

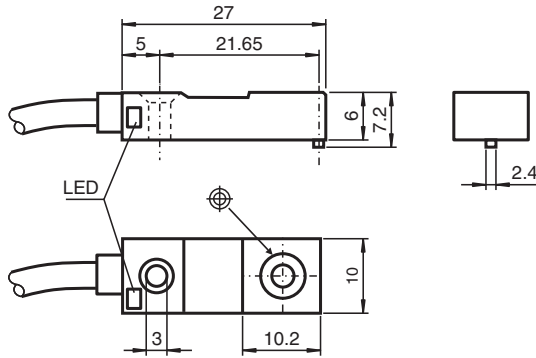


# Inductive sensor NBB2-F29-A0

- 2 mm flush
- 4-wire DC



## Dimensions



## Technical Data

### General specifications

Switching function		complementary
Output type		NPN
Rated operating distance	$s_n$	2 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 1.62 mm
Reduction factor $r_{Al}$		0.2
Reduction factor $r_{Cu}$		0.15
Reduction factor $r_{304}$		0.7
Output type		4-wire

### Nominal ratings

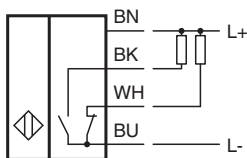
Operating voltage	$U_B$	4.75 ... 30 V DC
Switching frequency	$f$	0 ... 1000 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2$ V
Operating current	$I_L$	0 ... 100 mA
Off-state current	$I_r$	0 ... 0.5 mA typ. 0.1 $\mu$ A at 25 °C

Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 802136\_eng.pdf

## Technical Data

No-load supply current	$I_0$	$\leq 15 \text{ mA}$
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1680 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>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated $\leq 36 \text{ V}$
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		Ryton R4
Sensing face		Ryton R4
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3 mm + 0.3 mm
Bending radius		> 10 x cable diameter
Material		PVC
Color		grey
Number of cores		3
Core cross section		0.14 mm <sup>2</sup>
Length	L	2 m
Dimensions		
Height		6 mm
Width		10 mm
Length		27 mm

## Connection



Release date: 2025-02-27 Date of issue: 2025-02-27 Filename: 802136\_eng.pdf