

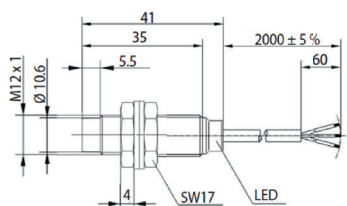
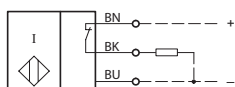
## Inductive Proximity Switch

### Series M12


Description **KIN-M12PÖ/004-KL2VI**

Article number **6532704001**

#### Wiring Diagram



#### Identifying characteristics in accordance with EN 60947-5-2

Electrical data		
Sensor operation (delivery status)		
Rated operating distance	$S_n$	4 mm
Standard target		12 mm x 12 mm, t = 1 mm, material: FE360
Real sensing distance	$S_r$	3,6 ... 4,4 mm
Assured operating distance	$S_a$	0 ... 3,2 mm
Switching element function		DC, N.C.
Repeat accuracy	R	≤ 5 %
Differential travel (hysteresis)	H	≈ 8 %
Rated operational voltage	$U_e$	12 - 24 V DC
Operational voltage range	$U_B$	10 - 30 V DC
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	≤ 2 V specification
Utilization category		DC 13
Rated operational current	$I_e$	200 mA ± 10 %
Minimum operating current	$I_m$	1 mA
Off-state current	$I_r$	< 0,1 mA
No-load supply current	$I_o$	< 10 mA
Switching element		permanent overload and s.c.p.
Short-circuit protection		pulsed, current-limited and thermal
Frequency of operating cycles	f	450 Hz
Mounting		non flush
False polarity protection		yes
Time delay before availability	$t_v$	< 300 ms
<b>IO-Link operation</b>  <b>IO-Link</b>		
Rated operating voltage range	$U_B$	18 - 30 V DC (typ. 24 V DC)
Output		IO-Link
Switching element function		N.O. / N.C. parameterizable
Repeat accuracy	R	≤ 5 % from the end value, $U_B$ and temperature at a constant level
No-load supply current	$I_o$	< 15 mA
Serial output		Short-circuit proof
False polarity protection		yes

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Technical modifications and errors excepted.

The technical datasheet corresponds to the technical state as of 2020-03-24 and will not be removed in case of changes.

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IO-Link specification		
IO-Link Spec V 1.1	compliant (yellow LED)	
Speed	COM 2	38,4 kBaud
Process data Device→Master	8 bit	
cycle time	10 ms	

Mechanical Data		
Front cap	LCP, black	
Enclosure	brass, nickel plated	
End cap	PA12, transparent	
Temperature range	- 20 °C ... + 70 °C (cable not fixed mounted) - 25 °C ... + 70 °C (cable fixed mounted)	
Type of protection	IP67 / NEMA Type 1	
Function indication	LED, yellow	
Degree of pollution	3 (Pollution of the sensing surface may decrease operating distance)	
Termination type	Cable 3 x 0,14 mm <sup>2</sup> x 2 m ±5 %, PUR - Outer jacket, black	
For attachment	2 x hexagon nut (tightening torque ≤ 10 Nm) and 2 x toothed washer	

Product reliability (in acc. with DIN EN 61709 (SN 29500))	
MTTF (at 40 °C)	>1150 years

EU Conformity	
	acc. to directive 2014/30/EU (EMC-Directive)

Approvals	
	

Notes	
To be used with a class 2 power supply according to UL approval.	
Further data and information can be found at <a href="http://www.bernstein.eu">www.bernstein.eu</a> .	