

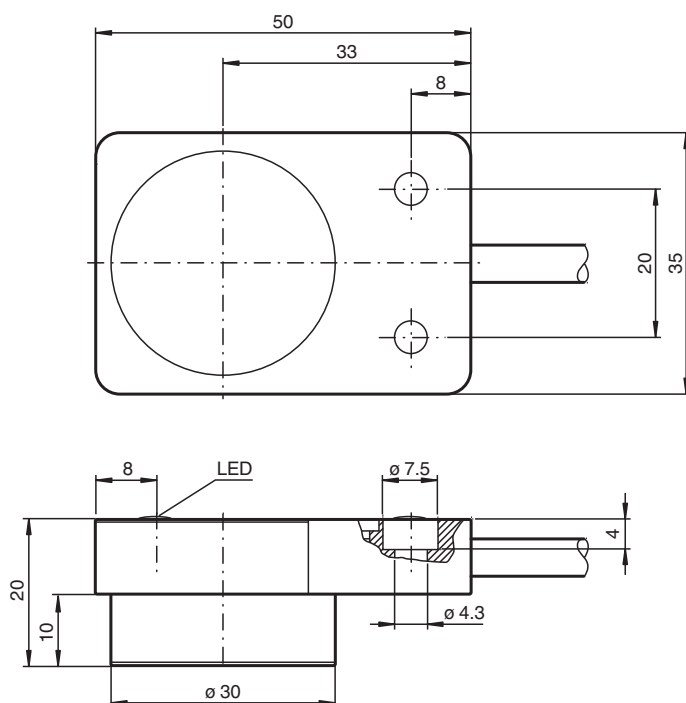
Inductive sensor

NBB15-F148P10-E2-0,46M-V1

- 15 mm flush
- 3-wire DC
- Extended temperature range
- Highly shock and vibration resistant
- Fixed cable with plug
- RADOX cable EM 104 from Huber+Suhner



Dimensions



Technical Data

General specifications

Switching function	Normally open (NO)	
Output type	PNP	
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}	0.5	
Reduction factor r_{Cu}	0.45	

Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 321184-0014_eng.pdf

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

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0001
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111
fa-info@de.pepperl-fuchs.com

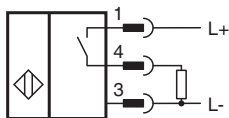
Singapore: +65 6779 9091
fa-info@sg.pepperl-fuchs.com

PEPPERL+FUCHS

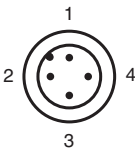
Technical Data

Reduction factor r_{304}		0.8
Reduction factor r_{Brass}		0.55
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 600 Hz
Hysteresis	H	2 ... 20 % (typ. 3 %)
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 10 μ A
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 300 ms
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		1156 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 connector M12 x 1 , 460 mm from Huber+Suhner RADOX EM 104
Core cross-section		0.5 mm ²
Housing material		anodized aluminum
Sensing face		PBT
Degree of protection		IP67 / IP69K
Tightening torque, housing screws		≤ 1.8 Nm

Connection



Connection Assignment



Release date: 2020-03-24 Date of issue: 2020-03-30 Filename: 321184-0014_eng.pdf