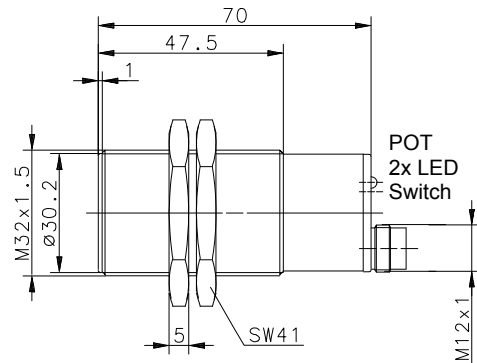
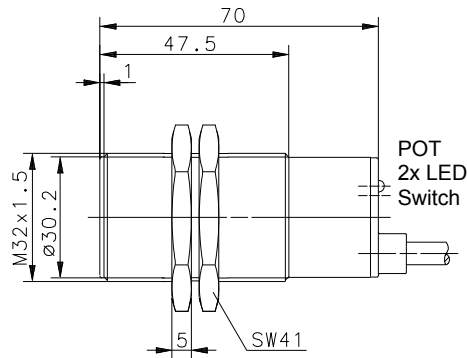


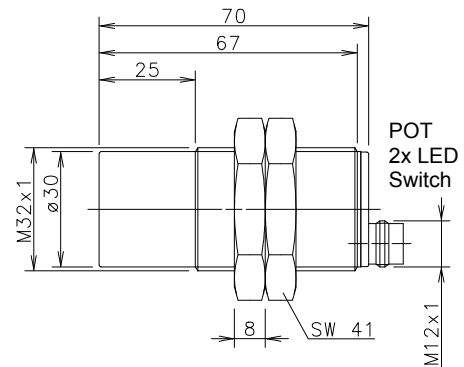
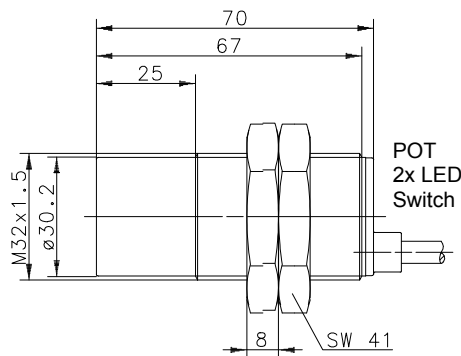
Technical Data

Capacitive Proximity Switch

Series M32 flush and non flush - DC



Mounting: flush	Type M32x1,5 ; Enclosure: Brass			
	2m cable		M12 plug-in connection	
Sn	15mm			
Sr	3-15mm			
Output	N.O / N.C. programmable	Push-pull circuit	N.O / N.C. programmable	Push-pull circuit
NPN / PNP prog.	6507013011	6507013012	6507013015	6507013016



Mounting: non flush	Type M32x1,5 ; Enclosure: Thermoplastic			
	2m cable		M12 plug-in connection	
Sn	30mm			
Sr	6-30mm			
Output	N.O / N.C. programmable	Push-pull circuit	N.O / N.C. programmable	Push-pull circuit
NPN / PNP prog.	6507013001	6507013002	6507013004	6507013005

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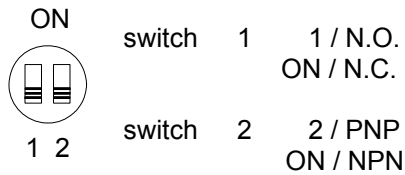
Technical Data

Capacitive Proximity Switch

Wiring Diagram PNP / NPN and N.O. / N.C. programmable (dual output circuit)



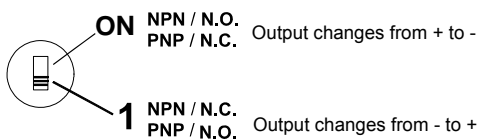
Switch diagram for programming



Wiring Diagram PNP / NPN programmable, push-pull circuit

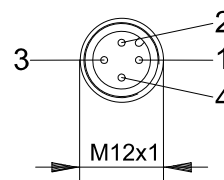


Switch diagram for programming



M12 connector and corresponding colours

Pin Number	Colour	Code
1	Brown	BN
2	-	-
3	Blue	BU
4	Black	BK



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Technical Data

Capacitive Proximity Switch



Technical Data according to EN 60947-5-2

Electrical data		
Rated operating distance	S_n	See overview
Mounting		See overview
Standard target		Flush = 45x45x1mm, material: steel; connected to earth Non flush = 90x90x1mm, material: steel; connected to earth
Effective operating distance	S_r	See overview Adjustable with potentiometer (POT) Turn right \triangle high sensitivity, turn left \triangle low sensitivity
Assured operating distance	S_a	$0 \leq S_a \leq 0,8 \cdot S_r$
Switching element function		See overview
Repeat accuracy	R	$\leq 0,1 \cdot S_r$
Differential travel (hysteresis)	H	$\leq 0,2 \cdot S_r$
Frequency of operating cycles	f	$\approx 25\text{Hz}$
Rated operational voltage	U_e	12V - 48V DC
Operational voltage range	U_B	10V - 60V DC
Rated insulation voltage	U_i	75V DC
Rated impulse withstand voltage	U_{imp}	500V
Voltage drop	U_d	$\leq 3\text{V DC}$
Utilization category		DC-13 (Switching element)
Rated operational current	I_e	$\leq 400\text{mA DC}$
Minimum operational current	I_m	$\geq 1\text{mA DC}$
Off-state current	I_r	$\leq 0,5\text{mA DC}$
No-load supply current	I_o	$\leq 20\text{mA DC}$
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	$\leq 50\text{ms}$

Electromagnetic compatibility (EMC)		
Electromagnetic field test	IEC 61000-4-3	3V/m, 80...1000MHz
Electrostatic discharge test	IEC 61000-4-2	4kV CD / 8kV AD
Electrical fast transient immunity test (Burst)	IEC 61000-4-4	1kV/ coupling clamp
Impulse voltage withstandability (Surge)	IEC 61000-4-5	500V, 1,2/50 μs bei $R_i = 42\Omega$
Radiated disturbance field strength	EN 55011	$\leq 40\text{dB } (\mu\text{V/m})$

Mechanical Data	
Enclosure	Flush = brass, nickel plated Non flush = PBT black
Front cap	Flush = PTFE nature
End cap	PA 6.6 black
Ambient air temperature	-25°C ... 70°C
Type of protection	IP67 (NEMA 4; proximity switch with plug socket: only in fully locked position with it's plugs)
Pollution degree	3 (Pollution of the active zone can cause impairments of the operating distances.) Power ON: LED = green
Indication	(Undervoltage or output short circuit: LED flashes) Dual output circuit ON: LED = yellow Push-pull circuit - active surface is damped: LED = yellow
Termination type	Cable 3 x 0,5mm ² x 2m; PVC-Outer jacket, black Plug socket M12x1, PA
For attachment	Flush = hexagon nut; brass, nickel plated Non flush = hexagon nut; PA 6.6, black

EU Conformity **CE**

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