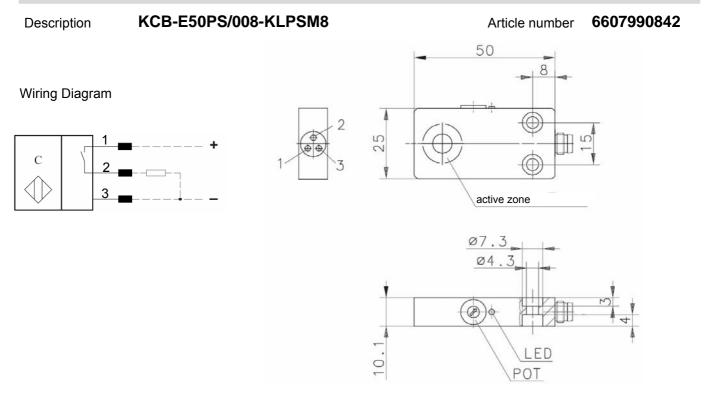
# **Technical Data** Capacitive Proximity Switch



### Series E50



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

Electrical data				
Rated operating distance	Sn	8 mm		
Mounting		flush		
Standard target		25 mm x 20 mm, t=1 mm, material: steel; connected to earth		
Effective operating distance	Sr	bis 8 mm		
		adjustable with potentiometer (POT);		
		turn right = high sensitivity, turn left = low sensitivity		
Assured operating distance	Sa	$0 \le S_a \le 0.8 \times S_r$		
Switching element function		DC, N.O.		
Repeat accuracy	R	≤ 0,1 x S <sub>r</sub>		
Differential travel (hysteresis)	Н	≤ 0,2 x S <sub>r</sub>		
Frequency of operating cycles	f	≈ 25Hz		
Rated operational voltage	U <sub>e</sub>	12 – 24V DC		
Operational voltage range	UB	10 – 36V DC		
Rated insulation voltage	Ui	75V DC		
Rated impulse withstand voltage	U <sub>imp</sub>	500V		
Voltage drop	U <sub>d</sub>	≤ 1,5V DC		
Utilization category		DC 13		
Rated operational current	l <sub>e</sub>	200mA DC		
Minimum operational current	l <sub>m</sub>	≥ 1mA DC		
Off-state current	l <sub>r</sub>	≤ 0,5mA DC		
No-load supply current	lo	≤ 15mA DC		
Switching element		permanent overload and s.c.p.		
Short-circuit protection		pulsed		
False polarity protection		yes, with permutation of +, -, output no damage occurs		
Time delay before availability	t <sub>v</sub>	≤ 50ms		

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Date of issue: 11.01.2012 / Page 1 of 2 Document : 6607990842\_en / Last update: 1 / 0469-10

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### Electromagnetic compatibility (EMC)

Electromagnetic field test	IEC 61000-4-3	3V/m, 801000MHz
Electrostatic discharge test	IEC 61000-4-2	8kV AD
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	1kV / coupling clamp
Impulse voltage withstand ability (Surge)	IEC 61000-4-5	500V, 1,2/50μs @ Ri = 42Ω
Radiated disturbance field strength	EN 55011	≤ 40dB (μV/m)
Mechanical Data		
Enclosure	PBT, black	

Enclosure Ambient air temperature Type of protection Pollution degree

Indication Termination type

#### **EU Conformity**

acc. to directive 2004/108/EC

3 (Pollution of the active zone can cause impairments of the operating distances.)

-25°C ... +70°C

LED, yellow

connector

IP65

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Date of issue: 11.01.2012 / Page 2 of 2 Document : 6607990842\_en / Last update: 1 / 0469-10