

# Technical Data

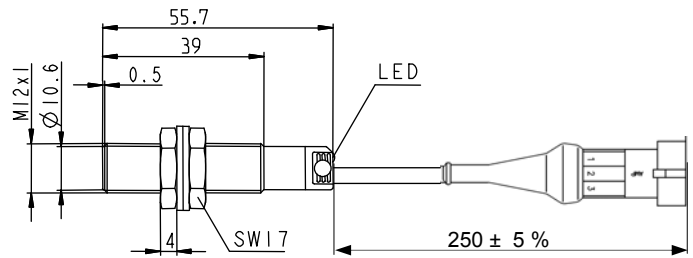
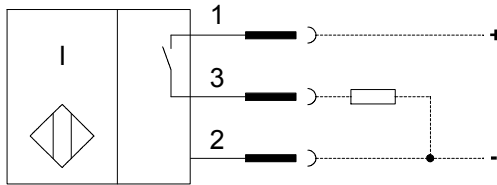
## Inductive Proximity Switch

### Series M12

Description **KIB-M12PS/004-KL0,25ES**

Article number **6602903886**

#### Wiring Diagram



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

Electrical data		
Rated operating distance	$S_n$	4 mm
Standard target		12 mm x 12 mm, t = 1 mm, material: FE360
Real sensing distance	$S_r$	3,6 ... 4,4 mm
Assured operating distance	$S_a$	0 ... 3,2 mm
Switching element function		DC, N.O. Open collector output
Repeat accuracy	R	≤ 5 %
Differential travel (hysteresis)	H	≈ 10 %
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	$U_d$	≤ 1,8 V
Utilization category		DC 12
Rated operational current	$I_e$	≤ 200 mA at 20 °C
Minimum operating 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 frequency of supply network		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	IEC 61000-4-4
Radiated disturbance field strength	EN 55011

#### Mechanical Data

Front cap	PA 6.6, black
Enclosure	Brass, nickel plated
Endcap	PA 6, black
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
Termination type	Cable 3 x 0,34 mm <sup>2</sup> x 0,25 m, PVC - Outer jacket, black with AMP-Superseal connector
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)	> 800 years
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#### EU Conformity

acc. to directive 2004 / 108 / EC

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