



Model Number

NCN4-12GM60-B3-C2-V1

Features

- Comfort series
- 4 mm non-flush
- NO/NC selectable
- On/Off delay (disconnectable)
- Weld Immune
- Cylindrical

Accessories

V1-W

Female connector, M12, 4-pin, field attachable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

EXG-12

Quick mounting bracket with dead stop

BF 12

Mounting flange, 12 mm

V1-G

Female connector, M12, 4-pin, field attachable

Technical Data

General specifications

Switching function		Normally open/closed (NO/NC) programmable
Output type		AS-Interface
Rated operating distance	s_n	4 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 3.24 mm
Actual operating distance	s_r	3.6 ... 4.4 mm typ. 4 mm
Reduction factor r_{AI}		0.37
Reduction factor r_{CU}		0.36
Reduction factor r_{304}		0.74
Slave type		Standard slave
AS-Interface specification		V2.1
Required master specification		\geq V2.0
Output type		2-wire

Nominal ratings

Operating voltage	U_B	26.5 ... 31.9 V via AS-i bus system
Switching frequency	f	0 ... 500 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Voltage drop at I_L		
Voltage drop $I_L = 20$ mA, switching element on U_d		3.4 ... 5 V typ. 4.3 V
No-load supply current	I_0	\leq 25 mA
Time delay before availability	t_v	\leq 1000 ms
Alternating magnetic field	B	100 mT
Switching state indicator		dual-LED, yellow
Error indicator		dual-LED, red

Functional safety related parameters

MTTF _d	2140 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	Connector plug M12 x 1, 4-pin
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	PBT
Degree of protection	IP67

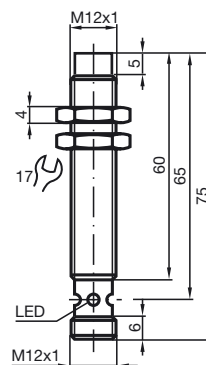
Compliance with standards and directives

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

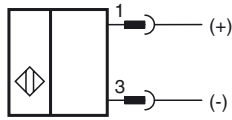
Approvals and certificates

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

Dimensions



Electrical Connection



Pinout



Programming Instructions

Address 00 preset, alterable
 via Busmaster
 or programming units
 IO-Code 1
 ID-Code 1

Data bit

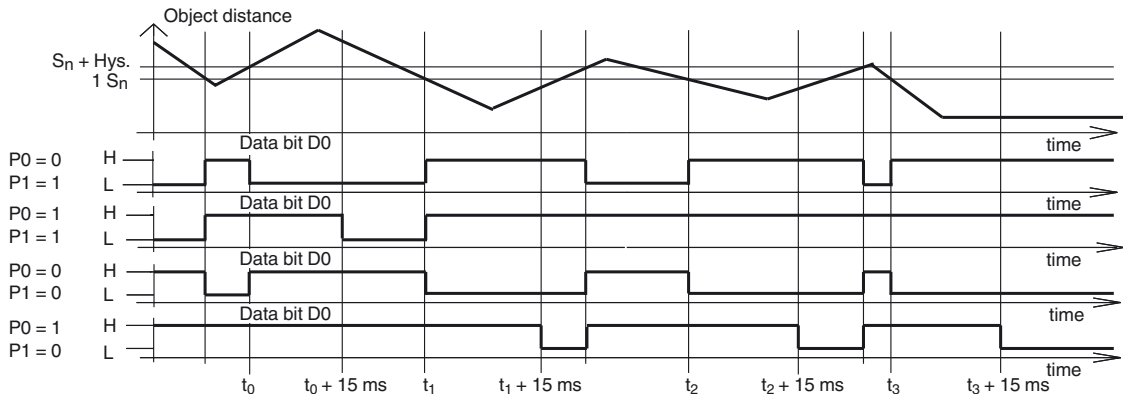
Bit	Function
D0	Switching state
D1	not used
D2	not used
D3	not used

Parameter bit

Bit	Function
P0	ON / Off delay activated* / deactivated
P1	Switching element function NO* / NC
P2	not used
P3	not used

*Standard setting

On/off delay:



The on/off delay is preset and switched on (P0=1). On delay approx.15 ms, when P0=1 and NO function (P1=1). Off delay approx.15 ms, when P0=1 and NC function (P1=0).

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