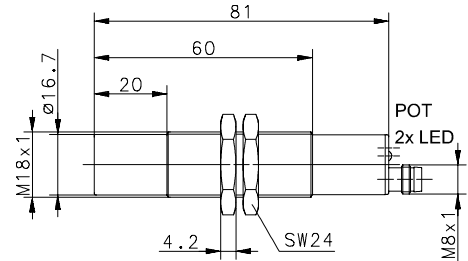
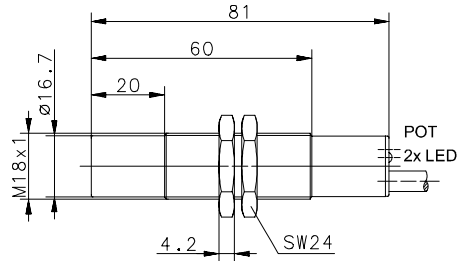


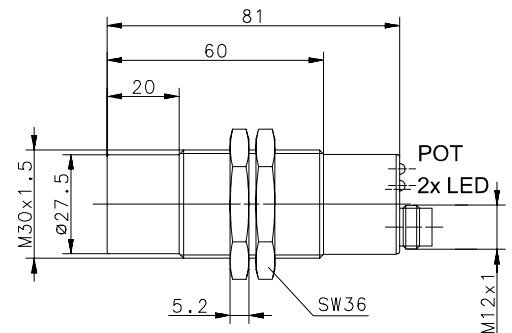
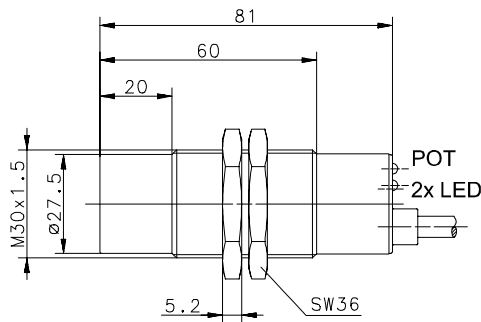
Technical Data

Capacitive Proximity Switch

Series M18, M30, Ø20 and Ø34 non flush - DC



Mounting non flush	Type M18x1 Enclosure: plastic			
	2m cable		M8 male plug	
S _n	8mm			
S _r	1-8mm			
Output	N.O.	N.C.	N.O.	N.C.
NPN	6507321723	6507121722	6507321002	6507121002
PNP	6507921724	6507721001	6507921002	6507721002

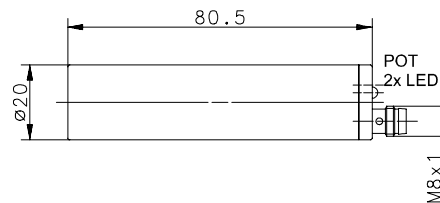
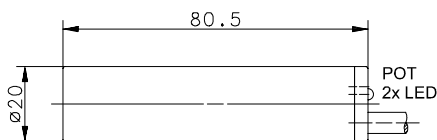


Mounting non flush	Type M30x1,5 Enclosure: plastic			
	2m cable		M12 male plug	
S _n	20mm			
S _r	5-20mm			
Output	N.O.	N.C.	N.O.	N.C.
NPN	6507323001	6507123001	6507323004	6507123004
PNP	6507923727	6507723001	6507923004	6507723004

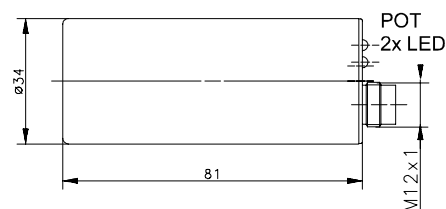
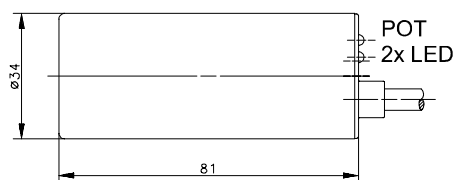
This document will not become the contractual basis; the details included herein do not constitute any descriptions of expected conditions, so that warranties/claims for defects on account of possible variations of the actual qualities from the qualities described herein are explicitly excluded. All rights reserved. Specifications subject to change without notice!

Technical Data

Capacitive Proximity Switch



Mounting non flush	Series Ø20 Enclosure: plastic			
	2m cable		M8 male plug	
S _n	15mm			
S _r	3,5-15mm			
Output	N.O.	N.C.	N.O.	N.C.
NPN	6507310002	6507110001	6507310004	
PNP	6507910001	6507710001	6507910004	6507710004



Mounting non flush	Series Ø34 Enclosure: plastic			
	2m cable		M12 male plug	
S _n	30mm			
S _r	6-30mm			
Output	N.O.	N.C.	N.O.	N.C.
NPN	6507315001	6507115001	6507315004	6507115004
PNP	6507915001	6507715154	6507915004	6507715004

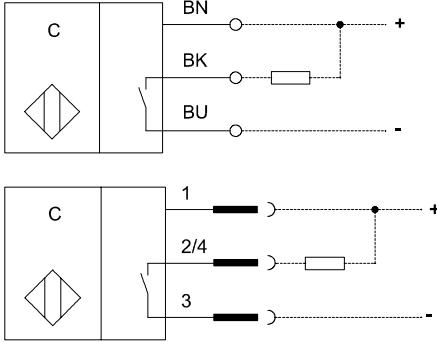
This document will not become the contractual basis; the details included herein do not constitute any descriptions of expected conditions, so that warranties/claims for defects on account of possible variations of the actual qualities from the qualities described herein are explicitly excluded. All rights reserved. Specifications subject to change without notice!

Technical Data

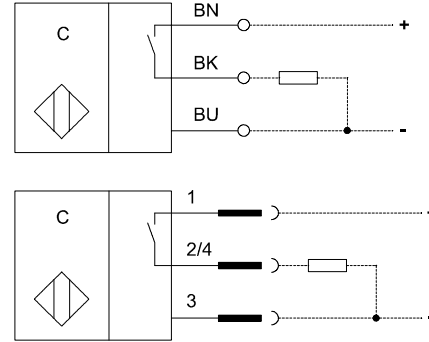
Capacitive Proximity Switch

Wiring diagrams NPN and PNP normally open / N.O.

NPN - Proximity Switch

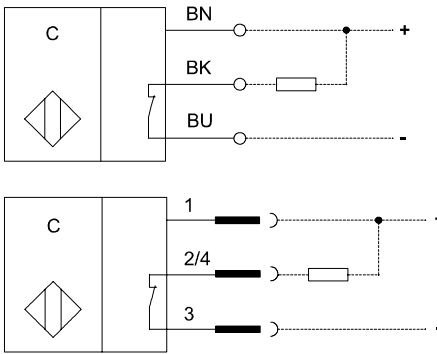


PNP - Proximity Switch

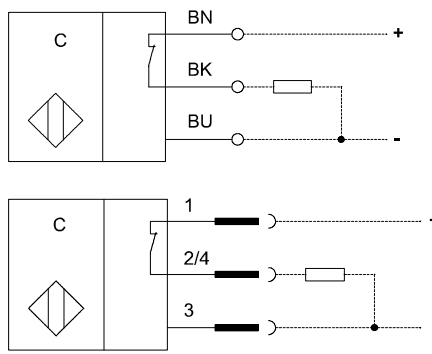


Wiring diagrams NPN and PNP normally closed / N.C.

NPN - Proximity Switch

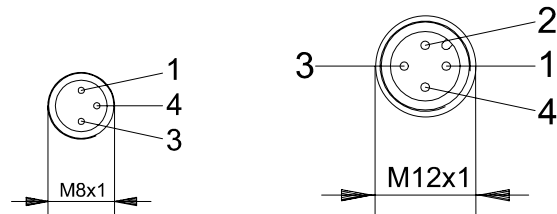


PNP - Proximity Switch



Male plug M8x1 / M12x1 and corresponding colours

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



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	$\approx 25\text{Hz}$
Rate 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	< 3V DC
Utilization category		DC-13(Switching element)
Rated operational current	I_e	$\leq 400\text{mA DC}$ $\leq 200\text{mA DC @ M18x1 proximity switch}$
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
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	$\leq 50\text{ms}$

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 @ $R_i = 42\Omega$
Radiated disturbance field strength	EN 55011	$\leq 40\text{dB } (\mu\text{V/m})$

Mechanical Data	
Enclosure	M18x1 and M30x1,5 = 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	Cable versions: IP67 Male plug versions: M8x1 with plug-in-connector IP65 Male plug versions: M8x1 / M12x1 with screwed plug-in-connector IP67
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 3x0,5mm ² x 2m, PVC-outer jacket black Male plug M12x1, PA Male plug M8x1, brass, nickel plated
For attachment	M18x1 and M30x1,5 = hexagon nut PA 6.6 black

EU Conformity	CE
---------------	----