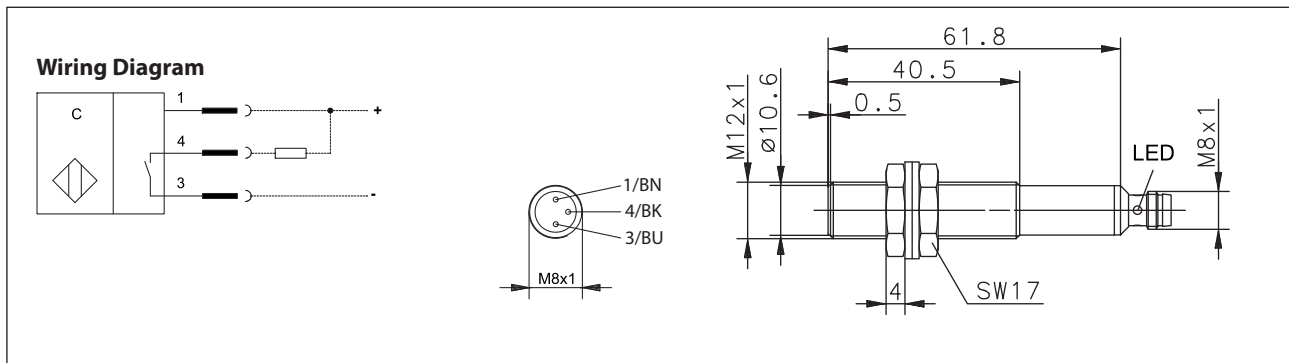


## Capacitive Proximity Switch Series M12

Description **KCB-M12NS/002-KLSM8**

Article number **6507303004**



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

Electrical data		
Rated operating distance	$S_n$	2 mm
Mounting		flush
Standard target		12 x 12 x 1 mm; material: steel; connected to earth
Effective operating distance	$S_r$	1,8-2,2 mm
Assured operating distance	$S_a$	$0 \leq S_a \leq 0,8 \cdot S_r$
Switching element function		N.O.
Repeat accuracy	R	$\leq 0,1 \cdot S_r$
Differential travel (hysteresis)	H	$\leq 0,2 \cdot S_r$
Frequency of operating cycles	f	$\approx 25$ Hz
Rate doperational voltage	$U_e$	12 V - 24 V DC
Operational voltage range	$U_B$	10 V - 36 V DC
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	$\leq 1,5$ V DC
Utilization category		DC-13
Rated operational current	$I_e$	200 mA DC
Minimum operational current	$I_m$	$\geq 1$ mA DC
Off-state current	$I_r$	$\leq 0,5$ mA DC
No-load supply current	$I_o$	$\leq 15$ mA DC
Switching element		permanent overload and s.c.p.
Short-circuit protection		pulsed
False polarity protection		with permutation of +, -, output no damage occurs
Time delay before availability	$t_v$	$\leq 50$ ms

<b>Electromagnetic compatibility (EMC)</b>		
Electromagnetic field test	IEC 61000-4-3	3 V/m, 80...1000 MHz
Electrostatic discharge test	IEC 61000-4-2	4 kV CD / 8 kV AD
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	1 kV coupling clamp
Impulse voltage withstand ability (Surge)	IEC 61000-4-5	500 V, 1,2/50 $\mu$ s @ Ri = 42 $\Omega$
Radiated disturbance field strength	EN 55011	$\leq$ 40 dB ( $\mu$ V/m)

<b>Mechanical Data</b>	
Enclosure	Brass, nickel plated
Front cap	PTFE
Ambient air temperature	-25 °C ... +70 °C
Type of protection	IP65 (with plug-in-connector) IP67 (with screwed plug-in-connector)
Pollution degree	3 (Pollution of the optic can cause impairments of the operating distances.)
Indication	Output ON = LED yellow
Termination type	M8 x 1, brass, nickel plated
For attachment	Hexagon nut, brass, nickel plated (with toothed washers A2)

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