

# Technical Data

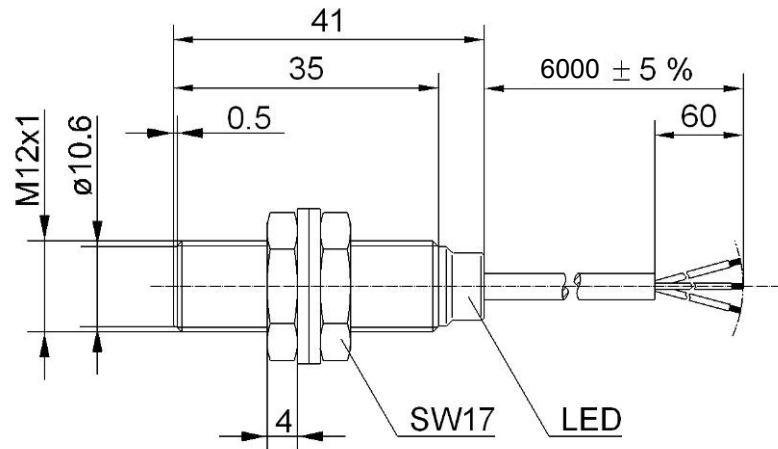
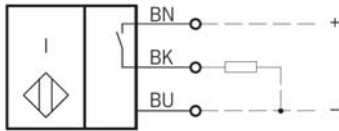
## Inductive Proximity Switch

### Series M12

Description **KIB-M12PS/002-KL6V**

Article number **6502903017**

#### Wiring Diagram



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

Electrical data		
Rated operating distance	$S_n$	2 mm
Standard target		12 mm x 12 mm, t = 1 mm, Material: FE360
Effective operating 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	≤ 5 %
Differential travel (hysteresis)	H	≈ 10 %
Rated operational voltage	$U_e$	12 – 24 V DC
Operational voltage range	$U_B$	10 – 36 V DC
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	≤ 1,5 V
Utilization category		DC 13
Rated operational current	$I_e$	≤ 200 mA
Minimum operational current	$I_m$	≤ 1 mA
Off-state current	$I_r$	< 0,1 mA
No-load supply current	$I_o$	≤ 11 mA
Switching element		Permanent overload and s.c.p.
Short-circuit protection		pulsed
Frequency of operating cycles	f	800 Hz
Rated supply frequency		DC
Mounting		flush
False polarity protection		yes
Time delay before availability	$t_v$	≤ 50 ms

#### Electromagnetic compatibility (EMC)

Electromagnetic field test	IEC 61000-4-3
Electrostatic discharge test	IEC 61000-4-2
Electrical fast transient immunity test (Burst)	IEC 61000-4-4
Radiated disturbance field strength	EN 55011

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### Mechanical Data

Front cap	PA6.6, black
Enclosure	Brass, nickel plated
End cap	PA 12, transparent
Ambient air temperature	-25 °C ... +70 °C (cable fixed mounted)
Type of protection	IP67
Pollution degree	3 (Pollution of the active zone can cause impairments of the operating distances.)
Indication	LED, yellow
Termination type	Cable 3 x 0,14 mm <sup>2</sup> ; PVC – Outer jacket, black
For attachment	2 x hexagon nut and 2 x toothed washer

### Product reliability (in acc. with DIN EN 61709 (SN 29500))

MTTF (at nominal load, 40 °C)	> 900 years
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### EU Conformity

acc. to directive 2004 / 108 / EC

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