

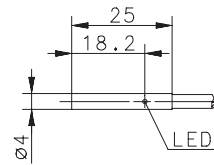
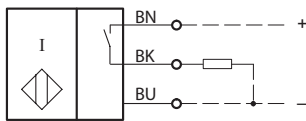
## Inductive Proximity Switch

### Series D04


Description **KIB-D04PS/001-KL2I**

Article number **6532999001**

#### Wiring Diagram



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


Electrical data		
<b>Sensor operation (delivery status)</b>		
Rated operating distance	$S_n$	1 mm
Standard target		4 mm x 4 mm, t = 1 mm, material: FE360
Real sensing distance	$S_r$	0,90 ... 1,10 mm
Assured operating distance	$S_a$	0 ... 0,8 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		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

Mechanical Data	
Front cap	LCP, black
Enclosure	stainless steel (Niro 1.4401)
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

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> .	