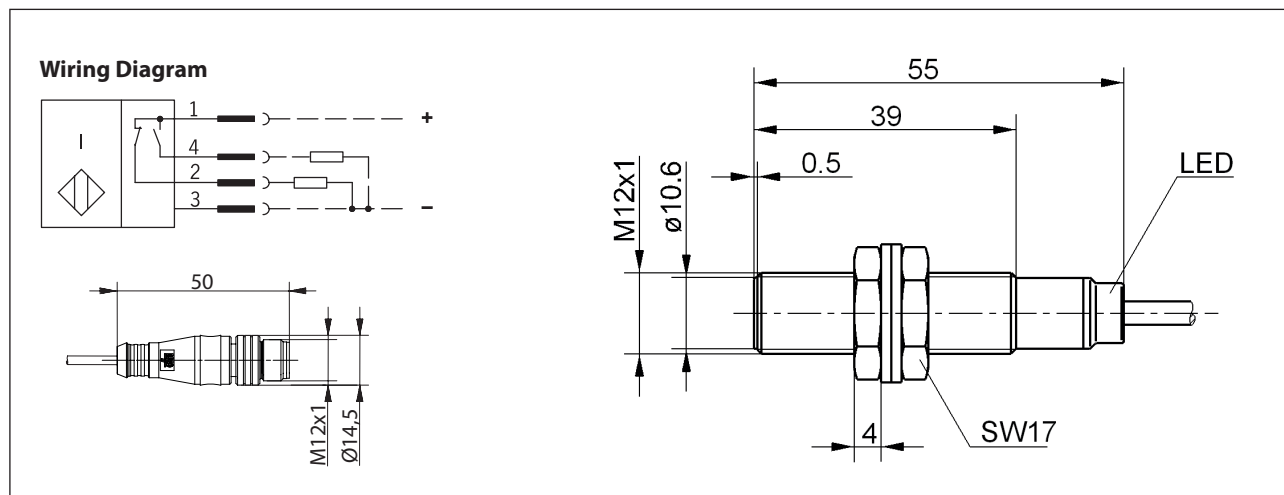


## Inductive Proximity Switch

### Series M12

Description **SIB-M12PA/002-KL0,2S12**

Article number **6502803003**


#### 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		antivalent, DC
Repeat accuracy	R	≤ 5 %
Differential travel (hysteresis)	H	≈ 10 %
Operational voltage range	$U_B$	8 - 30 V DC (PELV / SELV power supply unit)
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	≤ 2,5 V
Utilization category		DC-13
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	$I_o$	≤ 8 mA
Switching element		Permanent overload and s.c.p.
Short-circuit protection		pulsed
Frequency of operating cycles	f	200 Hz
Mounting		flush
False polarity protection		yes
Turn-off delay	$t_a$	≤ 5 ms
Time delay before availability	$t_v$	≤ 50 ms

Mechanical Data	
Front cap	LCP, black
Enclosure	Brass, nickel plated
Ambient air temperature	-30 °C ... +80 °C
Type of protection	IP67 (only in fully locked position with it's plugs)
Pollution degree	3 (Pollution of the active zone can cause impairments of the operating distances.)
Termination type	Cable 0,2 m, PUR-Outer jacket, with plug connector M12
For attachment	2 x hexagon nut and 2x toothed lock washer
Tightening torque for fastening nuts	3 Nm +1 Nm

Safety data at 60°C		
The inductive proximity switch may only be used in conjunction with a safety controller, for example a safety PLC, which recognises a sensor error before the next request to the safety function.		
Up to PL	d	acc. to EN ISO 13849-1
Category	2	
PFH <sub>D</sub>	1,46 x 10 <sup>-8</sup> 1/h	acc. to DIN EN 62061
SIL CL	2	
MTTF d	1990 years	
Service life	20 years	

EU Conformity	
	acc. to directive 2014/30/EU (EMC-Directive)
	acc. to directive 2006/42/EC (Machinery Directive)