

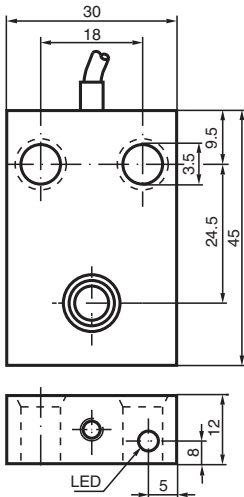


Inductive sensor NJ10-F-E2

- Comfort series
- 10 mm non-flush
- 3-wire DC



Dimensions



Technical Data

General specifications

Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	10 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 8.1 mm
Actual operating distance	s_r	5.4 ... 6.6 mm typ.
Reduction factor r_{Al}		0.22
Reduction factor r_{Cu}		0.2
Reduction factor r_{304}		0.7
Output type		3-wire

Nominal ratings

Operating voltage	U_B	10 ... 60 V DC
Switching frequency	f	0 ... 250 Hz
Hysteresis	H	0 ... 0.3 % typ. 0.1 %
Reverse polarity protection		reverse polarity protected

Release date: 2025-06-04 Date of issue: 2025-06-04 Filename: 024683_eng.pdf

Technical Data

Short-circuit protection		pulsing
Voltage drop	U_d	$\leq 3 \text{ V}$
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	$\leq 0.5 \text{ mA}$
No-load supply current	I_0	$\leq 20 \text{ mA}$
Time delay before availability	t_v	$\leq 15 \text{ ms}$
Switching state indicator		LED, yellow
Functional safety related parameters		
MTTF _d		990 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		-25 ... 70 °C (-13 ... 158 °F)
Mechanical specifications		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
Cable		
Wire end ferrules		yes
Cable diameter		4.8 mm ± 0.2 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		91 g
Dimensions		
Height		12 mm
Width		30 mm
Length		45 mm

Connection Assignment

