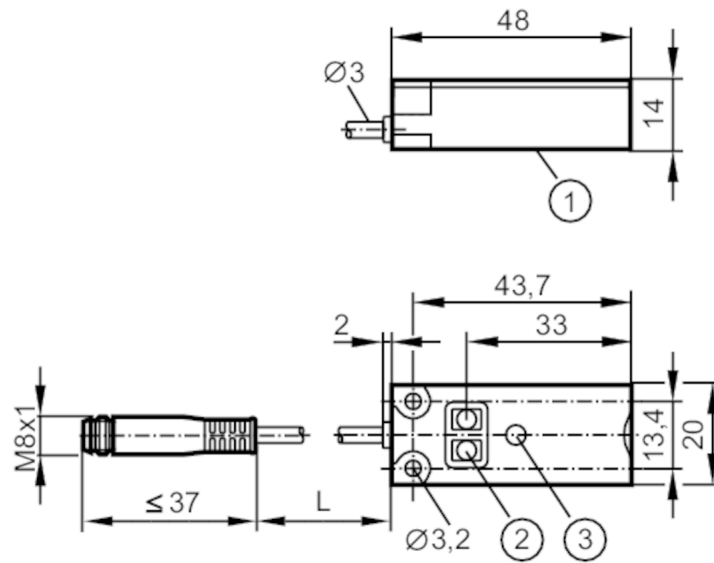


# KQ6003



## Capacitive sensor

KQ-3120NFAKG/2T/0,04M/AS



- 1 Sensing face
- 2 programming buttons
- 3 LED



### Product characteristics

Electrical design	PNP/NPN; (automatic load detection PNP/NPN)
Output function	normally open / normally closed; (selectable)
Sensing range [mm]	12
Communication interface	IO-Link
Housing	rectangular
Dimensions [mm]	20 x 14 x 48

### Application

Installation	detection through non-metallic container wall or on bypass pipes
Media	dry bulk material; liquids

### Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 17
Protection class	III
Reverse polarity protection	yes

# KQ6003



## Capacitive sensor

KQ-3120NFAKG/2T/0,04M/AS

Outputs		
Electrical design	PNP/NPN; (automatic load detection PNP/NPN)	
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	
Type of short-circuit protection	pulsed	
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	
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	
Min. process cycle time [ms]	100.8	
Operating conditions		
Ambient temperature [°C]	-25...80	
Protection	IP 65; IP 67	
Tests / approvals		
EMC	EN 61000-4-2 ESD	8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	3 V
Shock resistance	EN 55011	class B
	EN 60068-2-27	30 g 6 shocks / 11 ms half-sine (x, y, z)
Vibration resistance	EN 60068-2-6	(10...55 Hz) / 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz
MTTF [years]	623	

# KQ6003



## Capacitive sensor

KQ-3120NFAKG/2T/0,04M/AS

Mechanical data	
Weight [g]	25
Housing	rectangular
Mounting	non-flush mountable
Dimensions [mm]	20 x 14 x 48
Materials	housing: PBT glass fibre reinforced; pushbuttons: TPE-U; cover: PC glass fibre reinforced

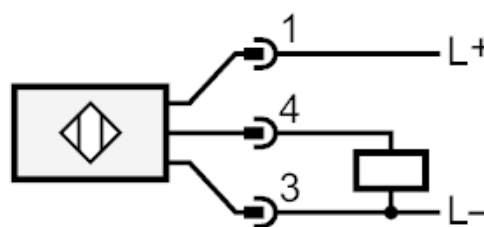
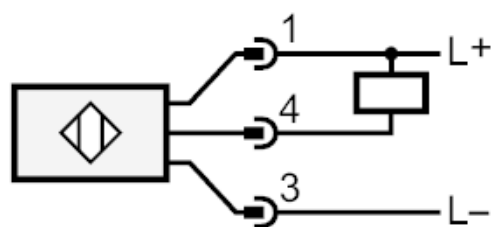
Displays / operating elements	
Display	switching status 1 x LED, yellow
Teach function	yes
Electronic lock	yes

Remarks	
Pack quantity	1 pcs.

### Electrical connection - plug

Cable: 0.04 m, PVC

Connector: 1 x M8



4: OUT / IO-Link  
automatic load detection PNP/NPN  
when using a resistive load < 20 kΩ