55 Hz
Shock resistance	EN 60068-2-27 Ea	30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF [years]	771	
UL approval	Ta	-25...50 °C
	Enclosure type	Type 1
	voltage supply	Class 2
Mechanical data		
Weight [g]	27.4	
Housing	rectangular	
Mounting	non-flush mountable	
Dimensions [mm]	20 x 7 x 48	
Material	PBT; TPE-U; stainless steel	
Displays / operating elements		
Display	Switching status	1 x LED, yellow
Remarks		
Pack quantity	1 pcs.	

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Capacitive sensor

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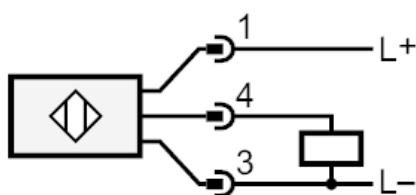
Electrical connection - plug

Cable: 0.1 m, PUR, Ø 2.9 mm

Connector: 1 x M12; coding: A; Contacts: 3



Connection



4: OUT / IO-Link