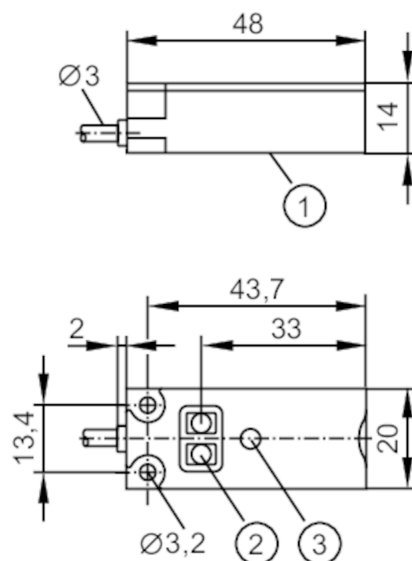


KQ6006

Capacitive sensor

KQ-3120NFNKG/2T



- 1 sensing face
- 2 Programming buttons
- 3 LED



Product characteristics

Electrical design	NPN
Output function	normally open / 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

Outputs

Electrical design	NPN
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

KQ6006



Capacitive sensor

KQ-3120NFKG/2T

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	
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, vibration duration 5 min., 30 min. per axis with 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	
Mechanical data			
Weight	[g]	46.5	
Housing	rectangular		
Mounting	non-flush mountable		
Dimensions	[mm]	20 x 14 x 48	
Material	housing: PBT reinforced glass-fiber; Pushbuttons: TPE-U; cover: PC reinforced glass-fiber		
Displays / operating elements			
Display	Switching status	1 x LED, yellow	
Teach function	yes		
Electronic lock	yes		
Remarks			
Pack quantity	1 pcs.		

KQ6006



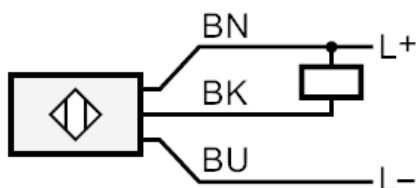
Capacitive sensor

KQ-3120NFKG/2T

Electrical connection

Cable: 2 m, PVC; 3 x 0.14 mm²

Connection



BK: OUT / IO-Link
Core colors :
BK = black
BN = brown
BU = blue