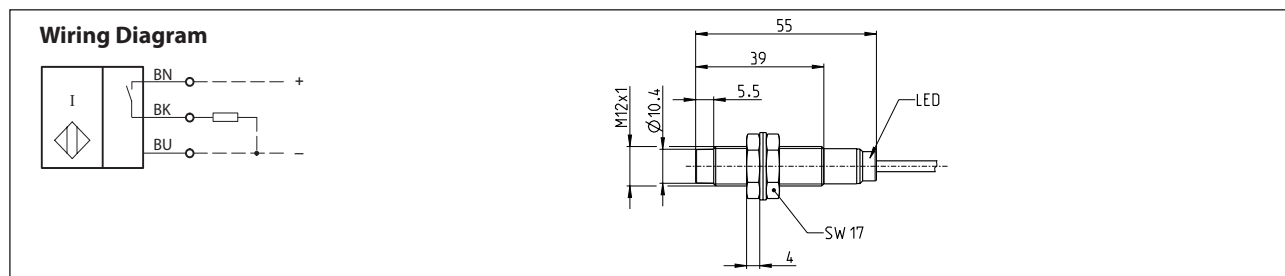



## Inductive Proximity Switch Series M12

Description **KIN-M12PS/004-KL2I**

Article number **6602904079**



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

Electrical data		
<b>Sensor operation (delivery status)</b>		
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.O.
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	1000 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


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

Electromagnetic compatibility (EMC)	
Sensor operation	
Electromagnetic field test	IEC 61000-4-3
Electrostatic discharge test	IEC 61000-4-2
Electrical fast transient immunity test	IEC 61000-4-4
Radiated disturbance field strength	EN 55011
IO-Link operation	
	acc. to EN 60947-5-7, EN 61131-9

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> .	