



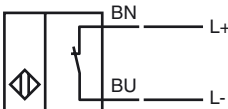
### Model Number

NJ5-18GK-SN-Y43392

### Features

- 5 mm flush

### Connection



### Application

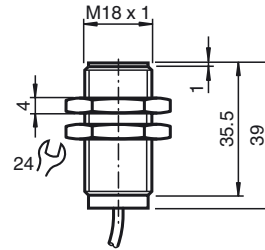


#### Danger!

In safety-related applications the sensor must be operated with a qualified fail safe interface from

Pepperl+Fuchs, such as KFD2-SH-EX1. Consider the "exida Functional Safety Assessment" document which is available on [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com) as an integral part of this product's documentation.

### Dimensions



### Technical Data

#### General specifications

Switching element function		NAMUR, NC
Rated operating distance	$s_n$	5 mm
Installation		flush
Output polarity		Safety Function
Assured operating distance	$s_a$	0 ... 4.05 mm
Reduction factor $r_{AI}$		0.4
Reduction factor $r_{Cu}$		0.3
Reduction factor $r_{304}$		0.85

#### Nominal ratings

Nominal voltage	$U_o$	8 V
Switching frequency	$f$	0 ... 500 Hz
Current consumption		
Measuring plate not detected		$\geq 3$ mA
Measuring plate detected		$\leq 1$ mA

#### Ambient conditions

Ambient temperature		-40 ... 100 °C (-40 ... 212 °F)
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#### Mechanical specifications

Connection type		cable PVC , 2 m
Core cross-section		0.75 mm <sup>2</sup>
Housing material		PP
Sensing face		PP
Protection degree		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
Standards		EN 60947-5-2:2007 IEC 60947-5-2:2007

#### Approvals and certificates

UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose

**ATEX 2G**

Instruction

**Device category 2G**

Directive conformity

Standard conformity

CE marking

Ex-identification

EC-Type Examination Certificate

Appropriate type

Effective internal capacitance  $C_i$ Effective internal inductance  $L_i$ 

General

Highest permissible ambient temperature

Installation, Commissioning

Maintenance

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

for use in hazardous areas with gas, vapour and mist


94/9/EG

EN 60079-0:2009, EN 60079-11:2007

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

 0102

 II 2G Ex ia IIC T6 Gb

PTB 00 ATEX 2049 X

NJ 5-18GK-SN...

 $\leq 120$  nF ; a cable length of 10 m is considered. $\leq 200$   $\mu$ H ; 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.