



CE
0102

Model Number

NCN20+U1M+N0

Features

- Comfort series
- 20 mm non-flush

Technical Data

General specifications

Switching element function		NAMUR, NC
Rated operating distance	s_n	20 mm
Installation		non-flush
Output polarity		NAMUR
Assured operating distance	s_a	0 ... 16.2 mm
Reduction factor r_{Al}		0.37
Reduction factor r_{Cu}		0.35
Reduction factor r_{304}		0.79

Nominal ratings

Installation conditions		
A		5 mm
B		
C		
Nominal voltage	U_o	8 V
Switching frequency	f	0 ... 250 Hz
Hysteresis	H	1 ... 15 typ. 5 %
Reverse polarity protection		reverse polarity protected
Short-circuit protection		yes
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA
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	terminal compartment
Core cross-section	up to 2.5 mm ²
Housing material	PBT
Sensing face	PBT
Degree of protection	IP68

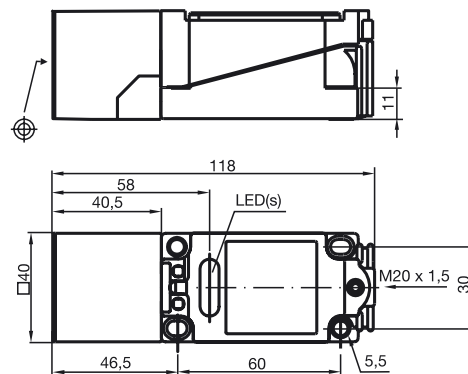
General information

Use in the hazardous area	see instruction manuals
Category	2G

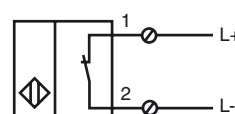
Compliance with standards and directives

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

Dimensions



Electrical Connection



ATEX 2G

Instruction

Device category 2G

EC-Type Examination Certificate

CE marking

ATEX marking

Directive conformity

Standards

Appropriate type

Effective internal capacitance C_i Effective internal inductance L_i

General

Ambient temperature

Installation, Commissioning

Maintenance

Specific conditions**Manual electrical apparatus for hazardous areas**

for use in hazardous areas with gas, vapour and mist

PTB 00 ATEX 2032 X

CE 0102

II 2G EEx ia IIC T6

94/9/EG

EN 50014:1997, EN 50020:1994

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

NCN20+U...+N0...

≤ 110 nF ; a cable length of 10 m is considered.

≤ 160 μH ; a cable length of 10 m is considered.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate.

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.