



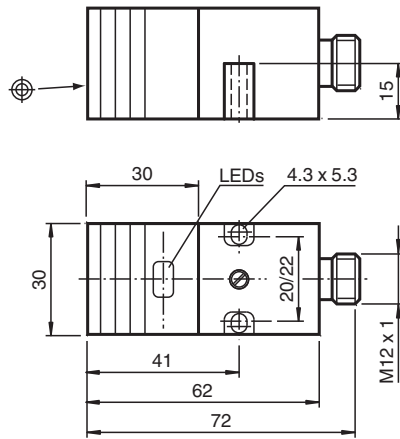
# Inductive sensor

## NJ15-M1-E2-V1-Y222496

- 15 mm non-flush
- 3-wire DC



### Dimensions



### Technical Data

General specifications		
Switching function		Normally open (NO)
Output type		PNP
Rated operating distance	$s_n$	15 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 12.15 mm
Actual operating distance	$s_r$	13.5 ... 16.5 mm typ. 15 mm
Reduction factor $r_{Al}$		0.39
Reduction factor $r_{Cu}$		0.36
Reduction factor $r_{304}$		0.73
Output type		3-wire
Nominal ratings		
Operating voltage	$U_B$	10 ... 60 V DC
Switching frequency	$f$	0 ... 200 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		yes

Release date: 2022-06-30 Date of issue: 2022-06-30 Filename: 222496\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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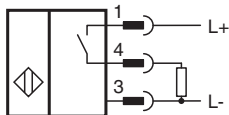
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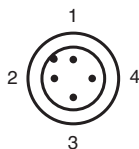
## Technical Data

Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5 \text{ V}$
Voltage drop at $I_L$		
Voltage drop $I_L = 200 \text{ mA}$ , switching element on	$U_d$	1 ... 2.5 V typ. 2.2 V
Rated insulation voltage	$U_{BIS}$	500 V
Operating current	$I_L$	0 ... 200 mA
No-load supply current	$I_0$	$\leq 14 \text{ mA}$
Time delay before availability	$t_v$	$\leq 50 \text{ ms}$
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow
<b>Functional safety related parameters</b>		
MTTF <sub>d</sub>		1000 a
Mission Time ( $T_M$ )		20 a
Diagnostic Coverage (DC)		0 %
<b>Compliance with standards and directives</b>		
Standard conformity		
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007
<b>Ambient conditions</b>		
Ambient temperature		-25 ... 70 °C (-13 ... 158 °F)
<b>Mechanical specifications</b>		
Connection type		Connector plug M12 x 1 , 4-pin
Housing material		PBT/metal RAL 7011
Sensing face		PBT
Degree of protection		IP67

## Connection





## Connection Assignment



Wire colors in accordance with EN 60947-5-2

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

**Accessories**

	<b>V1-W-2M-PUR</b>	Female cordset single-ended M12 angled A-coded, 4-pin, PUR cable grey
	<b>V1-G-2M-PUR</b>	Female cordset single-ended M12 straight A-coded, 4-pin, PUR cable grey