

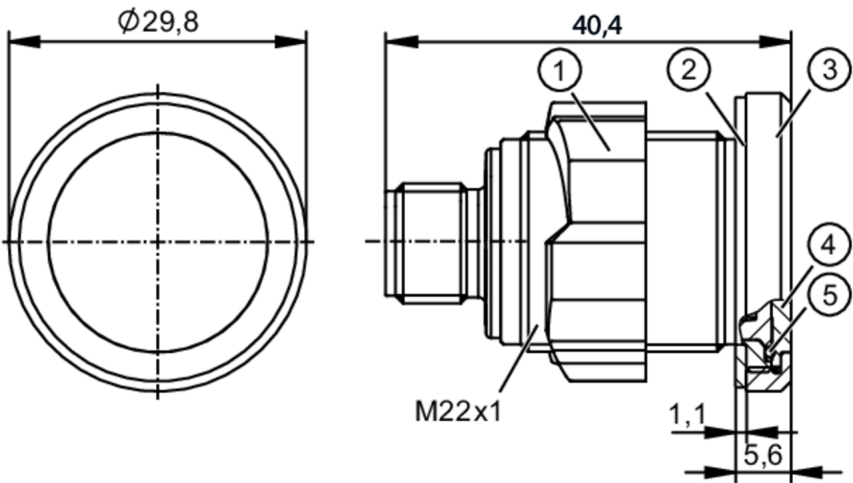
KTE301



Capacitive touch sensor

KTEEFOEMMFRKG/US/IO

FDA compliance only in conjunction with the FDA-compliant E12840 seal



- 1 Nut (included in packaging)
- 2 sealing (fitted)
- 3,4,5 Symbol disc + sealing (optionally mounted)



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 = 40.4
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 = 24V)
	< 125 mA; (LED white, max. brightness: Ub = 8V)
	< 79 mA; (LED white, max. brightness: Ub = 12V)
	< 43 mA; (LED white, max. brightness: Ub = 24V)
	< 35 mA; (LED white, max. brightness : Ub = 32V)
Inputs	
Total number of inputs	2
Switching level high [V]	< 4.8; (at 24V safely off : Voltage <= Ub*0,2)
Switching level low [V]	> 19.2; (at 24V safely on : Voltage >= Ub*0,8)
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

Software / programming		
Parameter setting options	normally open / closed; PnP/nPn; static; dynamic; Bistable; combination; Switch-on and switch-off delay; brightness; Sensitivität; Operating conditions	

Interfaces		
Communication interface	IO-Link	
Transmission type	COM2 (38,4 kBaud)	
IO-Link revision	1.1.3	
Profiles	Function class	Description
	0x0002	Fixed Switching Sensor
	0x4000	Identification and Diagnosis
	0x8101	Locator
	0x8102	ProductURI
	0x800C	Sensor Control
Min. process cycle time	[ms]	13.2

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
UL approval	Ta	-30...60 °C
	Enclosure type	Type 1
	voltage supply	Limited Voltage/Current
	File number UL	E174191

Mechanical data		
Weight	[g]	58.1
Housing	Threaded type	

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Dimensions	[mm]	M22 x 1 / L = 40.4
Thread designation		M22 x 1
Material		housing: stainless steel; lock nut: PBT

Displays / operating elements

Display	Power	LED, RGB configurable
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Accessories

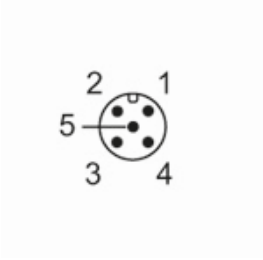
Items supplied	lock nuts: 1
Accessory required	Symbol disc

Remarks

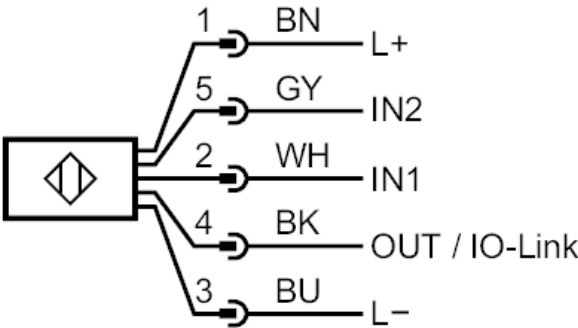
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A



Connection



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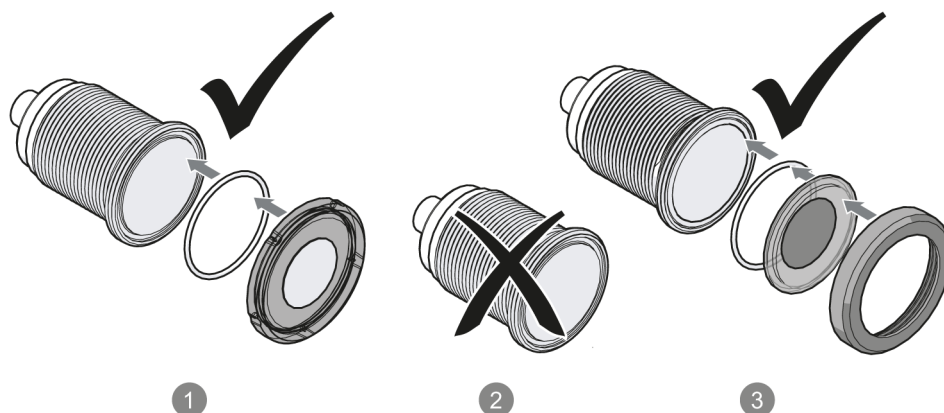
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Diagrams and graphs

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