

Inductive sensor

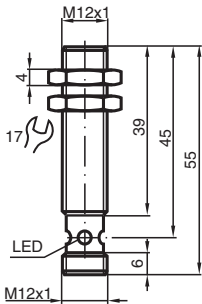
NCB4-12GM40-Z4-V1



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



Dimensions



Technical Data

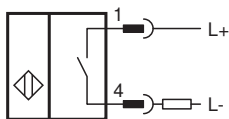
General specifications		
Switching function		Normally open (NO)
Output type		Two-wire
Rated operating distance	s_n	4 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 3.24 mm
Reduction factor r_{Al}		0.49
Reduction factor r_{Cu}		0.47
Reduction factor r_{304}		0.76
Output 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

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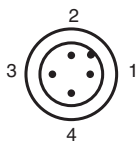
Technical Data

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	0.4 ... 0.6 mA typ. 0.5 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		1883 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		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °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		29 g
Dimensions		
Length		35 mm
Diameter		12 mm

Connection



Connection Assignment



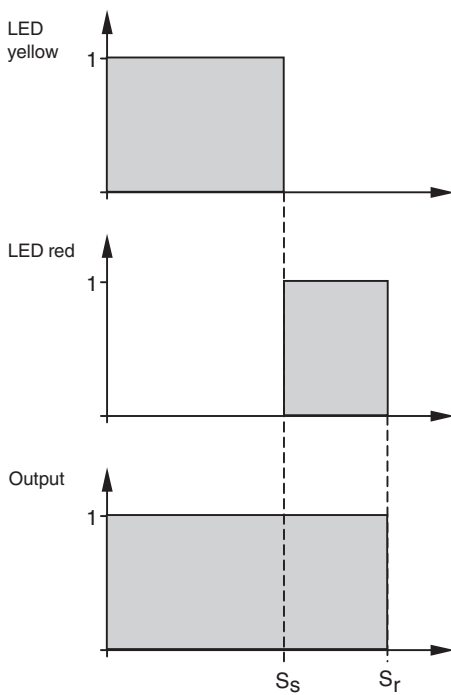
Connection Assignment

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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