



## Model Number

NCN50-FP-N0-P4-V1

## Features

- 50 mm non-flush

## Accessories

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

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

Female cordset, M12, 2-pin, NAMUR, PUR cable

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

Female cordset, M12, 2-pin, NAMUR, PUR cable

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	50 mm
Installation		non-flush
Assured operating distance	$s_a$	0 ... 40.5 mm
Actual operating distance	$s_r$	45 ... 55 mm typ.
Reduction factor $r_{AI}$		0.4
Reduction factor $r_{CU}$		0.35
Reduction factor $r_{304}$		0.8
Output type		2-wire

### Nominal ratings

Installation conditions		
A		40 mm
B		150 mm
F		240 mm
Nominal voltage	$U_o$	8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Switching frequency	f	0 ... 80 Hz
Hysteresis	H	0 ... 5 typ. 3 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		$\geq 3$ mA
Measuring plate detected		$\leq 1$ mA
Time delay before availability	$t_v$	$\leq 20$ ms
Switching state indicator		LED, yellow

### Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
Storage temperature	-40 ... 100 °C (-40 ... 212 °F)

### Mechanical specifications

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

### General information

Use in the hazardous area	see instruction manuals
Category	1G; 2G; 1D

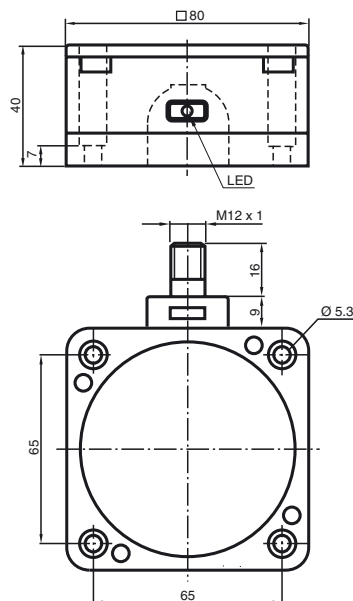
### Compliance with standards and directives

Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Electromagnetic compatibility	
Standards	NE 21:2007 EN 60947-5-2:2007 IEC 60947-5-2:2007

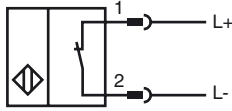
### Approvals and certificates

FM approval	
Control drawing	116-0165
UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose
CCC approval	CCC approval / marking not required for products rated $\leq 36$ V

## Dimensions



**Electrical Connection**



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)

**Equipment protection level Ga**

CE marking	CE 0102	
Effective internal inductivity	$C_i$	$\leq 220 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 360 \text{ }\mu\text{H}$ ; a cable length of 10 m is considered.
Highest permissible ambient temperature	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate. <b>Note:</b> Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1 has already been applied to the temperature table for category 1.	

**Equipment protection level Gb**

CE marking	CE 0102	
Effective internal inductivity	$C_i$	$\leq 220 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 360 \text{ }\mu\text{H}$ ; a cable length of 10 m is considered.
Maximum permissible ambient temperature $T_{amb}$	Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, the temperature class, and the effective internal reactance values can be found on the EU-type examination certificate.	

**Equipment protection level Da**

CE marking	CE 0102	
Effective internal inductivity	$C_i$	$\leq 220 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 360 \text{ }\mu\text{H}$ ; a cable length of 10 m is considered.