



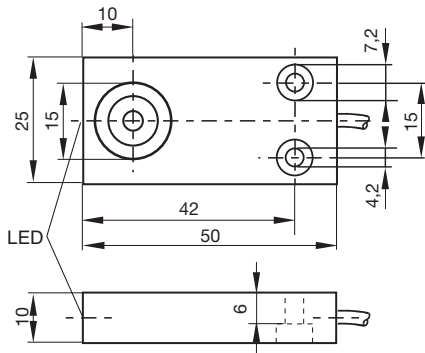
Inductive sensor

NBB5-F33M-E2

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



Dimensions



Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s _n	5 mm
Installation		flush
Output polarity		DC
Assured operating distance	s _a	0 ... 4.05 mm
Reduction factor r _{Al}		0.3
Reduction factor r _{Cu}		0.2
Reduction factor r ₃₀₄		0.6
Output type		3-wire
Nominal ratings		
Operating voltage	U _B	10 ... 30 V DC

Technical Data

Switching frequency	f	0 ... 500 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U _d	≤ 3 V
Operating current	I _L	0 ... 200 mA
Off-state current	I _r	0 ... 0.5 mA typ. 0.1 µA
No-load supply current	I ₀	≤ 15 mA
Time delay before availability	t _v	≤ 10 ms
Switching state indicator		LED
Functional safety related parameters		
MTTF _d		1840 a
Mission Time (T _M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012
Approvals and certificates		
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cablE PVC , 2 m
Core cross-section		0.34 mm ²
Housing material		metal
Sensing face		PBT
Degree of protection		IP67

Connection

