

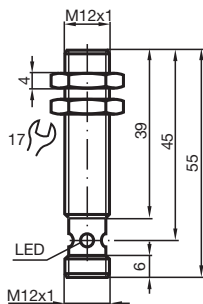


Inductive sensor NCB4-12GM40-Z4-V1

- 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
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Technical Data

Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity-conductive
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 3.5 V
Temperature drift		± 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
Pre-fault 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 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

Approvals and certificates

UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V

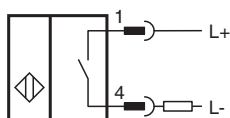
Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

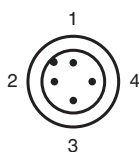
Mechanical specifications

Connection type		Connector plug M12 x 1 , 4-pin
Housing material		brass, nickel-plated
Sensing face		PBT
Degree of protection		IP67

Connection



Connection Assignment

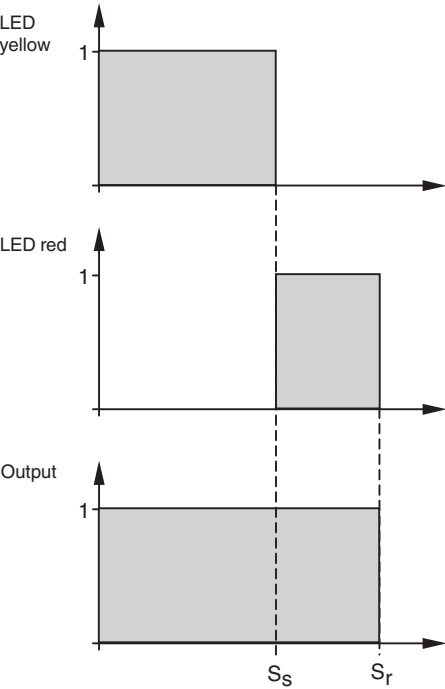


Wire colors in accordance with EN 60947-5-2

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

Characteristic Curve

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



Accessories

	BF 12	Mounting flange, 12 mm
	EXG-12	Quick mounting bracket with dead stop
	V1-G-2M-PUR	Female cordset, M12, 4-pin, PUR cable
	V1-W-2M-PUR	Female cordset, M12, 4-pin, PUR cable

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