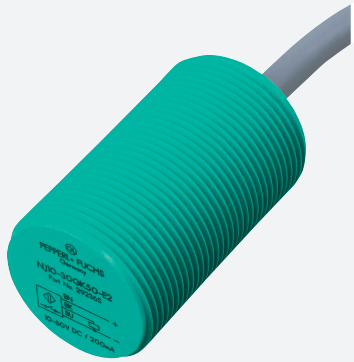
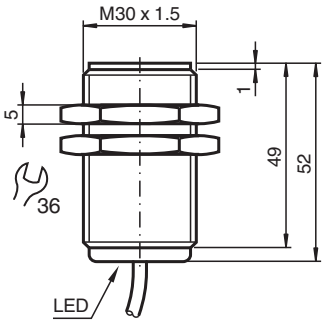


Inductive sensor

NJ10-30GK50-E2-Y222509

- 3-wire DC
- 10 mm flush

Dimensions



Technical Data

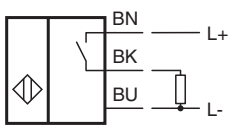
General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	10 mm
Installation		flush
Output polarity		DC
Assured operating distance	s_a	0 ... 8.1 mm
Actual operating distance	s_r	9 ... 11 mm typ. 10 mm
Reduction factor r_{Al}		0.22
Reduction factor r_{Cu}		0.19
Reduction factor r_{304}		0.66
Reduction factor r_{Brass}		0.33
Output type		3-wire
Nominal ratings		
Operating voltage	U_B	10 ... 60 V
Switching frequency	f	0 ... 700 Hz
Hysteresis	H	typ. 5 %

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Technical Data

Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 2.8 V
Voltage drop at I_L		
Voltage drop I_L = 10 mA, switching element on	U_d	0.9 ... 2.4 V typ. 1.7 V
Voltage drop I_L = 20 mA, switching element on	U_d	0.9 ... 2.4 V typ. 1.7 V
Voltage drop I_L = 50 mA, switching element on	U_d	0.9 ... 2.5 V typ. 1.7 V
Voltage drop I_L = 100 mA, switching element on	U_d	1 ... 2.6 V typ. 1.8 V
Voltage drop I_L = 200 mA, switching element on	U_d	1.2 ... 2.8 V typ. 2 V
Operating current	I_L	0 ... 400 mA
Off-state current	I_r	0 ... 0.5 mA typ. 0.01 mA
No-load supply current	I_0	≤ 9 mA
Switching state indicator		LED, yellow
Functional safety related parameters		
$MTTF_d$		1370 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		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
Ambient conditions		
Ambient temperature		-40 ... 70 °C (-40 ... 158 °F)
Storage temperature		-40 ... 85 °C (-40 ... 185 °F)
Mechanical specifications		
Connection type		cable silicone , 2.9 m
Core cross section		0.75 mm^2
Housing material		PBT
Sensing face		PBT
Degree of protection		IP68
Dimensions		
Length		50 mm
Diameter		30 mm
Note		stainless steel nuts included

Connection Assignment



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