



**Model Number**

**NBB50-FP-B3B-P1-V1**

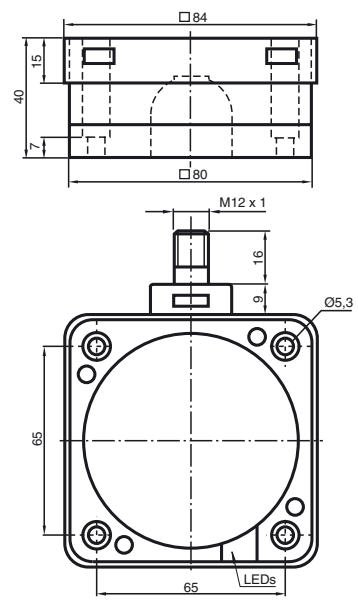
**Features**

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

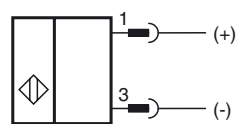
**Technical Data**

General specifications	
Switching function	Normally open/closed (NO/NC) programmable
Output type	AS-Interface
Rated operating distance	$s_n$ 50 mm
Installation	flush
Assured operating distance	$s_a$ 0 ... 40.5 mm
Actual operating distance	$s_r$ 45 ... 55 mm typ. 50 mm
Reduction factor $r_{AI}$	0.38
Reduction factor $r_{CU}$	0.35
Reduction factor $r_{304}$	0.83
Output type	2-wire
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 protection	reverse polarity protected
Time delay before availability	$t_v$ ≤ 1000 ms
Operating voltage indicator	LED green
Switching state indicator	LED yellow
Error indicator	LED red
Ambient conditions	
Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications	
Connection type	4-pin, M12 x 1 connector
Housing material	PBT
Sensing face	PBT
Housing base	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**

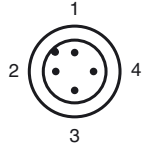


**Electrical Connection**



Release date: 2019-08-23 12:11 Date of issue: 2019-08-23 122881\_eng.xml

## Pinout



Wire colors in accordance with EN 60947-5-2

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

### 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	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).