



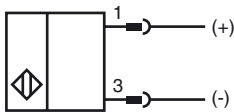
Model Number

NBB40-FP-B3B-P1-V1

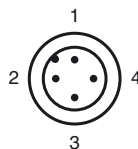
Features

- Basic series
- 40 mm flush
- NO/NC selectable
- On/Off delay (disconnectable)
- Oscillator monitoring
- A/B slave with extended addressing possibility for up to 62 slaves

Connection



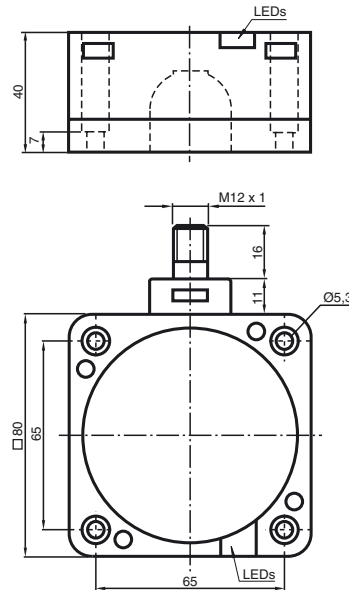
Pinout



Wire colors in accordance with EN 60947-5-2

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

Dimensions



Technical Data

General specifications

Switching element function		NO/NC programmable
Rated operating distance	s_n	40 mm
Installation		flush
Output polarity		AS-Interface
Assured operating distance	s_a	0 ... 32.4 mm
Reduction factor r_{Al}		0.25
Reduction factor r_{Cu}		0.23
Reduction factor r_{304}		0.85

Nominal ratings

Operating voltage	U_B	26.5 ... 31.9 V via AS-i bus system
Switching frequency	f	0 ... 80 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protected		reverse polarity protected
Operating voltage display		LED green
Indication of the switching state		LED yellow
Fault indication		LED red

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	PBT
Sensing face	PBT
Housing base	PBT
Protection degree	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	Products with a maximum operating voltage of ≤ 36 V do not bear a CCC marking because they do not require approval.

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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
D1	not used
D2	Oscillator monitoring
D3	not used

Parameter bit

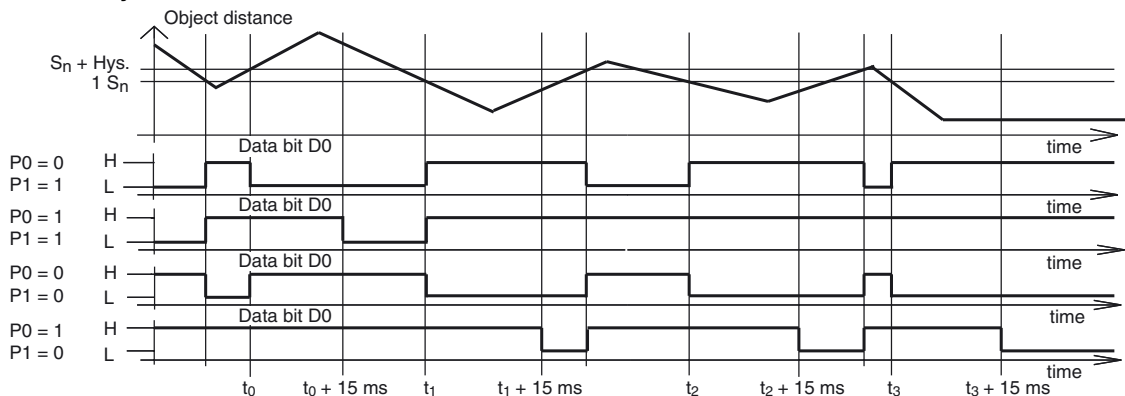
Bit	Function
P0	ON / Off delay activated* / deactivated
P1	Switching element function NO* / NC
P2	not used
P3	not used

*Standard setting

Indication depending on the operation mode

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

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