



Model Number

NJ8-18GK-N-150

Features

- 8 mm non-flush
- Temperature range
-40 ... 150 °C (-40 ... 302 °F)

Technical Data

General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	s_n	8 mm
Installation		non-flush
Assured operating distance	s_a	0 ... 6.48 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	8.2 V (R_i approx. 1 k Ω)
Switching frequency	f	0 ... 200 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA
Measuring plate detected		≤ 1 mA

Ambient conditions

Ambient temperature		-40 ... 150 °C (-40 ... 302 °F)
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Mechanical specifications

Connection type		cable SIHF, 2 m
Core cross-section		0.34 mm ²
Housing material		PPS
Sensing face		PPS
Degree of protection		IP65
Cable		
Bending radius		> 10 x cable diameter

General information

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

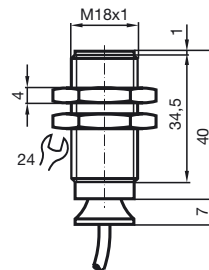
Compliance with standards and directives

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

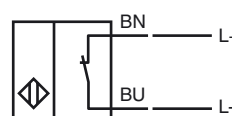
Approvals and certificates

EAC conformity		TR CU 012/2011
UL approval		cULus Listed, General Purpose
CSA approval		cCSAus Listed, General Purpose
CCC approval		CCC approval / marking not required for products rated ≤ 36 V


Dimensions




Electrical Connection




Equipment protection level Ga

CE marking	CE 0102	
ATEX marking	 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	NJ8-18GK-N-150...	
Effective internal inductivity	C_i	$\leq 70 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 50 \text{ }\mu\text{H}$; 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. Note: 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	 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	NJ8-18GK-N-150...	
Effective internal inductivity	C_i	$\leq 70 \text{ nF}$; a cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 50 \text{ }\mu\text{H}$; 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	 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	NJ8-18GK-N-150...	
Effective internal inductivity	C_i	$\leq 70 \text{ }\mu\text{F}$ A cable length of 10 m is considered.
Effective internal inductance	L_i	$\leq 50 \text{ }\mu\text{H}$ A cable length of 10 m is considered.

Special conditions