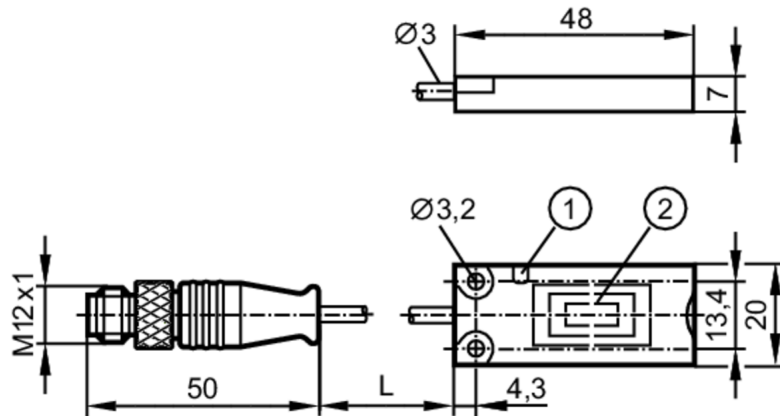


# KQ5101



## Capacitive sensor

KQ-3120NFPKG/0,1M/US



- 1 LED
- 2 Sensing face



### Product characteristics

Electrical design	PNP
Output function	normally open / normally 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; ("supply class 2" according to UL)
Current consumption [mA]	< 17
Protection class	III
Reverse polarity protection	yes

### Outputs

Electrical design	PNP
Output function	normally open / normally 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

### Detection zone

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

# KQ5101



## Capacitive sensor

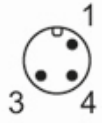
KQ-3120NFPKG/0,1M/US

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
IO-Link device ID		371d / 000173h
Profiles		Smart Sensor
SIO mode		yes
Operating conditions		
Ambient temperature	[°C]	-25...80
Note on ambient temperature		for UL application: ...50 °C
Protection		IP 65; IP 67
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, oscillation period 5 min., 30 min. per axis at 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
Mechanical data		
Weight	[g]	27.5
Housing		rectangular
Mounting		non-flush mountable
Dimensions	[mm]	20 x 7 x 48
Materials		PBT; TPE-U; stainless steel
Displays / operating elements		
Display	switching status	1 x LED, yellow
Remarks		
Pack quantity		1 pcs.
Electrical connection - plug		
Cable: 0.1 m, PUR, Ø 2.9 mm		
Connector: 1 x M12		

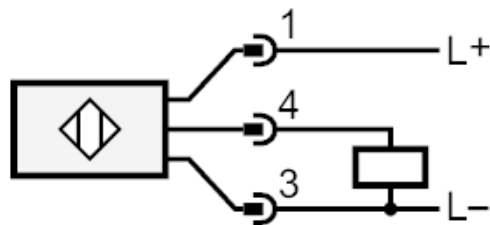
# KQ5101

## Capacitive sensor

KQ-3120NFPKG/0,1M/US



### Connection



4: OUT / IO-Link