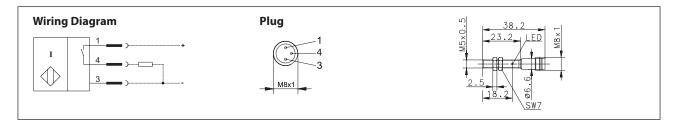


# **Inductive Proximity Switch**

Series M05

### Description KIB-M05PS/001-KLSM8I Article number 6532999003



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

Electrical data		
Sensor operation (delivery status)		
Rated operating distance	S <sub>n</sub>	1 mm
Standard target		5 mm x 5 mm, t = 1 mm, material: FE360
Real sensing distance	S <sub>r</sub>	0,90 1,10 mm
Assured operating distance	Sa	0 0,8 mm
Switching element function		DC, N.O.
Repeat accuracy	R	≤ 5 %
Differential travel (hysteresis)	Н	≈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 <sub>d</sub>	≤ 2 V specification
Utilization category		DC 13
Rated operational current	l <sub>e</sub>	200 mA ±10 %
Minimum operating current	I <sub>m</sub>	1 mA
Off-state current	l <sub>r</sub>	< 0,1 mA
No-load supply current	l <sub>o</sub>	< 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		flush
False polarity protection		yes
Time delay before availability	$t_v$	< 300 ms
IO-Link operation		<b>⊘ IO-</b> Link
Rated operating voltage range	$U_{\scriptscriptstyle B}$	18 – 30 V DC (typ. 24 V DC)
Output		IO-Link
Switching element function		N.O. / N.C. parameterizable
Repeat accuracy	R	$\leq$ 5 % from the end value, U <sub>B</sub> and temperature at a constant level
No-load supply current	$I_0$	< 15 mA
Serial output		Short-circuit proof
False polarity protection		yes

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## **Technical Data**



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
Ambient air temperature	-25 °C +70 °C
Type of protection	IP67 / NEMA Type 1 (only in fully locked position with it's plugs)
Function indication	LED, yellow
Degree of pollution	3 (Pollution of the sensing surface may decrease operating distance)
Termination type	plug socket M8x1
For attachment	2 x hexagon nut (tightening torque ≤ 1,5 Nm)

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		
	c UL us	

#### Notes

To be used with a class 2 power suppy according to UL approval.

Further data and information can be found at www.bernstein.eu.