



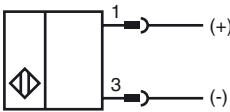
Model Number

NBN30-L2-B3B-V1

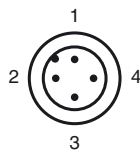
Features

- Basic series
- 30 mm not embeddable
- A/B slave with extended addressing possibility for up to 62 slaves
- Sensor head bidirectional and rotatable
- NO/NC selectable
- Oscillator monitoring
- On/Off delay (disconnectable)

Connection



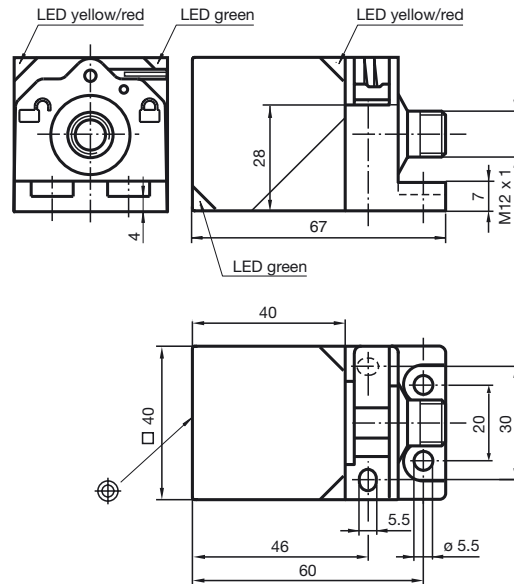
Pinout



Accessories

- V1-W**
Field attachable female cordset
- V1-W-2M-PUR**
Cable socket, M12, 4-pin, PUR cable
- MHW 01**
Modular mounting bracket
- MH 02-L**
Mounting aid
- V1-G-2M-PUR**
Cable socket, M12, 4-pin, PUR cable
- V1-G**
Field attachable female cordset

Dimensions



Technical Data

General specifications

Switching element function		NO/NC programmable
Rated operating distance	s_n	30 mm
Installation		not embeddable
Output polarity		AS-Interface
Assured operating distance	s_a	0 ... 24.3 mm
Reduction factor r_{Al}		0.3
Reduction factor r_{Cu}		0.3
Reduction factor r_{303}		0.75
Reduction factor r_{Brass}		0.38
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 ... 100 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protected		reverse polarity protected
No-load supply current	I_0	\leq 40 mA
Operating voltage display		LED, green
Indication of the switching state		dual-LED, yellow
Fault indication		dual-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	Device connector M12 x 1 , 4-pin
Housing material	PA
Sensing face	PA
Protection degree	IP67
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	Products with a maximum operating voltage of \leq 36 V do not bear a CCC marking because they do not require approval.

Release date: 2011-04-26 13:42 Date of issue: 2011-04-26 226319_ENG.xml

Programming Instructions

Adress 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 ¹⁾ (0 = damped; 1 = undamped)
D1	not used
D2	oscillator monitoring (0= oscillator defective, 1=normal operation)
D3	not used

Parameter bit

Bit	Function
P0	ON / Off delay activated* / deactivated
P1	switching element function ²⁾ (0 = NC; 1 = NO)
P2	not used
P3	not used

- ¹⁾ Applies to NO funktion (P1 = 1; preset),
with NC funktion (P1 = 0) reversed characteristics
- ²⁾ Default setting: NO

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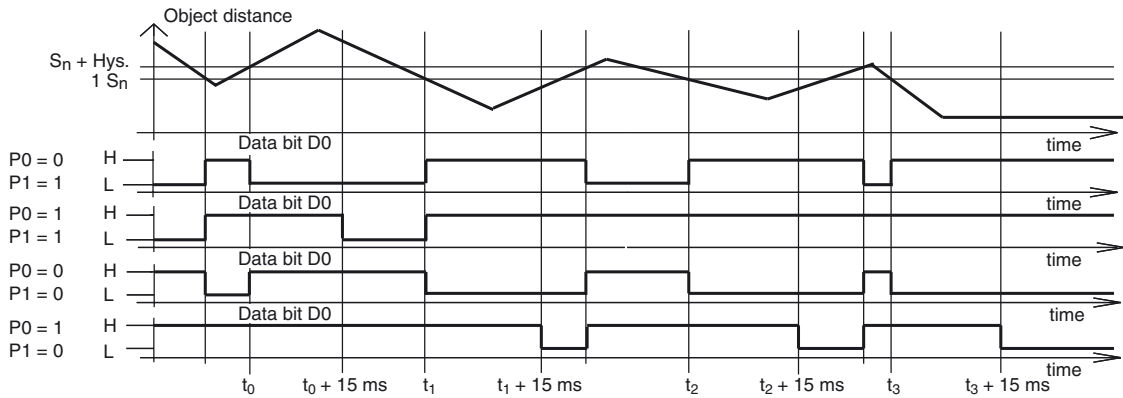
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Indication depending on the operation mode

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 ($P1=0$).