



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
Actual operating distance	s_r	13.5 ... 16.5 mm typ. 15 mm
Reduction factor r_{AI}		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	≤ 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	≤ 14 mA
Time delay before availability	t_v	≤ 50 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	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

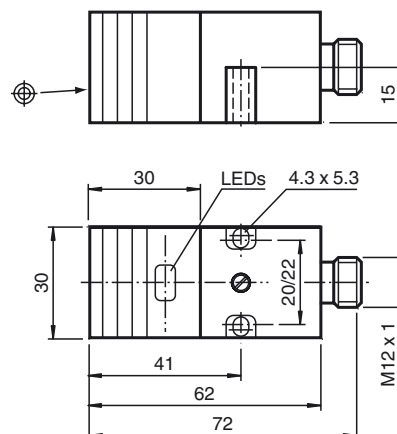
Compliance with standards and directives

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

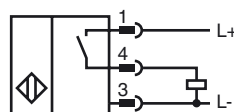
Approvals and certificates

EAC conformity	TR CU 020/2011
CCC approval	Certified by China Compulsory Certification (CCC)

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)