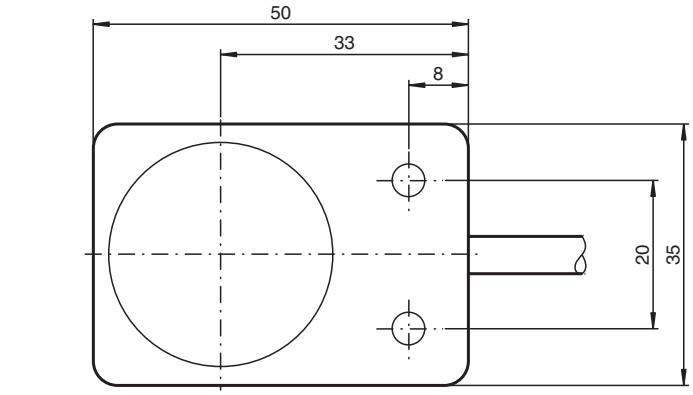


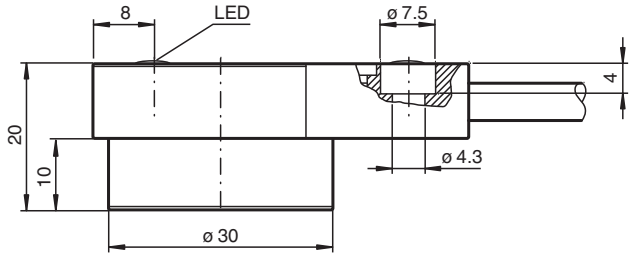
Inductive sensor

NBB8-F148P10-E2-M-2M-PUR-V1S

- 8 mm flush
- 3-wire DC
- Extended temperature range
- E1-Type approval
- Highly shock and vibration resistant

Dimensions





Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	8 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 6.48 mm
Reduction factor r_{Al}		0.45
Reduction factor r_{Cu}		0.4
Reduction factor r_{304}		0.8

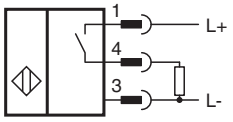
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Technical Data

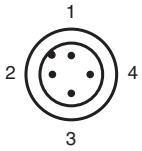
Reduction factor r_{Brass}		0.5
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 600 Hz
Hysteresis	H	2 ... 20 % (typ. 3 %)
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 1.5 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	≤ 10 µA
No-load supply current	I_0	≤ 10 mA
Time delay before availability	t_v	≤ 300 ms
Switching state indicator		LED, yellow
Safety-relevant product characteristics		
$MTTF_d$		1008 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		
E1 Type approval		10R-06
Ambient conditions		
Ambient temperature		-40 ... 85 °C (-40 ... 185 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		anodized aluminum
Sensing face		PPS
Degree of protection		IP67 / IP69K
Connector		
Threading		M12 x 1
Tightening torque		≤ 0.6 Nm
Number of pins		3
Cable		
Cable diameter		4.3 mm ± 0.1 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		3
Core cross section		0.34 mm^2
Length	L	2 m
Mass		96 g
Tightening torque, housing screws		≤ 1.8 Nm
Dimensions		
Height		20 mm
Width		35 mm
Length		50 mm

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Connection Assignment



Connection Assignment



Wire colors in accordance with EN 60947-5-2

1	BN	(brown)
2	WH	(white)
3	BU	(blue)
4	BK	(black)

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