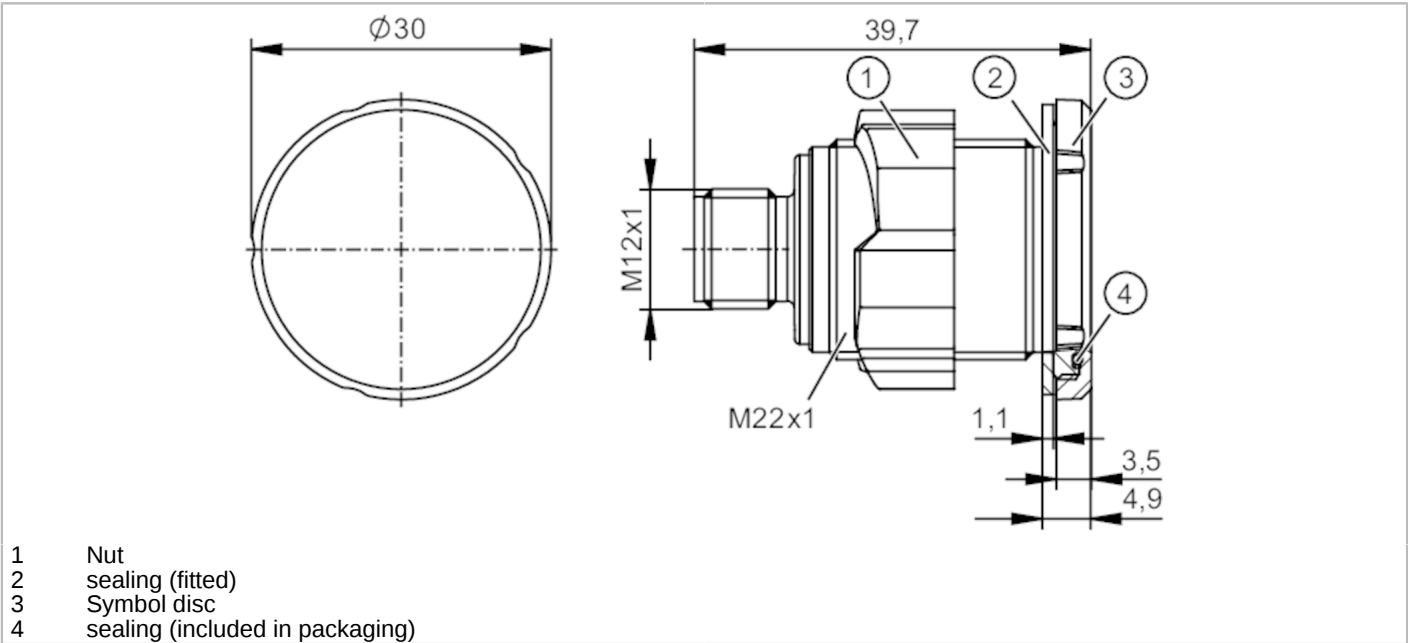




Capacitive touch sensor

KTEEFM6MMFRKG/US/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 = 39.7
Application		
Principle of operation		static; (Factory setting, 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)



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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; sensitivity; Operating conditions	
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
		Function	Locator
		Function	ProductURI
		Extension	Sensor control
Min. process cycle time	[ms]	13.2	
Supported DeviceIDs		Type of operation	DeviceID
		default	1917
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]	48.4	
Housing		Threaded type	
Dimensions	[mm]	M22 x 1 / L = 39.7	
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

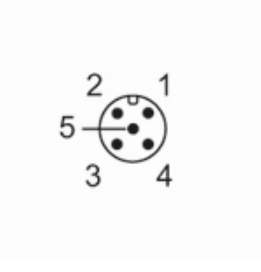
Items supplied	lock nuts: 1 x M22
	transparent symbol disc: 1
	symbol sticker: 1
	Gasket: 1
	O-ring: 1
Accessories (optional)	Symbol disc

Remarks

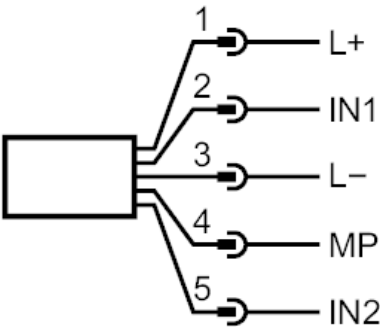
Pack quantity	1 pcs.
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Electrical connection

Connector: 1 x M12; coding: A



Connection



1	L+	
2	IN1	
3	L-	
4	MP	DO (NO/NC), IO-Link
5	IN2	

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

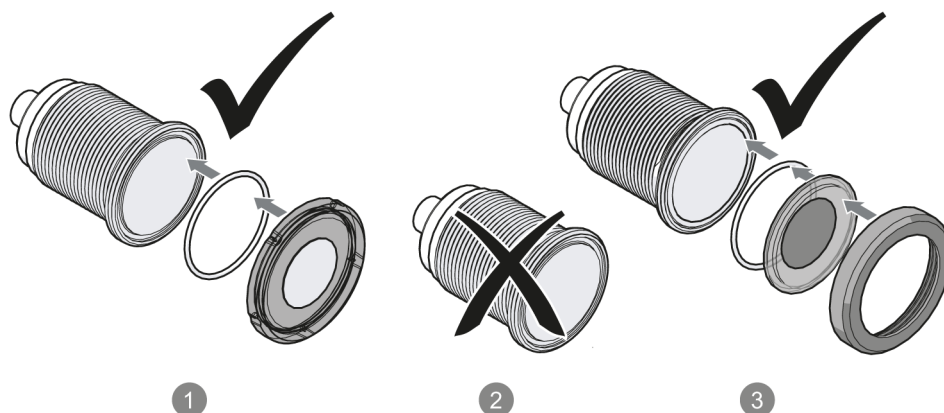


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Diagrams and graphs

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