

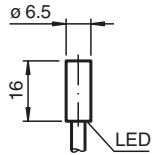


## Inductive sensor NBB2-6,5S16-E3

- 2 mm flush
- Increased operating distance
- Extended temperature range  
-40 ... +85 °C



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally closed (NC)
Output type		PNP
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 $r_{Al}$		0.15
Reduction factor $r_{Cu}$		0.1
Reduction factor $r_{304}$		0.5
Reduction factor $r_{Brass}$		0.2
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	$U_d$	$\leq 1.5$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.2 mA
No-load supply current	$I_o$	$\leq 10$ mA
Time delay before availability	$t_v$	$\leq 100$ ms
Switching state indicator		LED, yellow

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## Technical Data

### Functional safety related parameters

MTTF <sub>d</sub>	960 a
Mission Time (T <sub>M</sub> )	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	cable
Housing material	Stainless steel 1.4305 / AISI 303
Sensing face	LCP
Degree of protection	IP65 / IP66 / IP67

#### Cable

Wire end ferrules	yes	
Cable diameter	3.5 mm ± 0.1 mm	
Bending radius	> 10 x cable diameter	
Material	PVC	
Color	black	
Number of cores	3	
Core cross section	0.14 mm <sup>2</sup>	
Length	L	2 m
Mass	37 g	
Dimensions		
Length	16 mm	
Diameter	6.5 mm	

## Connection Assignment

