

Inductive sensor

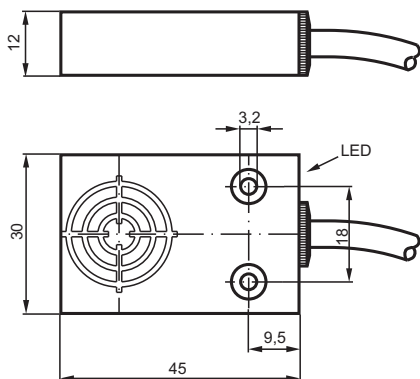
NBB6-F-B3B



- Basic series
- NO/NC selectable
- Degree of protection IP67
- Oscillator monitoring



Dimensions



Technical Data

General specifications		
Switching function		Normally open/closed (NO/NC) programmable
Output type		AS-Interface
Rated operating distance	s_n	6 mm
Installation		flush
Assured operating distance	s_a	0 ... 4.86 mm
Reduction factor r_{Al}		0.28
Reduction factor r_{Cu}		0.25
Reduction factor r_{304}		0.75
Slave type		A/B slave
AS-Interface specification		V3.0
Required master specification		$\geq V2.1$
Output type		2-wire

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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Technical Data

Nominal ratings

Operating voltage	U_B	26.5 ... 31.9 V via AS-i bus system
Switching frequency	f	≥ 500 (P3=0), ≥ 100 (P3=1)
Hysteresis	H	typ. 5 %
Operating current	I_L	20 mA
Time delay before availability	t_v	≤ 1000 ms

Functional safety related parameters

MTTF _d		532 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %

Indicators/operating means

LED POWER		AS-Interface voltage; LED green
LED IN		switching state (input); LED yellow
LED OUT		Dual LED yellow/red yellow: switching state red: error mode

Electrical specifications

Rated operating voltage	U_e	26.5 ... 31.6 V from AS-Interface
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Compliance with standards and directives

Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007 EN 50295:1999

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

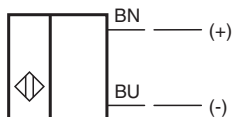
Ambient conditions

Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type		cable PVC , 2 m
Core cross-section		0.34 mm ²
Housing material		PBT
Degree of protection		IP67
Mass		90 g

Connection



Additional Information

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

Parameterbit

Bit	Function
P0	Pulse extension P0 = 1 : 10 ms* P0 = 0 : Without
P1	switching element function NO* / NC
P2	not used
P3	not used

* Standard setting

Fault mode

- No communication
Red LED On
Green LED On
- Address 0 set
Red LED On
Green LED flashes