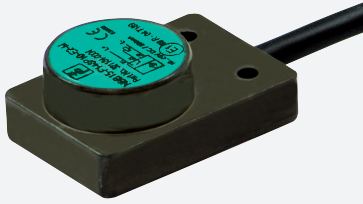


# Inductive sensor

## NBB15-F148P10-ARO

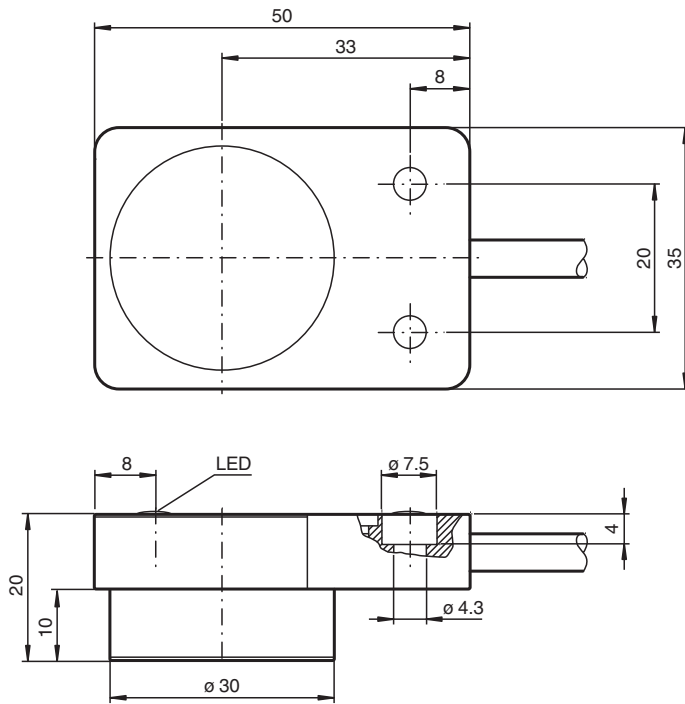


- 15 mm flush
- Relay contact output
- Extended temperature range
- Highly shock and vibration resistant

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
Reduction factor $r_{304}$		0.8

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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## Technical Data

Reduction factor $r_{\text{Brass}}$		0.5
Output type		relay
<b>Nominal ratings</b>		
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
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1004 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
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
<b>Ambient conditions</b>		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
<b>Mechanical specifications</b>		
Connection type		cable PUR , 2 m
Core cross section		0.5 mm <sup>2</sup>
Housing material		anodized aluminum
Sensing face		PBT
Degree of protection		IP67 / IP69K
Tightening torque, housing screws		$\leq 1.8 \text{ Nm}$

## Connection

