

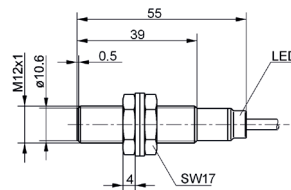
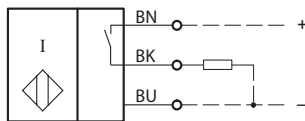
## Inductive Proximity Switch

Series M12  $\text{Ex}$

Description **KIB-M12PS/002-KL2D**

Article number **6522903022**

### Wiring Diagram




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

Electrical data		
<b>Sensor operation (delivery status)</b>		
Rated operating distance	$S_n$	2 mm
Standard target		12 mm x 12 mm, t = 1 mm, material: FE360
Real sensing distance	$S_r$	1,8 ... 2,2 mm
Assured operating distance	$S_a$	0 ... 1,6 mm
Switching element function		DC, N.O.
Repeat accuracy	R	$\leq 5 \%$
Differential travel (hysteresis)	H	$\approx 8 \%$
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	$U_d$	$\leq 2$ V specification
Utilization category		DC 13
Rated operational current	$I_e$	200 mA $\pm 10 \%$
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	800 Hz
Mounting		flush
False polarity protection		yes
Time delay before availability	$t_v$	$< 300$ ms

Mechanical Data	
Front cap	LCP, black
Enclosure	brass, nickel plated
End cap	PA12, transparent
Ambient temperature range	- 20 °C ... + 60 °C
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)
	acc. to directive 2014/34/EU (ATEX Directive)

Approvals	
	

Label	
ATEX	II 2 D Ex tb IIIC T100°C Db

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