

# Inductive sensor

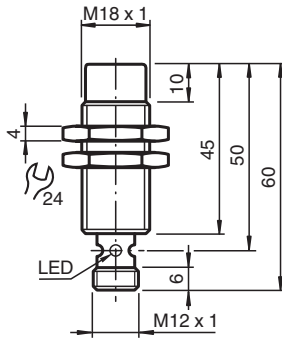
## NCN12-18GM50-Z5-V1



- 12 mm non-flush
- 2-wire DC
- Increased operating distance



### Dimensions



### Technical Data

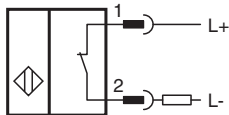
General specifications		
Switching function		Normally closed (NC)
Output type		Two-wire
Rated operating distance	$s_n$	12 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 9.1 mm
Reduction factor $r_{Al}$		0.5
Reduction factor $r_{Cu}$		0.45
Reduction factor $r_{304}$		0.75
Reduction factor $r_{Brass}$		0.55
Output type		2-wire
Nominal ratings		
Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3.5$ V
Temperature drift		$\pm 15\%$
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	typ. 0.8 mA

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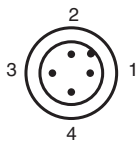
## Technical Data

Switching state indicator	LED, yellow
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	1556 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %
<b>Compliance with standards and directives</b>	
Standard conformity	
Standards	EN IEC 60947-5-2
<b>Approvals and certificates</b>	
UL approval	cULus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated ≤36 V
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-25 ... 85 °C (-13 ... 185 °F)
<b>Mechanical specifications</b>	
Connection type	Connector plug
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67
Connector	
Threading	M12 x 1
Number of pins	4
Mass	51 g
Dimensions	
Length	60 mm
Diameter	18 mm

## Connection



## Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)