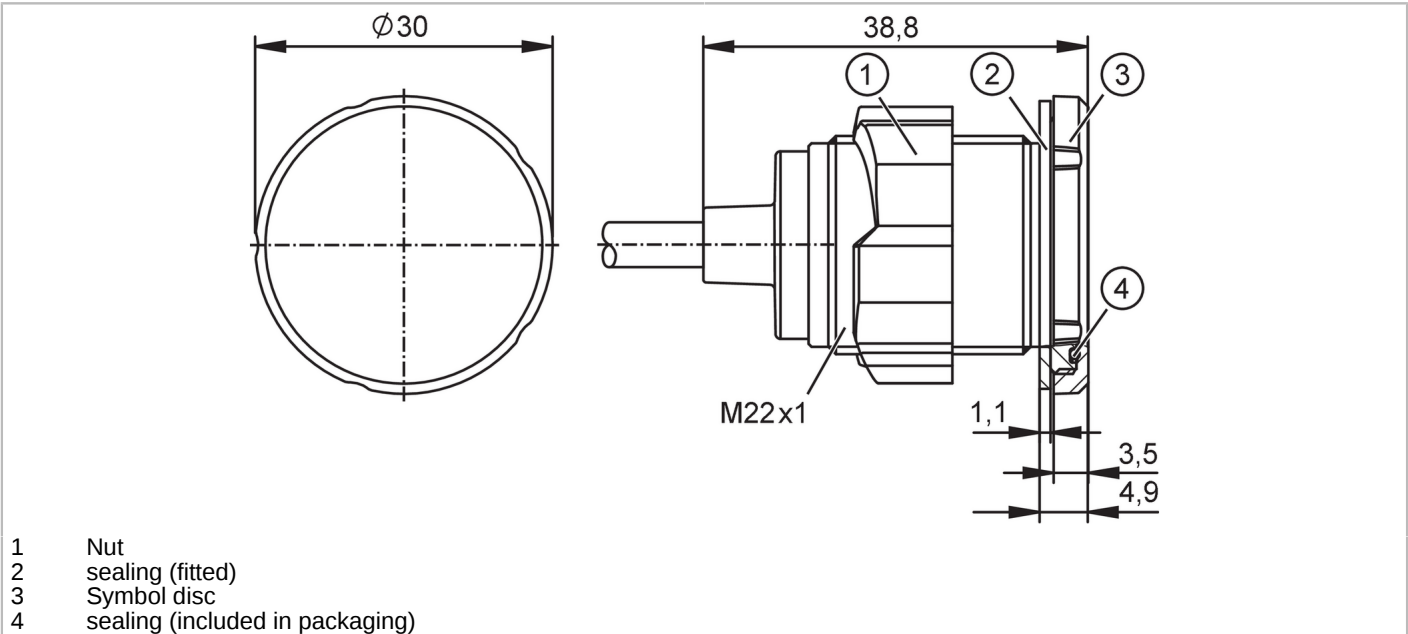




Capacitive touch sensor

KTEEFOKMMFRKG/2M/IO



Product characteristics	
Electrical design	PNP/NPN; (configurable)
Output function	normally open / closed; (configurable)
Communication interface	IO-Link
Housing	Threaded type
Dimensions [mm]	M22 x 1 / L = 38.8
Application	
Principle of operation	dynamic; static; Bistable; combination; (configurable)
Electrical data	
Operating voltage [V]	8...32 DC
Protection class	III
Reverse polarity protection	yes
Current consumption	< 7,2 mA; (LED off: Ub = 24 V)
	< 125 mA; (LED white, max. brightness: Ub = 8 V)
	< 79 mA; (LED white, max. brightness: Ub = 12 V)
	< 43 mA; (LED white, max. brightness: Ub = 24 V)
	< 35 mA; (LED white, max. brightness : Ub = 32 V)
Inputs	
Total number of inputs	2
Switching level high [V]	> 19.2; (at 24 V safely on : Voltage >= Ub*0,8)
Switching level low [V]	< 4.8; (at 24V safely off : Voltage <= Ub*0,2)
Inputs	according to the standard IEC 61131-2 (Typ 3)
Outputs	
Electrical design	PNP/NPN; (configurable)
Output function	normally open / closed; (configurable)
Max. voltage drop switching output DC [V]	1.5



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Permanent current rating of switching output DC [mA]	200
Short-circuit protection	yes
Overload protection	yes

Reaction times

Response time [ms]	64
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Software / programming

Parameter setting options	normally open / closed; PNP/NPN; static; dynamic; Bistable; combination; Switch-on and switch-off delay; brightness; sensitivity; Operating conditions
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Interfaces

Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1.3	
Profiles	Smart Sensor - SSP 1.1	Fixed Switching Sensor
	Common - I&D	Identification and Diagnosis
	Extension	Sensor Control Wide
	Function	Locator
	Function	ProductURI
Min. process cycle time [ms]	13.2	
Supported DeviceIDs	Type of operation	DeviceID
	default	1559

Operating conditions

Ambient temperature [°C]	-30...65
Protection	IP 65; IP 67; (IP 69K on the front)

Tests / approvals

EMC	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m / 3 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
	IEC 61000-6-3, EN 55011	(Class B)
	IEC 61000-4-5 Surge	1 kV (L+ to L- , 42 Ω, 0,5 μF) / 0,5 kV (all cables to L- , 42 Ω, 0,5 μF)
Vibration resistance	EN 60068-2-6 Fc	20 g (10...3000 Hz) / 50 sweep cycles per frequency; 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	50 g 11 ms half-sine; 20 shocks each in every direction of the 3 coordinate axes
Continuous shock resistance	EN 60068-2-29 Eb	40 g 6 ms half-sine; 8000 shocks each in every direction of the 3 coordinate axes
MTTF [years]	218	

Mechanical data

Weight [g]	109.5
Housing	Threaded type
Dimensions [mm]	M22 x 1 / L = 38.8
Thread designation	M22 x 1
Material	housing: PA; lock nut: PBT; Symbol disc: PA; Gasket: NR

Displays / operating elements

Display	Power	LED, RGB configurable
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KTE102



Capacitive touch sensor

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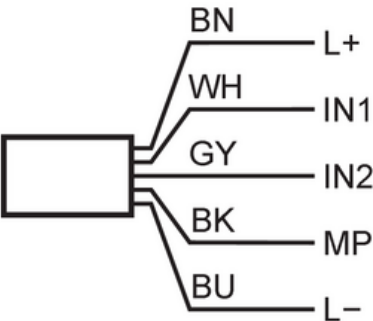
Accessories	
Items supplied	lock nuts: 1 x M22
	transparent symbol disc: 1
	symbol sticker: 1
	Gasket: 1
	O-ring: 1
Accessories (optional)	Symbol disc

Remarks	
Pack quantity	1 pcs.

Electrical connection

Cable: 2 m, PUR, Ø 4.9 mm; 5 x 0.34 mm²

Connection



BN :	brown
WH :	white
GY :	grey
BK:	black
BU:	blue

BN	L+	
WH	IN1	
GY	IN2	
BK	MP	DO (NO/NC), IO-Link
BU	L-	

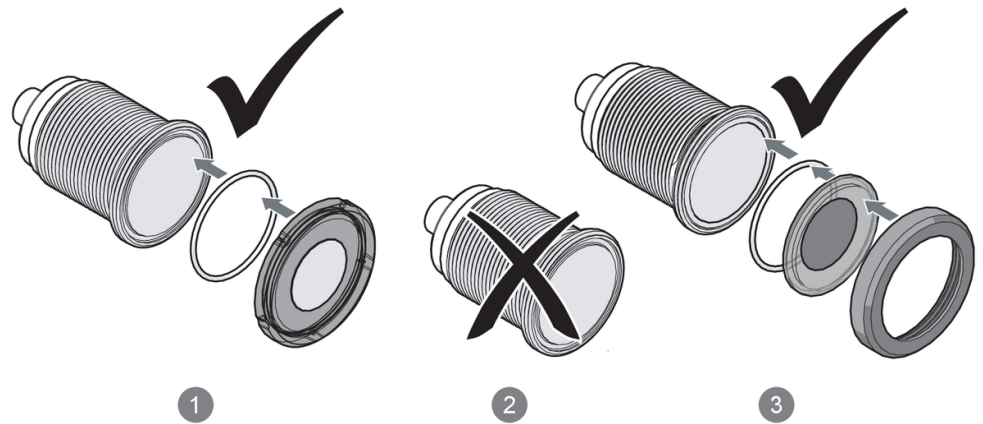
MP: multifunctional input; DO: digital output; NO: normally open; NC: normally closed

Capacitive touch sensor

KTEEFOKMMFRKG/2M/IO

Diagrams and graphs

application note relevant for the function



function
only
ensured
with
symbol
disc
(can
be
ordered
separately)

1. function ensured with plastic disc
2. function not ensured without disc
3. function ensured with stainless steel disc