

Inductive sensor

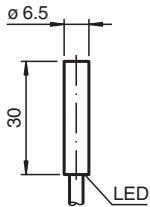
NBB2-6,5M30-E0-0,15M-PUR-V3



- 2 mm flush
- Increased operating distance
- Extended temperature range
-40 ... +85 °C
- Fixed cable with quick disconnect plug



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NPN
Rated operating distance	s_n	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 1.62 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 6.5 mm x 6.5 mm x 1 mm
Reduction factor r_{Al}		0.4
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45
Output type		3-wire

Nominal ratings

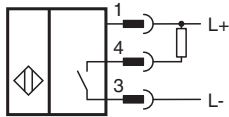
Operating voltage	U_B	5 ... 30 V
Switching frequency	f	0 ... 6000 Hz
Hysteresis	H	typ. 5%
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 100 mA
Off-state current	I_f	0 ... 0.2 mA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 100 ms

Release date: 2025-05-20 Date of issue: 2025-05-20 Filename: 304615-0006_eng.pdf

Technical Data

Switching state indicator	LED, yellow	
Functional safety related parameters		
MTTF _d	960 a	
Mission Time (T _M)	20 a	
Diagnostic Coverage (DC)	0 %	
Compliance with standards and directives		
Standard conformity		
Standards	EN IEC 60947-5-2	
Approvals and certificates		
UL approval	cULus Listed, General Purpose	
CCC approval	CCC approval / marking not required for products rated ≤36 V	
Ambient conditions		
Ambient temperature	-40 ... 85 °C (-40 ... 185 °F)	
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)	
Mechanical specifications		
Connection type	fixed cable with plug	
Housing material	brass, nickel-plated	
Sensing face	LCP	
Degree of protection	IP65 / IP66 / IP67	
Connector		
Threading	M8 x 1	
Number of pins	3	
Cable		
Cable diameter	4.5 mm ± 0.15 mm	
Bending radius	> 10 x cable diameter	
Material	PUR	
Color	black	
Number of cores	3	
Core cross section	0.25 mm ²	
Length	L	0.15 m
Dimensions		
Length	30 mm	
Diameter	6.5 mm	

Connection



Connection Assignment



Connection Assignment

Wire colors in accordance with EN 60947-5-2

1		BN	(brown)
3		BU	(blue)
4		BK	(black)