

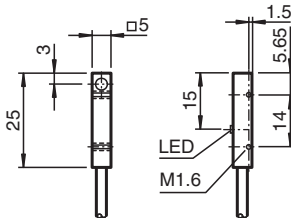


## Inductive sensor NBB0,8-F141-E2

- Basic series
- 0.8 mm flush
- 3-wire DC
- Extremely high switching frequency
- Metal housing



### Dimensions



### Technical Data

#### General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	0.8 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 0.648 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 5 mm x 5 mm x 1 mm
Reduction factor $r_{Al}$		0.6
Reduction factor $r_{Cu}$		0.45
Reduction factor $r_{304}$		0.85
Reduction factor $r_{Brass}$		0.6
Output type		3-wire

#### Nominal ratings

Operating voltage	$U_B$	10 ... 30 V DC
Switching frequency	$f$	0 ... 10000 Hz
Hysteresis	$H$	0.01 ... 0.1 mm
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Overload resistance		yes
Wire breakage protection		yes
Inductive overvoltage protection		yes
Surge suppression		yes
Ripple		≤ 10 %

Release date: 2024-11-13 Date of issue: 2024-11-14 Filename: 231910\_eng.pdf

## Technical Data

Voltage drop	$U_d$	$\leq 1.5$ V
Repeat accuracy	R	0.01 mm
Operating current	$I_L$	0 ... 200 mA
Off-state current	$I_r$	0 ... 0.1 mA
No-load supply current	$I_0$	$\leq 5$ mA
Time delay before availability	$t_v$	$\leq 1$ ms
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1354 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		brass, nickel-plated
Sensing face		POM
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		2.6 mm $\pm$ 0.1 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.14 mm <sup>2</sup>
Length	L	2 m
Mass		40 g
Dimensions		
Height		5 mm
Width		5 mm
Length		25 mm

## Connection

