



Model Number

NCN100-F23-E2-V1

Features

- 100 mm non-flush
- 3-wire DC

Accessories

V1-G

Female connector, M12, 4-pin, field attachable

V1-W

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

Technical Data

General specifications

Switching element function	PNP	NO
Rated operating distance	s_n	100 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 81 mm
Reduction factor r_{Al}		0.37
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		1
Reduction factor r_{Brass}		0.47

Nominal ratings

Operating voltage	U_B	10 ... 30 V DC
Switching frequency	f	0 ... 10 Hz
Hysteresis	H	typ. 8 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		pulsing
Voltage drop	U_d	≤ 3 V
Voltage drop at I_L		
Voltage drop $I_L = 200$ mA, switching element on U_d		1.3 ... 2.2 V typ. 1.9 V
Operating current	I_L	0 ... 200 mA
Off-state current	I_r	
Off-state current $U_B = 1.1 \times U_{0.5}$, switching element off		0 ... 0.5 mA
No-load supply current	I_0	≤ 20 mA
Time delay before availability	t_v	≤ 90 ms
Operating voltage indicator		LED, green
Switching state indicator		LED, yellow

Functional safety related parameters

MTTF _d	911 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	ABS (TSG), bottom Al
Sensing face	ABS
Housing base	aluminum
Degree of protection	IP67

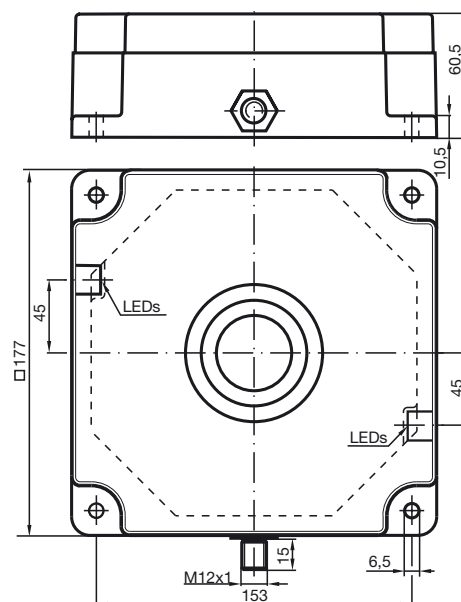
General information

Note	The mounting conditions must be checked on a case-by-case basis depending on the application in question.
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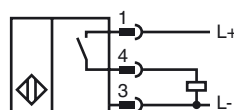
Compliance with standards and directives

Standard conformity	
Standards	EN 50044

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)