



Model Number

SJ2-N-Y43896

ATEX version

Features

- Comfort series

Technical Data

General specifications

Switching function	Normally closed (NC)
Output type	NAMUR
Slot width	2 mm
Depth of immersion (lateral)	5 ... 7 typ. 6 mm
Output type	2-wire

Nominal ratings

Nominal voltage	U_0	8 V
Operating voltage	U_B	5 ... 25 V
Switching frequency	f	0 ... 5000 Hz
Current consumption		
Measuring plate not detected		≥ 3 mA at nominal voltage
Measuring plate detected		≤ 1 mA at nominal voltage

Ambient conditions

Ambient temperature	-25 ... 100 °C (-13 ... 212 °F)
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Mechanical specifications

Connection type	flexible leads LIFYW, 500 mm
Core cross-section	0.06 mm ²
Housing material	PBT
Degree of protection	IP67
Cable	
Bending radius	> 10 x cable diameter

General information

Use in the hazardous area	see instruction manuals
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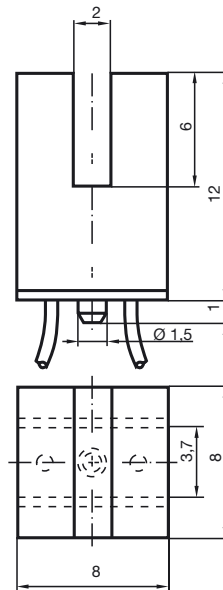
Compliance with standards and directives

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

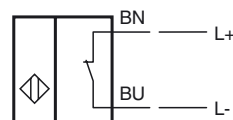
Approvals and certificates

UL approval	cULus Listed, General Purpose
CSA approval	cCSAus Listed, General Purpose

Dimensions



Electrical Connection



Data for application in connection with hazardous areas

Equipment protection level Gb , Da , Mb

Equipment protection level GbType of protection intrinsic safety
CE marking **CE**0102**Certificates**Appropriate type SJ2-N...
ATEX certificate PTB 99 ATEX 2219 X
ATEX marking **Ex** II 2G Ex ia IIC T6...T1 Gb
Standards EN 60079-0:2012+A11:2013 , EN 60079-11:2012
IECEX certificate IECEX PTB 11.0091X
IECEX marking Ex ia IIC T6...T1 Gb
Standards IEC 60079-0:2011 , IEC 60079-11:2011Effective internal capacitance C_i ≤ 30 nF
A cable length of 10 m is considered.Effective internal inductance L_i ≤ 100 μ H
A cable length of 10 m is considered.Maximum permissible ambient temperature T_{amb} Also observe the maximum permissible ambient temperature stated in the general technical data. Keep to the lower of the two values.
at $U_i = 16$ V , $I_i = 25$ mA , $P_i = 34$ mW ,
T6 : 73 °C (163.4 °F)
T5 : 88 °C (190.4 °F)
T4 : 100 °C (212 °F)
T3 : 100 °C (212 °F)
T2 : 100 °C (212 °F)
T1 : 100 °C (212 °F)
at $U_i = 16$ V , $I_i = 25$ mA , $P_i = 64$ mW ,
T6 : 67 °C (152.6 °F)
T5 : 82 °C (179.6 °F)
T4 : 100 °C (212 °F)
T3 : 100 °C (212 °F)
T2 : 100 °C (212 °F)
T1 : 100 °C (212 °F)
at $U_i = 16$ V , $I_i = 52$ mA , $P_i = 169$ mW ,
T6 : 45 °C (113 °F)
T5 : 60 °C (140 °F)
T4 : 78 °C (172.4 °F)
T3 : 78 °C (172.4 °F)
T2 : 78 °C (172.4 °F)
T1 : 78 °C (172.4 °F)
at $U_i = 16$ V , $I_i = 76$ mA , $P_i = 242$ mW ,
T6 : 30 °C (86 °F)
T5 : 45 °C (113 °F)
T4 : 57 °C (134.6 °F)
T3 : 57 °C (134.6 °F)
T2 : 57 °C (134.6 °F)
T1 : 57 °C (134.6 °F)**Equipment protection level Da**CE marking **CE**0102**Certificates**Appropriate type SJ2-N...
ATEX certificate PTB 99 ATEX 2219 X
ATEX marking **Ex** II 1D Ex ia IIIC T135°C Da
Standards EN 60079-0:2012+A11:2013 , EN 60079-11:2012
IECEX certificate IECEX PTB 11.0091X
IECEX marking Ex ia IIIC T135°C Da
Standards IEC 60079-0:2011 , IEC 60079-11:2011Effective internal capacitance C_i ≤ 30 μ F
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A cable length of 10 m is considered.Maximum permissible ambient temperature T_{amb} Also observe the maximum permissible ambient temperature stated in the general technical data. Keep to the lower of the two values.
at $U_i = 16$ V , $I_i = 25$ mA , $P_i = 34$ mW : 100 °C (212 °F)
at $U_i = 16$ V , $I_i = 25$ mA , $P_i = 64$ mW : 100 °C (212 °F)
at $U_i = 16$ V , $I_i = 52$ mA , $P_i = 169$ mW : 78 °C (172.4 °F)
at $U_i = 16$ V , $I_i = 76$ mA , $P_i = 242$ mW : 57 °C (134.6 °F)**Equipment protection level Mb**

Type of protection intrinsic safety

CertificatesAppropriate type SJ2-N...
IECEX certificate IECEX PTB 11.0091X
IECEX marking Ex ia I Mb
Standards IEC 60079-0:2011 , IEC 60079-11:2011Effective internal capacitance C_i ≤ 30 nF
A cable length of 10 m is considered.Effective internal inductance L_i ≤ 100 μ H
A cable length of 10 m is considered.

Maximum permissible ambient temperature T_{amb}

Also observe the maximum permissible ambient temperature stated in the general technical data.
Keep to the lower of the two values.

at $U_i = 16\text{ V}$, $I_i = 25\text{ mA}$, $P_i = 34\text{ mW}$: 100 °C (212 °F)

at $U_i = 16\text{ V}$, $I_i = 25\text{ mA}$, $P_i = 64\text{ mW}$: 100 °C (212 °F)

at $U_i = 16\text{ V}$, $I_i = 52\text{ mA}$, $P_i = 169\text{ mW}$: 78 °C (172.4 °F)

at $U_i = 16\text{ V}$, $I_i = 76\text{ mA}$, $P_i = 242\text{ mW}$: 57 °C (134.6 °F)