

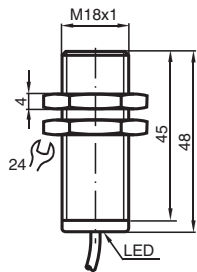
# Inductive sensor

## NCB8-18GM50-Z4

- 8 mm flush
- 2-wire DC
- Increased operating distance



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	$s_n$	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 6.48 mm
Reduction factor $r_{Al}$		0.4
Reduction factor $r_{Cu}$		0.4
Reduction factor $r_{304}$		0.7
Reduction factor $r_{Brass}$		0.5
Output type		2-wire

#### Nominal ratings

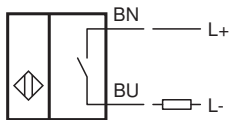
Operating voltage	$U_B$	3.5 ... 30 V
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	typ. 5%
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3.5$ V
Temperature drift		$\pm 15\%$
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	typ. 0.8 mA

Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 105930\_eng.pdf

## Technical Data

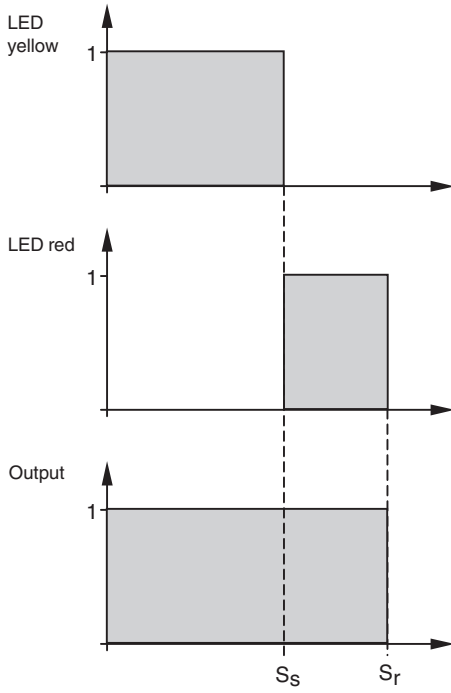
Switching state indicator		LED, yellow
Stability alarm indicator		LED, red
Stability control-switch point		0,8 s <sub>r</sub> ... 0,9 s <sub>r</sub>
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1370 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance 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		cable
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67
<b>Cable</b>		
Wire end ferrules		yes
Cable diameter		4.8 mm ± 0.2 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		2
Core cross section		0.34 mm <sup>2</sup>
Length	L	2 m
<b>Dimensions</b>		
Length		48 mm
Diameter		18 mm

## Connection



## Operation

Correlation between output signal/LED-function and stable operating distance  $s_s$ /effective operating distance  $s_r$ : ( $s_s$  typ. 80 % of  $s_r$ )



Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 105930\_eng.pdf