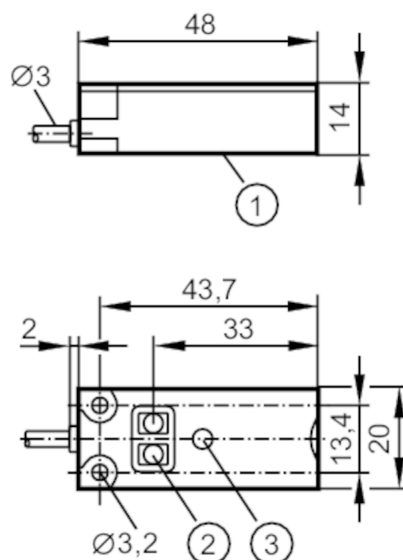


KQ6006

Capacitive sensor

KQ-3120NFKG/2T



- 1 Sensing face
- 2 programming buttons
- 3 LED



Product characteristics

Electrical design	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
Measuring principle	capacitive



Capacitive sensor

KQ-3120NFNKG/2T

Outputs		
Electrical design	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	
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	
Profiles	Smart Sensor	
SIO mode	yes	
Supported DeviceIDs	Type of operation	DeviceID
	Default	371
Operating conditions		
Ambient temperature [°C]	-25...80	
Protection	IP 65; IP 67; IP 69K	
Tests / approvals		
EMC	EN 61000-4-2	4 kV CD / 8 kV AD
	EN 61000-4-3	3 V/m
	EN 61000-4-4	2 kV
	EN 61000-4-6	3 ms
	EN 55011	class B
Vibration resistance		(10...55 Hz) / 1 mm amplitude, oscillation period 5 min., 30 min. per axis at resonance or 55 Hz
Shock resistance		30 g 6 shocks / 11 ms half-sine (x, y, z)
MTTF [years]	623	
UL approval	Ta	-25...80 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current

KQ6006



Capacitive sensor

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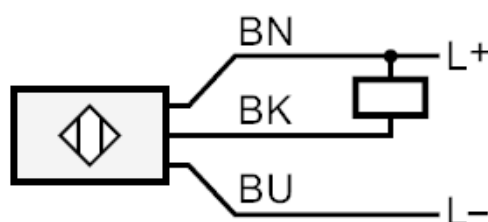
Mechanical data		
Weight	[g]	46.5
Housing		rectangular
Mounting		non-flush mountable
Dimensions	[mm]	20 x 14 x 48
Materials		housing: PBT glass fibre reinforced; pushbuttons: TPE-U; cover: PC glass fibre reinforced

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

Remarks	
Pack quantity	1 pcs.

Electrical connection	
Cable: 2 m, PVC; 3 x 0.14 mm ²	

Connection



BK: OUT / IO-Link

Core colours :

BK = black

BN = brown

BU = blue