

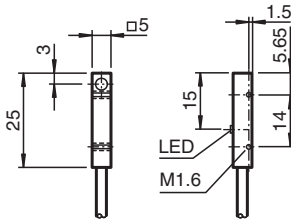


Inductive sensor NBB0,8-F141-E0

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



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		NPN
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 %

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Technical Data

Voltage drop	U_d	$\leq 1.5 \text{ V}$
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	$\leq 5 \text{ mA}$
Time delay before availability	t_v	$\leq 1 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1354 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Ambient conditions		
Ambient temperature		-25 ... 85 °C (-13 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
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 ²
Length	L	2 m
Mass		40 g
Dimensions		
Height		5 mm
Width		5 mm
Length		25 mm

Connection

