



### Model Number

NJ15-M1-E2-V1

### Features

- 15 mm non-flush
- 3-wire DC

### Accessories

#### V1-G

Female connector, M12, 4-pin, field attachable

#### V1-W-2M-PUR

Female cordset, M12, 4-pin, PUR cable

#### V1-G-2M-PUR

Female cordset, M12, 4-pin, PUR cable

#### V1-W

Female connector, M12, 4-pin, field attachable

## Technical Data

### General specifications

Switching element function	PNP	NO
Rated operating distance	$s_n$	15 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	$s_a$	0 ... 12.15 mm
Reduction factor $r_{Al}$		0.39
Reduction factor $r_{Cu}$		0.36
Reduction factor $r_{304}$		0.73

### Nominal ratings

Operating voltage	$U_B$	10 ... 60 V DC
Switching frequency	$f$	0 ... 200 Hz
Hysteresis	$H$	typ. 5 %
Reverse polarity protection		yes
Short-circuit protection		pulsing
Voltage drop	$U_d$	$\leq 2.5$ V
Voltage drop at $I_L$		
Voltage drop $I_L = 200$ 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	$I_0$	$\leq 14$ mA
Time delay before availability	$t_v$	$\leq 50$ ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

### Functional safety related parameters

MTTF <sub>d</sub>	932 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 70 °C (-13 ... 158 °F)
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### Mechanical specifications

Connection type	Connector M12 x 1, 4-pin
Housing material	PBT/metal RAL 7011
Sensing face	PBT
Degree of protection	IP67

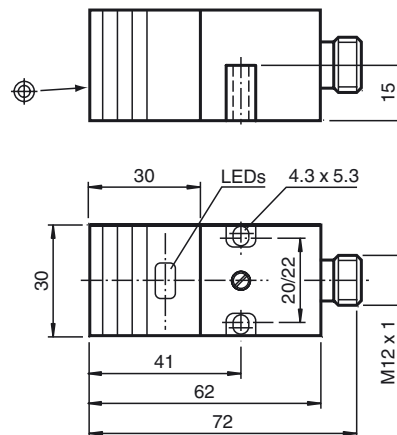
### Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 IEC 60947-5-2:2007

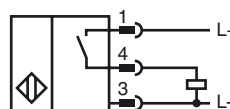
### Approvals and certificates

CCC approval	Certified by China Compulsory Certification (CCC)
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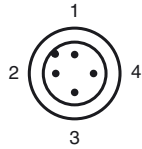
## Dimensions



## Electrical Connection



## Pinout



Wire colors in accordance with EN 60947-5-2

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