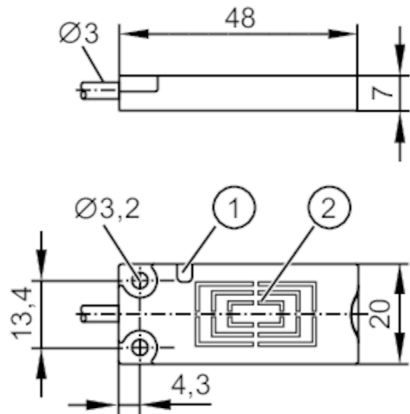


KQ5100



Capacitive sensor

KQ-3120NFPKG



- 1 LED
- 2 sensing face



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

KQ5100



Capacitive sensor

KQ-3120NFPKG

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 default DeviceID 371
Operating conditions		
Ambient temperature [°C]		-40...80
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...80 °C
	Enclosure type	Type 1
	voltage supply	Class 2
Mechanical data		
Weight [g]		36.7
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.

KQ5100



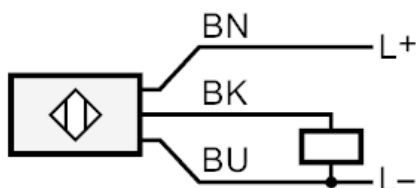
Capacitive sensor

KQ-3120NFPKG

Electrical connection

Cable: 2 m, PUR; 3 x 0.14 mm²

Connection



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