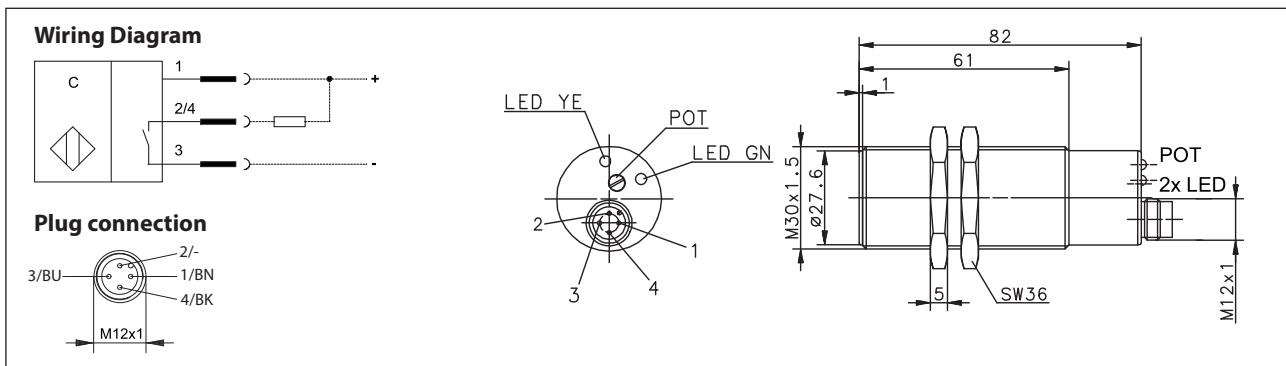


# **Capacitive Proximity Switch**

## Series M30

Description KCB-M30NS/010-KLPS12

Article number **6507307004**



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

Electrical data		
Rated operating distance	$S_n$	10 mm
Mounting		flush
Standard target		30 x 30 x 1 mm; material: steel; connected to earth
Effective operating distance	$S_r$	Sr adjustable with potentiometer (POT); turn right $\Delta$ high sensitivity, turn left $\Delta$ low sensitivity
Assured operating distance	$S_a$	$0 \leq S_a \leq 0,8 \times S_r$
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 operational voltage	$U_e$	12 V - 48 V DC
Operational voltage range	$U_B$	10 V - 60 V DC
Rated insulation voltage	$U_i$	75 V DC
Rated impulse withstand voltage	$U_{imp}$	500 V
Voltage drop	$U_d$	$\leq 3$ V DC
Utilization category		DC-13 (Switching element)
Rated operational current	$I_e$	400 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	$I_o$	$\leq 20$ 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	$t_v$	$\leq 130$ ms

**Electromagnetic compatibility (EMC)**

Electromagnetic field test	IEC 61000-4-3	3 V/m, 80...1000 MHz
Electrostatic discharge test	IEC 61000-4-2	4 kV CD
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	1kV coupling clamp
Impulse voltage withstand ability (Surge)	IEC 61000-4-5	500 V, 1,2/50 µs @ Ri = 42 Ω
Radiated disturbance field strength	EN 55011	≤ 40 dB (µV/m)

**Mechanical Data**

Enclosure	Brass, nickel plated
Front cap	PTFE
End cap	PA6.6, black
Ambient air temperature	-25 °C ... +70 °C
Type of protection	IP67 (only with screwed plug-in-connector)
Pollution degree	3 (Pollution of the optic can cause impairments of the operating distances.)
Indication	Power ON = LED green Output ON = LED yellow
Termination type	Plug M12 x 1, PA
For attachment	Hexagon nut, brass, nickel plated

**EU Conformity**

acc. to directive 2004 / 108 / EC