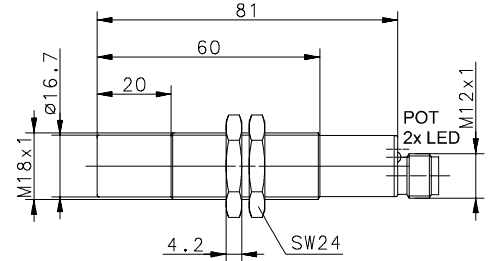
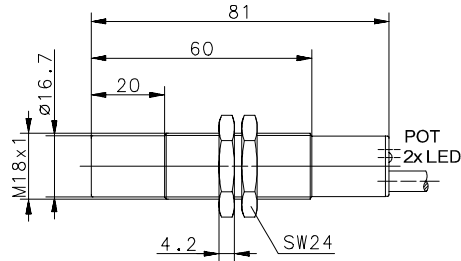


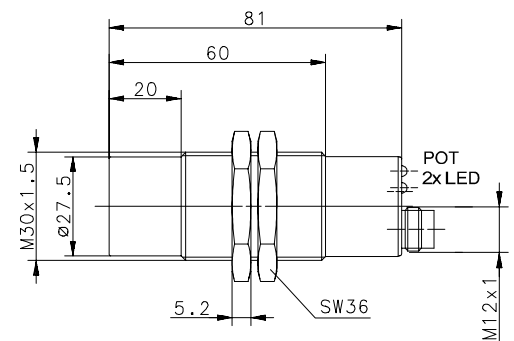
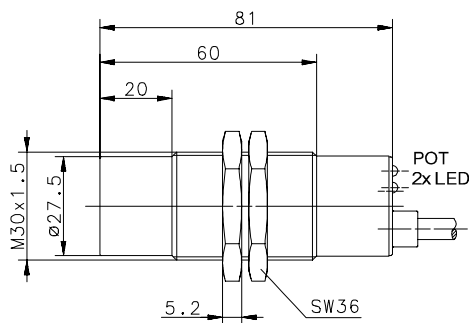
# Technical Data

## Capacitive Proximity Switch

### Series M18, M30, Ø20 and Ø34 non flush - AC



Mounting non flush	Type M18x1 Enclosure: plastic			
	2m cable		M12 male plug	
Sn	8mm			
Sr	1-8mm			
Output	N.O.	N.C.	N.O.	N.C.
AC	6508521001	6508421001	6508521004	6508421004



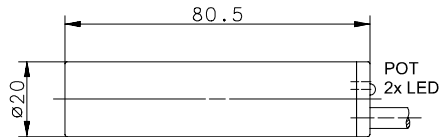
Mounting non flush	Type M30x1,5 Enclosure: plastic			
	2m cable		M12 male plug	
Sn	20mm			
Sr	5-20mm			
Output	N.O.	N.C.	N.O.	N.C.
AC	6508523001	6508423001	6508523004	6508423004

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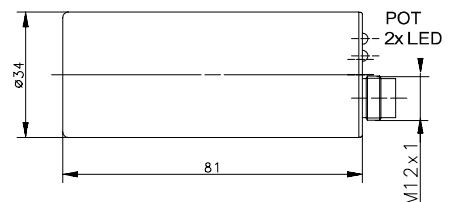
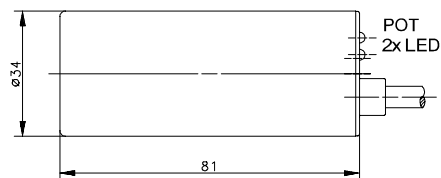
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# Technical Data

## Capacitive Proximity Switch



Mounting non flush	Series Ø20 Enclosure: plastic	
	2m cable	
Sn	15mm	
Sr	3,5-15mm	
Output	N.O.	N.C.
AC	6508510001	6508410001



Mounting non flush	Series Ø34 Enclosure: plastic			
	2m cable		M12 male plug	
Sn	30mm			
Sr	6-30mm			
Output	N.O.	N.C.	N.O.	N.C.
AC	6508515001	6508415001	6508515005	6508415004

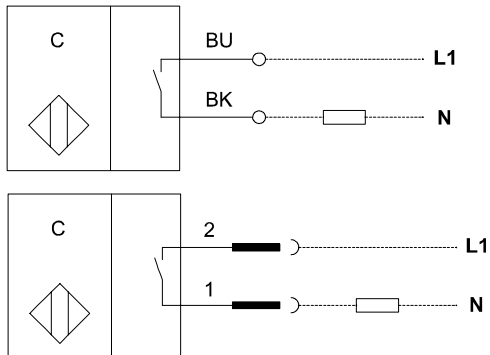
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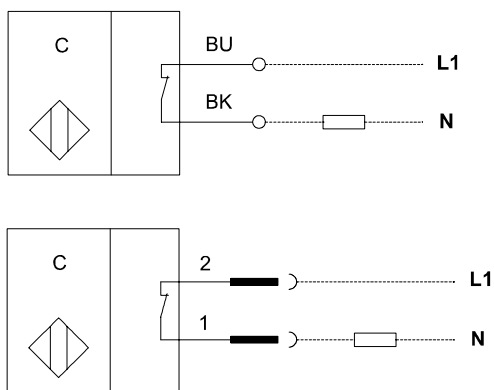
# Technical Data

## Capacitive Proximity Switch

### Wiring diagrams AC normally open / N.O.

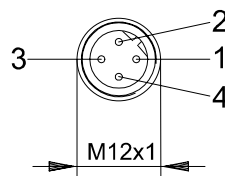


### Wiring diagrams AC normally closed / N.C.



### Male plug M12x1 and corresponding colours

pin number	colour	code
1	black	BK
2	blue	BU
3	-	-
4	-	-



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# Technical Data

## Capacitive Proximity Switch

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

Electrical data		
Rated operating distance	$S_n$	see overview
Mounting		Non flush
Standard target		$3 \cdot S_n \times 3 \cdot S_n \times 1\text{mm}$ ; material: steel; connected to earth
Effective operating distance	$S_r$	see overview $S_r$ adjustable with potentiometer (POT); turn right $\hat{=}$ high sensitivity, turn left $\hat{=}$ 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	$> 15\text{Hz}$
Rate operational voltage	$U_e$	24V - 230V AC
Operational voltage range	$U_B$	20V - 250V AC
Rated insulation voltage	$U_i$	250V AC
Rated impulse withstand voltage	$U_{imp}$	1500V
Voltage drop	$U_d$	$\leq 10\text{V AC}$ ( effective value )
Utilization category		AC-140 (Switching element)
Rated operational current	$I_e$	$\leq 300\text{mA AC}$
Minimum operational current	$I_m$	$\geq 5\text{mA AC}$
Off-state current	$I_r$	$\leq 3\text{mA AC}$
Rated supply frequency		AC 50Hz - 60Hz
False polarity protection		with permutation of +, -, output no damage occurs
Time delay before availability	$t_v$	$\leq 300\text{ms}$

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	4kV coupling clamp
Impulse voltage withstandability (Surge)	IEC 61000-4-5	2KV, 1,2/50 $\mu\text{s}$ @ $R_i = 42\Omega$
Radiated disturbance field strength	EN 55011	$\leq 40\text{dB}$ ( $\mu\text{V/m}$ )

Mechanical Data	
Enclosure	M18 and M30 = PBT black $\varnothing 20$ and $\varnothing 34$ = PBT red
End cap	PA 6.6 black
Ambient air temperature	-25°C ... +70°C
Type of protection	IP67 (NEMA 4) (plug-in connection: only in fully locked position with it's plugs)
Pollution degree	3 (Pollution of the active zone can cause impairments of the operating distances.)
Indication	Power ON = LED green Output ON = LED yellow
Termination type	Cable 2 x 0,5mm <sup>2</sup> x 2m, PVC-outer jacket black Male plug M12x1, PA
For attachment	M18x1 and M30x1,5 = hexagon nut PA 6.6 black

EU Conformity	CE
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