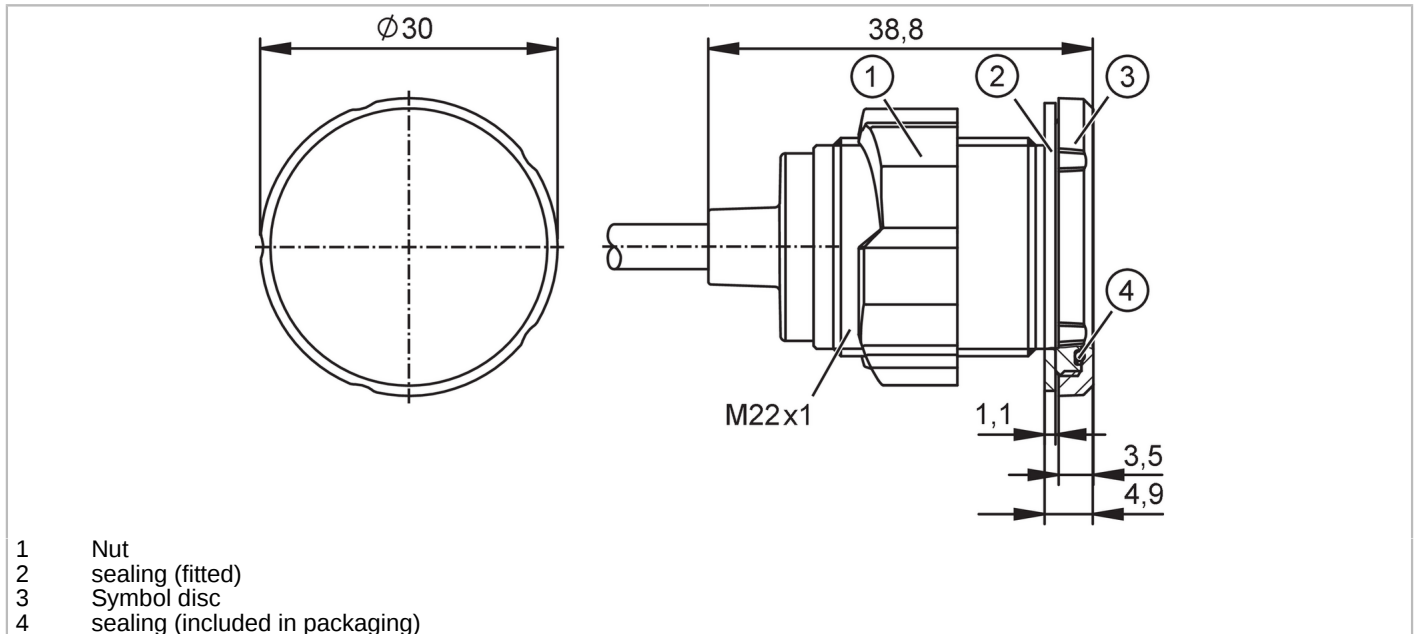


# KTE111



## 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; (Factory setting, configurable)
UV resistant	yes
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)

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Max. voltage drop switching output DC	[V]	1.5
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	<b>Type of operation</b>	<b>DeviceID</b>
	default	1918

### 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

### Mechanical data

Weight	[g]	108
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

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### Displays / operating elements

Display	Switching status	LED, red
	Power	LED, green

### Accessories

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

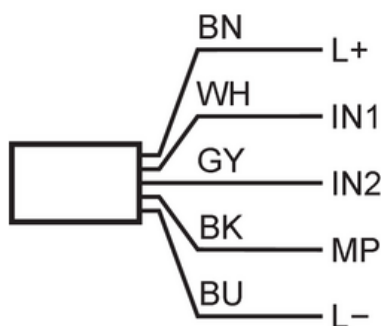
### Remarks

Pack quantity	1 pcs.
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### Electrical connection

Cable: 2 m, PUR, Ø 4.9 mm; 5 x 0.34 mm<sup>2</sup>

### 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

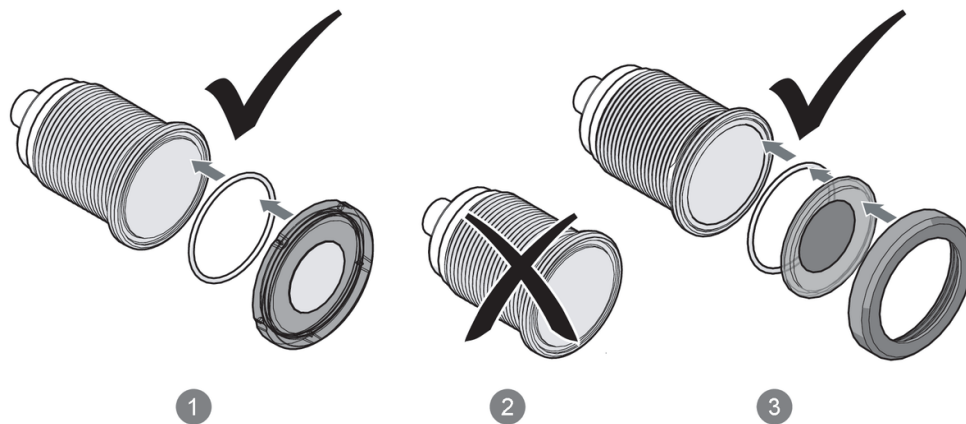


## Capacitive touch sensor

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