

## **Model Number**

NJ5-11-N-15M

## Features

- **Comfort series** ٠
- 5 mm non-flush •
- Usable up to SIL 2 acc. to IEC 61508 •

## Accessories

- BF 11
- Mounting flange, 11 mm

Те	chnical Data
Ger	neral specifications
S١	witching function
	utput type
	ated operating distance
	stallation
	ssured operating distance
	eduction factor r <sub>Al</sub>
	eduction factor r <sub>Cu</sub>
	eduction factor r <sub>304</sub>
	utput type ninal ratings
	•
	ominal voltage
	witching frequency
	ysteresis uitable for 2:1 technology
	urrent consumption
	Measuring plate not detected
	Measuring plate detected
	ctional safety related paramet
M	TTFd
	ission Time (T <sub>M</sub> )
Di	agnostic Coverage (DC)
Am	bient conditions
Ar	nbient temperature
Mec	chanical specifications
Co	onnection type
	ore cross-section
	ousing material
	ensing face
	egree of protection
	able
	Bending radius
	neral information
	se in the hazardous area
	Category
	npliance with standards and actives

FM approval Control drawing UL approval

CCC approval

Dimensions

Rated operating distance	s <sub>n</sub>	5 mm
Installation		non-flush
Assured operating distance	sa	0 4.05 mm
Reduction factor r <sub>Al</sub>		0.4
Reduction factor r <sub>Cu</sub>		0.3
Reduction factor r <sub>304</sub>		0.85
Output type		2-wire
Nominal ratings		
Nominal voltage	Uo	8 V
Switching frequency	f	0 3000 Hz
Hysteresis	н	typ. %
Suitable for 2:1 technology		yes, Reverse polarity protection diode not required
Current consumption		
Measuring plate not detected		≥3 mA
Measuring plate detected		≤1 mA
Functional safety related parameter	ters	
MTTF <sub>d</sub>		11774 a
Mission Time (T <sub>M</sub> )		20 a
Diagnostic Coverage (DC)		0 %
Ambient conditions		
Ambient temperature		-25 100 °C (-13 212 °F)
Mechanical specifications		
Connection type		cable PVC , 15 m
Core cross-section		0.34 mm <sup>2</sup>
Housing material		PVDF
Sensing face		PVDF
Degree of protection		IP68
Cable		
Bending radius		> 10 x cable diameter
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
Otensile		IEC 60947-5-6:1999 EN 60947-5-2:2007
Standards		IEC 60947-5-2:2007
Approvals and certificates		
FM approval		
Control drawing		116-0165

Normally closed (NC) NAMUR

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$\mathcal{T}^{-}$					

cULus Listed, General Purpose

CCC approval / marking not required for products rated ≤36 V

Refer to "General Notes Relating to Pepperl+Fuchs Product Information"

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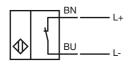
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## **Electrical Connection**



Equipment protection level Gb		
CE marking		C €0102
ATEX marking		<ul> <li>↔ II 2G Ex ia IIC T6T1 Gb</li> <li>The Ex-related marking can also be printed on the enclosed label.</li> </ul>
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 5-11-N
Effective internal capacitance	Ci	$\leq$ 45 nF ; a cable length of 10 m is considered.
Effective internal inductance	Li	$\leq$ 50 $\mu$ H ; a cable length of 10 m is considered.
Maximum permissible ambient temperature $\mathrm{T}_{\mathrm{amb}}$		Details of the correlation between the type of circuit connected, the maximum permissible ambient temperature, th 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		C €0102
ATEX marking		↔ 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		NJ 5-11-N
Effective internal capacitance	Ci	$\leq$ 45 $\mu\text{F}$ A cable length of 10 m is considered.
Effective internal inductance	Li	$\leq$ 50 $\mu H$ A cable length of 10 m is considered.
Special conditions		

**DEPPERL+FUCHS** 

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