

**Model Number**

**SJ10-N**

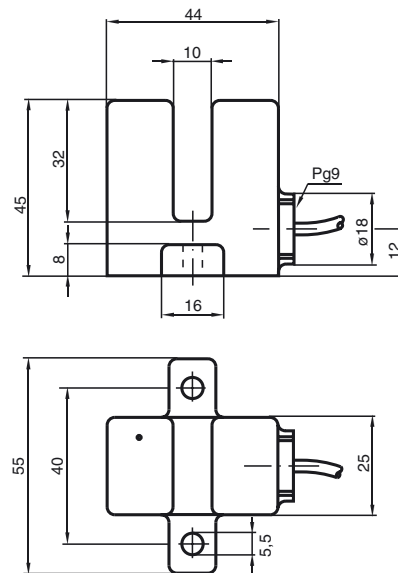
**Features**

- Usable up to SIL 2 acc. to IEC 61508
- 10 mm slot width

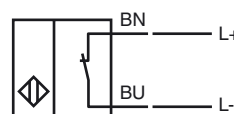
**Technical Data**

<b>General specifications</b>	
Switching function	Normally closed (NC)
Output type	NAMUR
Slot width	10 mm
Depth of immersion (lateral)	13.5 ... 16.5 mm , typ. 15 mm
Output type	2-wire
<b>Nominal ratings</b>	
Nominal voltage	$U_o$ 8.2 V ( $R_i$ approx. 1 k $\Omega$ )
Operating voltage	$U_B$ 5 ... 25 V
Switching frequency	f 0 ... 1000 Hz
Hysteresis	H 0.1 ... 0.5 mm
<b>Design data</b>	
Current consumption	
Measuring plate not detected	$\geq$ 3 mA
Measuring plate detected	$\leq$ 1 mA
<b>Functional safety related parameters</b>	
MTTF <sub>d</sub>	11460 a
Mission Time ( $T_M$ )	20 a
Diagnostic Coverage (DC)	0 %
<b>Ambient conditions</b>	
Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
<b>Mechanical specifications</b>	
Connection type	cable PVC , 2 m
Core cross-section	0.75 mm <sup>2</sup>
Housing material	PBT
Degree of protection	IP67
Cable	
Bending radius	> 10 x cable diameter
<b>General information</b>	
Use in the hazardous area	see instruction manuals
Category	1G; 2G; 1D
<b>Compliance with standards and directives</b>	
Standard conformity	
NAMUR	EN 60947-5-6:2000 IEC 60947-5-6:1999
Standards	
	EN 60947-5-2:2007 IEC 60947-5-2:2007
<b>Approvals and certificates</b>	
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 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		SJ10-N...
Effective internal inductivity	$C_i$	$\leq 50 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 1000 \mu\text{H}$ ; 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. <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.

**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		SJ10-N...
Effective internal inductivity	$C_i$	$\leq 50 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 1000 \mu\text{H}$ ; 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.

**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		SJ10-N...
Effective internal inductivity	$C_i$	$\leq 50 \text{ nF}$ ; a cable length of 10 m is considered.
Effective internal inductance	$L_i$	$\leq 1000 \mu\text{H}$ ; a cable length of 10 m is considered.