



Model Number

NBN40-L2-B3B-V1

Features

- 40 mm non-flush
- A/B slave with extended addressing possibility for up to 62 slaves
- Sensor head bidirectional and rotatable
- NO/NC programmable
- Oscillator monitoring
- On/Off delay (disconnectable)

Accessories

V1-G

Female connector, M12, 4-pin, field attachable

V1-W

Female connector, M12, 4-pin, field attachable

V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

MHW 01

Modular mounting bracket

MH 02-L

Mounting aid

Technical Data

General specifications

Switching element function	NO/NC programmable
Rated operating distance	s_n 40 mm
Installation	non-flush
Output polarity	AS-Interface
Assured operating distance	s_a 0 ... 32.4 mm
Reduction factor r_{AI}	0.3
Reduction factor r_{Cu}	0.3
Reduction factor r_{304}	0.75
Slave type	A/B slave
AS-Interface specification	V3.0
Required master specification	$\geq V2.1$

Nominal ratings

Operating voltage	U_B 26.5 ... 31.9 V via AS-i bus system
Switching frequency	f 0 ... 50 Hz
Hysteresis	H typ. 5 %
Reverse polarity protection	reverse polarity protected
No-load supply current	I_0 ≤ 25 mA
Time delay before availability	t_v ≤ 1000 ms
Operating voltage display	LED, green
Switching state indication	LED, yellow
Fault indication	LED, red

Functional safety related parameters

MTTF _d	1330 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 M12 x 1, 4-pin
Housing material	PA
Sensing face	PA
Protection degree	IP69K
Mass	210 g

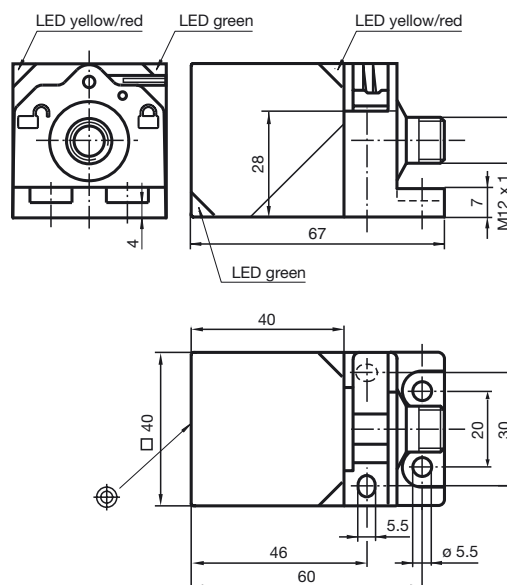
Compliance with standards and directives

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

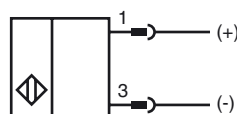
Approvals and certificates

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

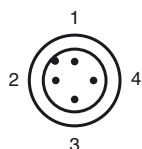
Dimensions



Electrical Connection



Pinout



Programming Instructions

Address 00 preset, alterable
via Busmaster
or programming units
IO-Code 0
ID-Code A
ID1-Code 7
ID2-Code E

Data bit

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

Parameter bit

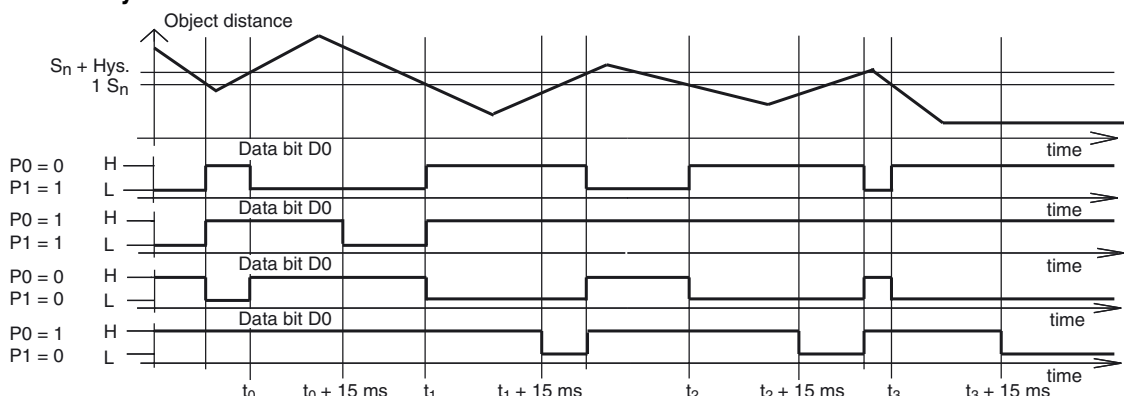
Bit	Function
P0	ON / Off delay activated* / deactivated
P1	Switching element function NO* / NC
P2	not used
P3	not used

*Standard setting

Indication depending on the operation mode

Symptoms	green LED (POWER)	red LED (FAULT)	Data bit D2
normal operation	on	off	1
Oscillator defect	flashing	flashing	0
no communication	off	on	1

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).