

Inductive sensor

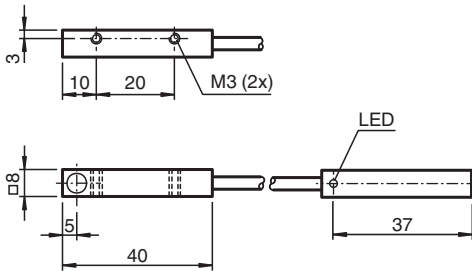
NEB3-F41-E2



- 3-wire DC
- Metal housing
- 3 mm quasi flush



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	3 mm
Installation		quasi flush
Output polarity		DC
Assured operating distance	s_a	0 ... 2.4 mm
Actuating element		mild steel, e. g. 1.0037, SR235JR (formerly St37-2) 9 mm x 9 mm x 1 mm
Reduction factor r_{Al}		0.35
Reduction factor r_{Cu}		0.3
Reduction factor r_{304}		0.7
Reduction factor r_{Brass}		0.45
Output type		3-wire

Nominal ratings

Installation conditions		
B		6 mm
C		9 mm
F		16 mm
G		1 mm
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 1000 Hz
Hysteresis	H	2 ... 20 % typ. 10 %

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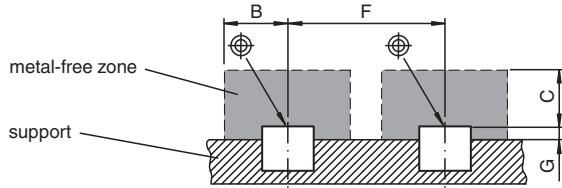
Technical Data

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 %
Voltage drop	U_d	≤ 2 V
Repeat accuracy	R	0.15 mm
Operating current	I_L	0 ... 200 mA , above 50°C max. 150 mA
Off-state current	I_r	≤ 10 μA
No-load supply current	I_0	≤ 15 mA
Time delay before availability	t_v	≤ 50 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		2134 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, Class 2 Power Source
CCC approval		CCC approval / marking not required for products rated ≤36 V
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		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		3.3 mm ± 0.2 mm
Material		PVC
Color		black
Number of cores		3
Core cross section		0.14 mm ²
Length	L	2 m
Mass		50 g
Dimensions		
Height		8 mm
Width		8 mm
Length		40 mm

Connection



Installation Conditions



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