

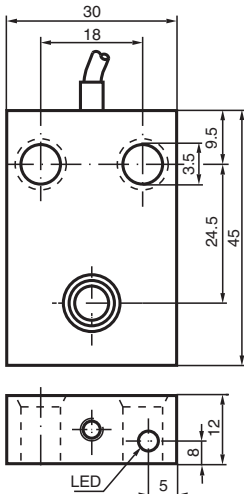


## Inductive sensor NJ6-F-A

- 6 mm flush
- 4-wire DC
- Polarity reversal protected



### Dimensions



### Technical Data

#### General specifications

Switching function		complementary
Output type		NPN
Rated operating distance	$s_n$	6 mm
Installation		flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 4.8 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		4-wire

#### Nominal ratings

Operating voltage	$U_B$	10 ... 60 V DC
Switching frequency	$f$	0 ... 500 Hz
Hysteresis	$H$	0 ... 0.3 mm typ. 5 %
Reverse polarity protection		reverse polarity protected

Release date: 2025-06-06 Date of issue: 2025-06-06 Filename: 025928\_eng.pdf

## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 3 \text{ V}$
Operating current	$I_L$	0 ... 200 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
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		690 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN IEC 60947-5-2
<b>Approvals and certificates</b>		
UL approval		cULus Listed, General Purpose
CCC approval		Certified by China Compulsory Certification (CCC)
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		cable
Housing material		PBT
Sensing face		PBT
Degree of protection		IP67
<b>Cable</b>		
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		4
Core cross section		0.34 mm <sup>2</sup>
Length	L	2 m
Mass		96 g
<b>Dimensions</b>		
Height		12 mm
Width		30 mm
Length		45 mm

## Connection

