



Model Number

NCB4-12GM35-Z4

Features

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

Accessories

BF 12

Mounting flange, 12 mm

EXG-12

Quick mounting bracket with dead stop

Technical Data

General specifications

Switching element function		DC	NO
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	

Nominal ratings

Operating voltage	U_B	3.5 ... 30 V
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		conducting
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3.5 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
Pre-fault indicator		LED, red
Stability control-switch point		0,8 s_r ... 0,9 s_r

Functional safety related parameters

MTTF _d	477 a
Mission Time (T_M)	20 a
Diagnostic Coverage (DC)	0 %

Ambient conditions

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

Mechanical specifications

Connection type	cabl PVC , 2 m
Core cross-section	0.34 mm ²
Housing material	brass, nickel-plated
Sensing face	PBT
Degree of protection	IP67

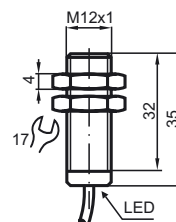
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

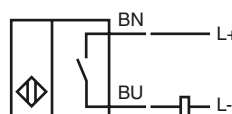
Approvals and certificates

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

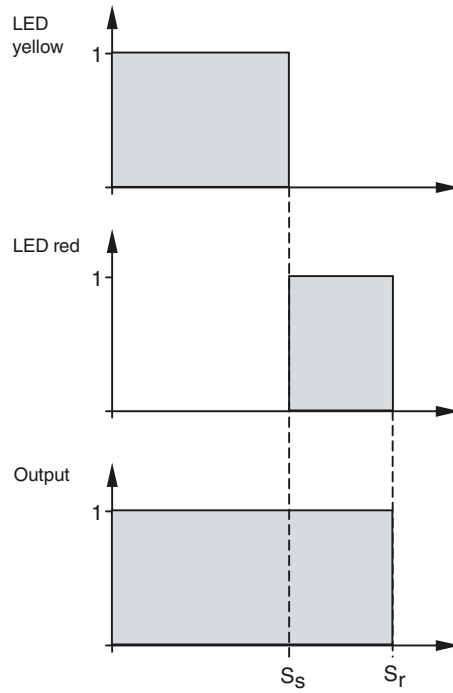
Dimensions



Electrical Connection



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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