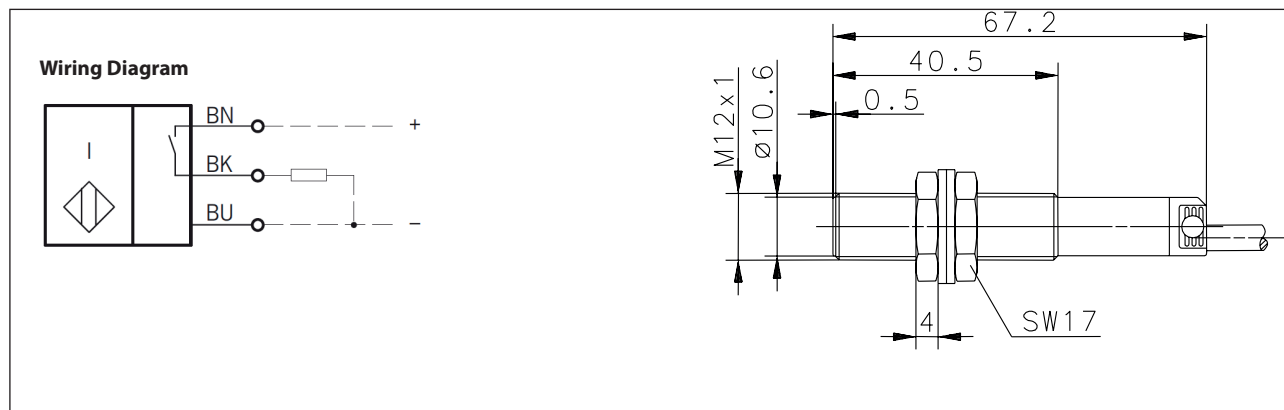


## Inductive Proximity Switch Series M12

Description **KIB-M12PS/002-KL2**

Article number **6502903027**



### 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
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	≤ 5 %
Differential travel (hysteresis)	H	≈ 10 %
Operational voltage range	$U_B$	10 - 150 V DC
Rated insulation voltage	$U_i$	300 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	at 200 mA < 2,5 V DC; at 100 mA < 1,8 V DC; at 50 mA < 1,5 V DC; at 5 mA < 1 V DC
Utilization category		DC 12
Rated operational current	$I_e$	200 mA
Minimum operating current	$I_m$	1 mA
Off-state current	$I_r$	< 0,1 mA
No-load supply current	$I_o$	≤ 5 mA; typ. 3,5 mA
Switching element		Permanent overload and s.c.p.
Short-circuit protection		pulsed
Frequency of operating cycles	f	800 Hz
Mounting		flush
False polarity protection		yes
Time delay before availability	$t_v$	< 50 ms; typ. 12 ms

Electromagnetic compatibility (EMC)		
Electromagnetic field test	IEC 61000-4-3	10 V/m 80 MHz -1 GHz
Electrostatic discharge test	IEC 61000-4-2	8 kV
Electrical fast transient immunity test	IEC 61000-4-4	4 kV (coupling clamp)
Electrical fast transient immunity test	IEC 61000-4-4	2 kV (directly coupled)
Radiated disturbance field strength	EN 55011	Acc. to test not measurable
Impulse voltage withstand ability	IEC 61000-4-5	4 kV common mode (Ri = 2 Ω) Supply cable
Impulse voltage withstand ability	IEC 61000-4-5	2 kV differential mode (Ri = 12 Ω) Supply cable
Impulse voltage withstand ability	IEC 61000-4-5	2 kV switched contact (Ri = 42 Ω)
Impulse voltage withstand ability	IEC 60255-5	5 kV to 500 Ω
Magnetic field immunity	IEC 61000-4-1 A4	50 Hz, 100 A/m

Mechanical Data	
Front cap	PA 6.6, black
Enclosure	Brass, nickel plated
Endcap	PA 12, transparent
Ambient air temperature	-25 °C ... +70 °C
Type of protection	IP67
Degree of pollution	3 (pollution of the active region, there can may be a deterioration of the operating distance)
Indication	LED, yellow (visible through transparent end cap)
Termination type	Cable 3 x 0,34 mm <sup>2</sup> x 2 m, 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 40 °C)	> 850 years

EU Conformity	
acc. to directive 2014/30/EU (EMC-Directive)	