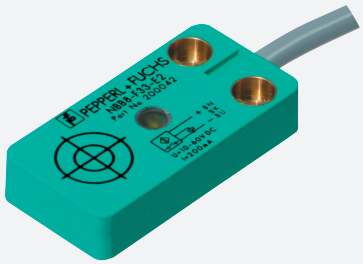
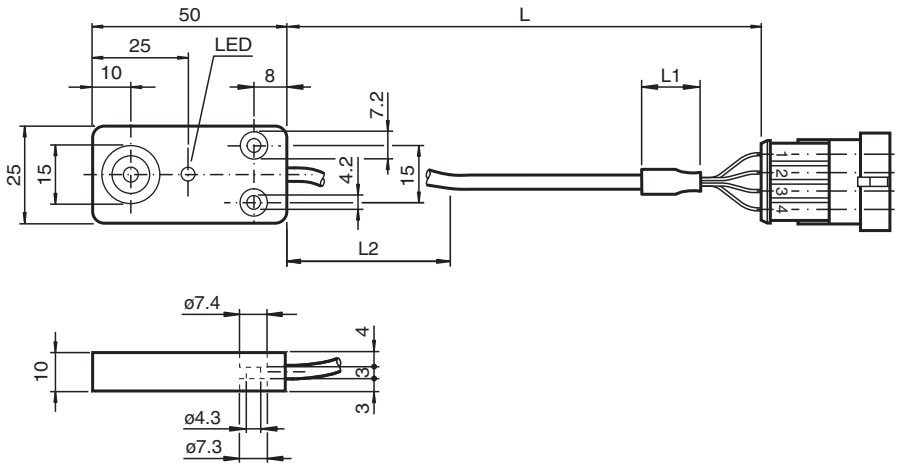


Inductive sensor

NBB8-F33-A2-Y70150659

- 8 mm flush
- 4-wire DC
- Raised EMC resistance 36 V/m

Dimensions



Technical Data

General specifications		
Switching function		complementary
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}		0.3
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
Switching frequency	f	0 ... 350 Hz
Hysteresis	H	typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing

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Technical Data

Voltage drop	U_d	≤ 3 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	0 ... 0.5 mA
No-load supply current	I_0	≤ 25 mA
Time delay before availability	t_v	≤ 5 ms
Switching state indicator		LED yellow
Functional safety related parameters		
$MTTF_d$		1240 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		0 %
Compliance with standards and directives		
Standard conformity		
Standards		EN IEC 60947-5-2
Ambient conditions		
Ambient temperature		-35 ... 70 °C (-31 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		fixed cable with plug
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67 / IP69K
Connector		AMP connector
Number of pins		4
Connection assembly		AMP housing 282106-1 AMP single wire seal 281934-4 AMP crimp 282404-1
Cable		
Cable diameter		4.8 mm ± 0.15 mm
Bending radius		> 10 x cable diameter
Material		PUR
Color		black
Number of cores		4
Core cross section		0.5 mm^2
Length	L	325 mm ± 5 mm
Cable protection		approx. L1 = 30 mm
Dimensions		
Height		10 mm
Width		25 mm
Length		50 mm
Tightening torque		≤ 5 Nm

Connection