

# Inductive sensor

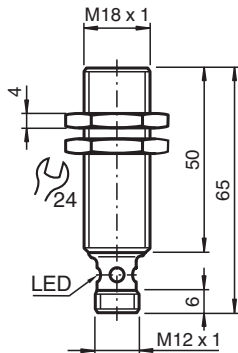
## NCB8-18GM50-Z4-V1



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



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s <sub>n</sub>	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s <sub>a</sub>	0 ... 6.48 mm ( -25 ... 70 °C (-13 ... 158 °F) ) 0 ... 6.08 mm ( -40 ... -25 °C (-40 ... -13 °F) )
Reduction factor r <sub>Al</sub>		0.4
Reduction factor r <sub>Cu</sub>		0.4
Reduction factor r <sub>304</sub>		0.7
Reduction factor r <sub>Brass</sub>		0.5
Output type		2-wire
Nominal ratings		
Operating voltage	U <sub>B</sub>	3.5 ... 30 V
Switching frequency	f	0 ... 1000 Hz
Reverse polarity protection		reverse polarity-conductive

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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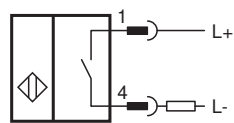
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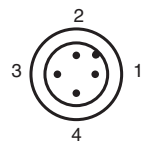
Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3.5\text{ V}$
Temperature drift		$\pm 15\%$
Operating current	$I_L$	2 ... 100 mA
Off-state current	$I_r$	typ. 0.8 mA
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>
Functional safety related parameters		
MTTF <sub>d</sub>		1370 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36\text{ V}$
Ambient conditions		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Mechanical specifications		
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		57 g
Dimensions		
Length		65 mm
Diameter		18 mm

Connection



Connection Assignment



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## Connection Assignment

Wire colors in accordance with EN 60947-5-2

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

## Operation

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

