



### Model Number

NJ15-30GK-N-150-Y38977

### Features

- **Temperature range**  
-25 ... 150 °C (-13 ... 302 °F)

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	15 mm
Installation		non-flush
Assured operating distance	$s_a$	0 ... 12.15 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 ... 100 Hz
Current consumption		
Measuring plate not detected		$\geq 3$ mA
Measuring plate detected		$\leq 1$ mA

### Functional safety related parameters

MTTF <sub>d</sub>	4540 a
Mission Time (T <sub>M</sub> )	20 a
Diagnostic Coverage (DC)	0 %

### Ambient conditions

Ambient temperature	-25 ... 150 °C (-13 ... 302 °F)
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### Mechanical specifications

Connection type	cable PTFE , 10 m
Core cross-section	0.38 mm <sup>2</sup>
Housing material	PPS
Sensing face	PPS
Degree of protection	IP65
Cable	
Bending radius	> 7.5 x cable diameter

### General information

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

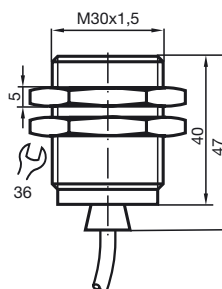
### Compliance with standards and directives

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

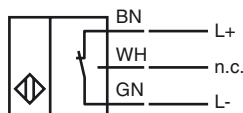
### Approvals and certificates

UL approval	
Ordinary Location	E87056
Hazardous Location	E501628
Control drawing	116-0452
CSA approval	cCSAus Listed, General Purpose

## Dimensions



**Electrical Connection**



**Equipment protection level Ga**

CE marking	CE 0102	
ATEX marking	Ex II 1G Ex ia IIC T6...T1 Ga 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	NJ15-30GK-N-150...	
Effective internal capacitance $C_i$	$\leq 140$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 100$ $\mu$ 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.	

**Special conditions**

**Equipment protection level Gb**

CE marking	CE 0102	
ATEX marking	Ex II 1G Ex ia IIC T6...T1 Ga 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	NJ15-30GK-N-150...	
Effective internal capacitance $C_i$	$\leq 140$ nF ; a cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 100$ $\mu$ 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 EU-type examination certificate.	

**Special conditions**

**Equipment protection level Da**

CE marking	CE 0102	
ATEX marking	Ex II 1D Ex ia IIIC 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	NJ15-30GK-N-150...	
Effective internal capacitance $C_i$	$\leq 140$ $\mu$ F A cable length of 10 m is considered.	
Effective internal inductance $L_i$	$\leq 100$ $\mu$ H A cable length of 10 m is considered.	

**Special conditions**

Release date: 2019-07-08 14:30 Date of issue: 2019-07-08 106489\_eng.xml