



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 function		Normally open (NO)
Output type		PNP
Rated operating distance	s_n	100 mm
Installation		non-flush
Output polarity		DC
Assured operating distance	s_a	0 ... 81 mm
Actual operating distance	s_r	90 ... 110 mm typ.
Reduction factor r_{Al}		0.37
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		1
Reduction factor r_{Brass}		0.47
Output type		3-wire

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		
Off-state current $U_B = 1.1 \times U_e$, 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)
Storage temperature	-40 ... 85 °C (-40 ... 185 °F)

Mechanical specifications

Connection type	Connector plug M12 x 1, 4-pin
Housing material	ABS (TSG), bottom Al
Sensing face	ABS
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.

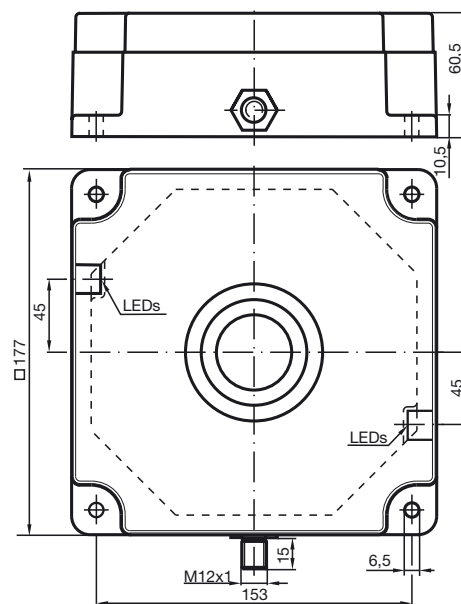
Compliance with standards and directives

Standard conformity	
Standards	EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

Approvals and certificates

UL approval	cULus Listed, General Purpose
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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)