



## Model Number

**NJ5-18GK-N-10M**

## Features

- Comfort series
- 5 mm flush
- Usable up to SIL 2 acc. to IEC 61508

## Accessories

### BF 18

Mounting flange, 18 mm

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	5 mm
Installation		flush
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
Output type		2-wire

### Nominal ratings

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

### Ambient conditions

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

### Mechanical specifications

Connection type		cable PVC , 10 m
Core cross-section		0.75 mm <sup>2</sup>
Housing material		PBT/PPS
Sensing face		PBT
Degree of protection		IP66 / IP68
Cable		
Cable diameter		6 mm $\pm$ 0.2 mm
Bending radius		> 10 x cable diameter

### General information

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

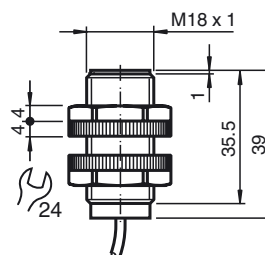
### Compliance with standards and directives

Standard conformity		
NAMUR		EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards		EN 60947-5-2:2007 EN 60947-5-2/A1:2012 IEC 60947-5-2:2007 IEC 60947-5-2 AMD 1:2012

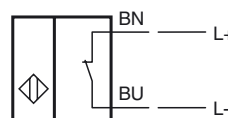
### Approvals and certificates

EAC conformity		TR CU 012/2011
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



**Equipment protection level Gb**

CE marking	CE 0102	
ATEX marking	II 2G Ex ia IIC T6...T1 Gb The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013 EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	NJ 5-18GK-N...	
Effective internal capacitance $C_i$	$\leq 70$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 50$ $\mu$ 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 EC-type examination certificate.	

**Equipment protection level Da**

CE marking	CE 0102	
ATEX marking	II 1D Ex ia IIC T135°C Da The Ex-related marking can also be printed on the enclosed label.	
Standards	EN 60079-0:2012+A11:2013 EN 60079-11:2012 Ignition protection "Intrinsic safety" Use is restricted to the following stated conditions	
Appropriate type	NJ 5-18GK-N...	
Effective internal capacitance $C_i$	$\leq 70$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 50$ $\mu$ 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 surface temperature, and the effective internal reactance values can be found on the EC-type-examination certificate. <b>The maximum permissible ambient temperature of the data sheet must be noted, in addition, the lower of the two values must be maintained.</b>	