

Inductive sensor

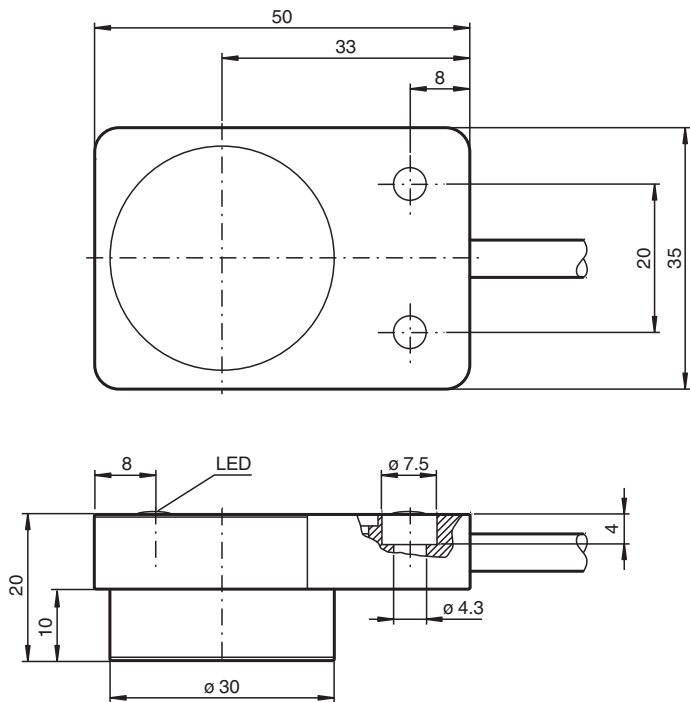
NBB15-F148P10-ARO

- 15 mm flush
- Relay contact output
- Extended temperature range
- Highly shock and vibration resistant

Inductive sensor with relay contact output



Dimensions



Technical Data

General specifications		
Switching function		Normally closed (NC)
Output type		relay
Rated operating distance	S _n	15 mm
Installation		flush
Output polarity		DC
Assured operating distance	S _a	0 ... 12.15 mm
Reduction factor r _{Al}		0.45
Reduction factor r _{Cu}		0.35

Technical Data

Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.5
Output type		relay
Nominal ratings		
Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 600 Hz
Hysteresis	H	2 ... 20 % (typ. 3 %)
Reverse polarity protection		reverse polarity protected
Short-circuit protection		no
Voltage drop	U_d	$\leq 0.5 \text{ V}$ ($\leq 0.275 \text{ V}$ at $\leq 100 \text{ mA}$ operating current)
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	$\leq 10 \mu\text{A}$
No-load supply current	I_0	$\leq 10 \text{ mA}$
Time delay before availability	t_v	$\leq 300 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1004 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
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable PUR , 2 m
Core cross-section		0.5 mm ²
Housing material		anodized aluminum
Sensing face		PBT
Degree of protection		IP67 / IP69K
Tightening torque, housing screws		$\leq 1.8 \text{ Nm}$

Connection

