

Inductive sensor

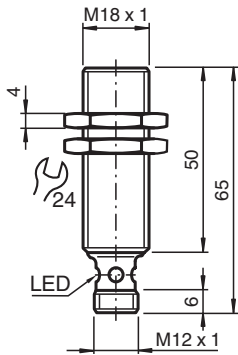
NCB8-18GM50-Z4-V1



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



Dimensions



Technical Data

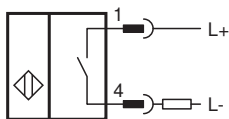
General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm (-25 ... 70 °C (-13 ... 158 °F)) 0 ... 6.08 mm (-40 ... -25 °C (-40 ... -13 °F))
Reduction factor 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
Reverse polarity protection		reverse polarity-conductive

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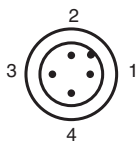
Technical Data

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 _r ... 0,9 s _r
Functional safety related parameters		
MTTF _d		1370 a
Mission Time (T _M)		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



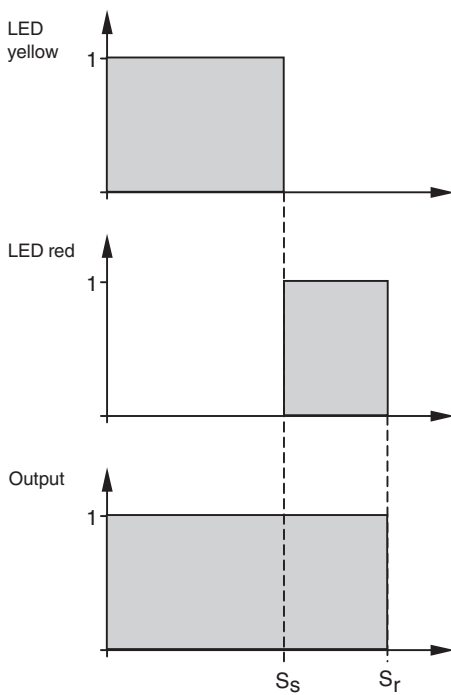
Connection Assignment

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)



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