



## Model Number

**NJ1,5-8GM-N-V1**

## Features

- 1.5 mm flush
- Usable up to SIL 2 acc. to IEC 61508

## Accessories

### V1-G

Female connector, M12, 4-pin, field attachable

### V1-W

Female connector, M12, 4-pin, field attachable

### V1-G-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

### V1-W-N-2M-PUR

Female cordset, M12, 2-pin, NAMUR, PUR cable

### BF 8

Mounting flange, 8 mm

## Technical Data

### General specifications

Switching function		Normally closed (NC)
Output type		NAMUR
Rated operating distance	$s_n$	1.5 mm
Installation		flush
Assured operating distance	$s_a$	0 ... 1.215 mm
Actual operating distance	$s_r$	1.35 ... 1.65 mm typ.
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 $\Omega$ )
Switching frequency	f	0 ... 5000 Hz
Hysteresis	H	1 ... 10 typ. 5 %
Suitable for 2:1 technology		yes, Reverse polarity protection diode not required
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)
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### Mechanical specifications

Connection type		Connector plug M12 x 1, 4-pin
Housing material		Stainless steel 1.4305 / AISI 303
Sensing face		PBT
Degree of protection		IP67

### General information

Use in the hazardous area		see instruction manuals
Category		2G

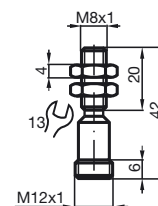
### Compliance with standards and directives

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

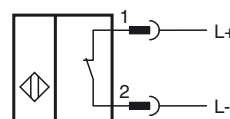
### Approvals and certificates

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

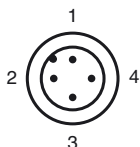
## Dimensions



## Electrical Connection



Pinout



Wire colors in accordance with EN 60947-5-6

1	BN	(brown)
2	BU	(blue)

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	NJ1,5-8GM-N...	
Effective internal capacitance	$C_i$	$\leq 30 \text{ nF}$ ; 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 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	NJ1,5-8GM-N...	
Effective internal capacitance	$C_i$	$\leq 30 \text{ }\mu\text{F}$ 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

Release date: 2019-05-15 16:53 Date of issue: 2019-05-15 106364\_eng.xml



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