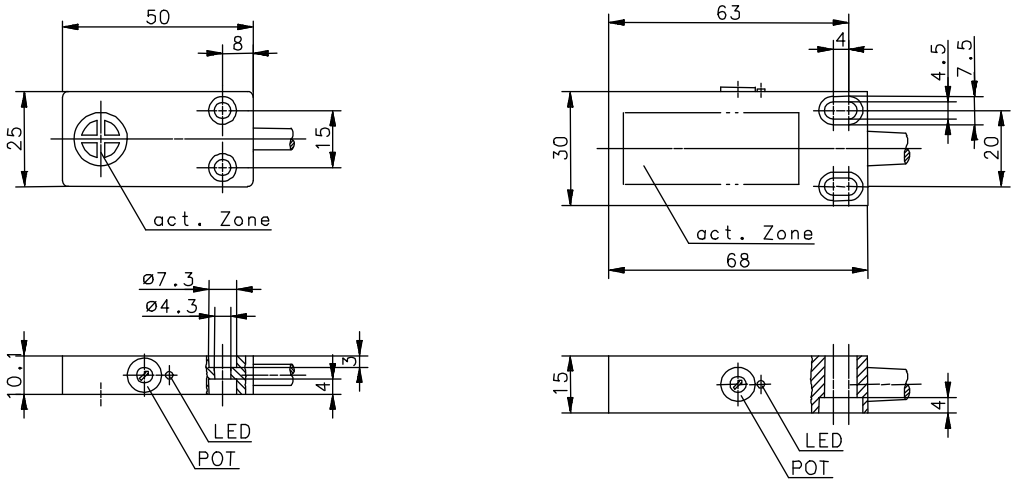
Technical Data
Capacitive Proximity Switch

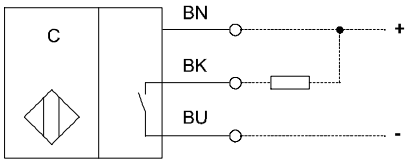
Series E50 and E68 flush - DC



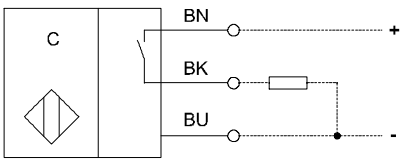
Mounting: flush	Type E50 Enclosure: Thermoplastic		Type E68 Enclosure: Thermoplastic	
	2m cable			
Sn	8mm	10mm		
Sr	3-8mm	3-10mm		
Output	N.O.	N.C.	N.O.	N.C.
NPN	6507390001		6507356001	
PNP	6507990001		6507956001	

Wiring Diagram NPN and PNP N.O.

NPN



PNP



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Technical Data
Capacitive Proximity Switch

BERNSTEIN

Technical Data according to EN 60947–5–2

Electrical data		
Rated operating distance	S_n	See overview
Mounting		flush
Standard target		E50 = 25x20x1mm; E68 = 57x30x1mm; material: steel; connected to earth
Effective operating distance	S_r	See overview Adjustable with potentiometer (POT) Turn right ≙ high sensitivity, turn left ≙ low sensitivity
Assured operating distance	S_a	0 ≤ Sa ≤ 0,8·Sr
Switching element function		See overview
Repeat accuracy	R	≤ 0,1·Sr
Differential travel (hysteresis)	H	≤ 0,2·Sr
Frequency of operating cycles	f	≈ 25Hz
Rated operational voltage	U_e	12 – 24V DC
Operational voltage range	U_B	10 – 36V DC
Rated insulation voltage	U_i	75V DC
Rated impulse withstand voltage	U_{imp}	500V
Voltage drop	U_d	≤ 1,5V DC
Utilization category		DC-13 (Switching element)
Rated operational current	I_e	≤ 200mA DC
Minimum operational current	I_m	≥ 1mA DC
Off-state current	I_r	≤ 0,5mA DC
No-load supply current	I_o	≤ 15mA DC
Switching element		Permanent overload and s.c.p.
Short-circuit protection		Pulsed
Rated conditional short-circuit current		100A
Rated supply frequency		DC
False polarity protection		With permutation of +, –, output no damage occurs
Time delay before availability	t_v	≤ 50ms

Electromagnetic compatibility (EMC)		
Electromagnetic field test	IEC 61000-4-3	3V/m, 80...1000MHz
Electrostatic discharge test	IEC 61000-4-2	8kV AD
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	1kV/ coupling clamp
Impulse voltage withstandability (Surge)	IEC 61000-4-5	500V, 1,2/50µs bei Ri = 42Ω
Radiated disturbance field strength	EN 55011	≤ 40dB (µV/m)

Mechanical Data	
Enclosure	PBT black
Ambient air temperature	-25°C … 70°C
Type of protection	IP65 (NEMA 12)
Pollution degree	3 (Pollution of the active zone can cause Impairments of the operating distances.)
Indication	Power ON: LED = yellow
Termination type	E50 = Cable 3 x 0,34mm² x 2m; PVC–Outer jacket, black E68 = Cable 3 x 0,5mm² x 2m; PVC–Outer jacket, black

EU Conformity	acc. to Directive 2004 / 108 / EC