



## **inductive sensor NBN40-U1-UU**

**238886**

URL:<https://www.sxplc.com/inductive-sensor-nbn40-u1-uu-238886>

### **Product data sheet**

General Specifications

Switch Function Normally Open/Normally Closed (NO/NC)

Output type 2-wire type

Rated Working Distance 40 mm

Mounting Non-flush

Output polarity AC/DC

Ensured operating distance 0 ... 32,4 mm

Actual working distance 36 ... 44 mm Type 40 mm

Attenuation coefficient rAI 0,37

Attenuation factor rCu 0,3

Attenuation factor r304 0,73

Reduction factor rFe 1

Attenuation factor rBrass 0,4

Output type 2-wire

Nominal values

Switching frequency AC, 0 .... . 30 Hz

DC, 0 ... . 100 Hz

Hysteresis 1 ... 10 Type 5 %

Reverse polarity protection Reverse connection permitted

Short-circuit protection Pulsed

Voltage drop  $\leq 5$  V (2 V typical) DC operation

$\leq 8$  V (typ. 3 V) AC operation

Instantaneous current

(20 ms, 0.1 Hz) 0 ... 3000 mA

Operating current 5 ... 500 mA

Rated operating current 500 mA 50/60 Hz

Minimum operating current 5 mA

Breakdown current  $\leq 1,5$  mA

Usage categories AC12, AC140, DC12, DC13

Time delay before availability  $\leq 300$  ms

Operating voltage indicator Green LED

Switching status indicator Yellow LED

Error indicator Flashes in case of overcurrent

Functional safety-related parameters

MTTFd 540 a

Task time (TM) 20 a

Diagnostic coverage (DC) 0 %

Electrical specifications

Rated operating voltage 24 ... 250 V DC / 24 ... 230 V AC

Operating voltage 20 ... 275 V DC / 20 ... 253 V AC

Compliance with standards and directives

Compliance with standards

Standard EN IEC 60947-5-2

Approvals and certificates

Protection class II

Rated insulation voltage 250 V

Rated shock withstand voltage 2,5 kV

UL approvals cULus approvals, general purpose

"For NFPA 79 applications only".

Installation of an overcurrent protection fuse rated for a maximum current of 3 A and at least 300 V  
AC/DC

CCC certification Ue 75VDC - 250VDC Ue 75VAC - 230VAC

Ambient conditions

Ambient temperature -25 ... 85 °C (-13 ... 185 °F)

Storage temperature -25 ... 85 °C (-13 ... 185 °F)

Contamination level 3

Mechanical specifications

Connection type Terminal box

Connection information Up to two wires with the same core cross sectional area can be installed in one terminal connector!

Tightening torque 1.2 Nm + 10%

Cross-sectional area of cores up to 2.5 mm<sup>2</sup>

Minimum core cross-section without wire end collar 0,5 mm<sup>2</sup> , with connector sleeve 0,34 mm<sup>2</sup>

Maximum core cross-section without wire end collar 2,5 mm<sup>2</sup> , with connector sleeve 1,5 mm<sup>2</sup>

Housing material PA 6.6 / metal

Sensing surface PA 6.6

Housing base Plastic

Protection class IP67

Mass 255 g

Dimension

Height 40 mm

Width 40 mm

Length 118 mm

Tightening torque: 1.8 Nm (housing)

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