

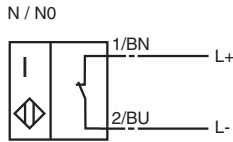
型番

SJ5-N

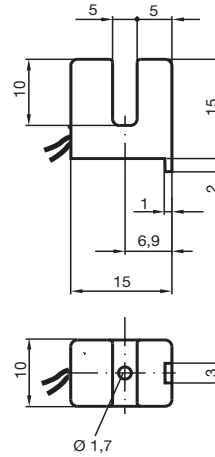
特長

- コンフォートシリーズ
- スロット幅 5 mm
- IEC 61508 準拠、SIL2 まで対応

接続方法



寸法



テクニカルデータ

仕様	
動作形態	NAMUR NC
溝幅	5 mm
溝深さ(断面)	5 ~ 7mm、typ. 6 mm
電気の仕様	
公称電圧 U_0	8 V
電源電圧 $+U_B$	5 ~ 25 V DC
発振周波数 f	0 ~ 2000 Hz
ヒステリシス H	0.05 ~ 0.65 mm
動作電流	
非検出時	3 mA 以上
検出時	1 mA 以下
適合規格	
EMC 規格	IEC / EN 60947-5-2:2004
規格	DIN EN 60947-5-6 (NAMUR)
TIIS 検定	TC16190
環境条件	
動作周囲温度	-25 ~ 100 °C
機械的仕様	
ケーブル長	0.5 m
電線径	0.14 mm ²
ハウジング材質	PBT (ポリブチレンテレフタレート)
保護等級	IP67
一般情報	
防爆カテゴリー	1G; 2G; 1D

ATEX 1G

Instruction

Manual electrical apparatus for hazardous areas

Device category 1G

for use in hazardous areas with gas, vapour and mist
94/9/EG

Directive conformity

Standard conformity

EN 60079-0:2006, EN 60079-11:2007, EN 60079-26:2007
Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

CE symbol

CE 0102

Ex-identification

 II 1G Ex ia IIC T6

EC-Type Examination Certificate

PTB 99 ATEX 2219 X

Appropriate type

SJ5-...-N...

Effective internal capacitance C_i

≤ 50 nF ; a cable length of 10 m is considered.

Effective internal inductance L_i

≤ 250 μ H ; a cable length of 10 m is considered.

Cable length

Dangerous electrostatic charges on the fixed connection cable must be taken into account for lengths equal to and exceeding the following values:

Explosion group IIC

30 cm

General

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

Highest permissible ambient temperature

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate. Note: Use the temperature table for category 1 !!! The 20 % reduction in accordance with EN 1127-1:2007 has already been accounted for in the temperature table for category 1.

Installation, Commissioning

Laws and/or regulations and standards governing the use or intended usage goal must be observed.

The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

The associated apparatus must satisfy the requirements of category ia.

Due to the possible danger of ignition, which can arise due to faults and/or transient currents in the equipotential bonding system, galvanic isolation of the power supply and signal circuit is preferable. Associated apparatus without electrical isolation must only be used if the appropriate requirements of IEC 60079-14 are met.

Maintenance

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

Special conditions

Protection from mechanical danger

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.

ATEX 2G

Instruction

Manual electrical apparatus for hazardous areas

Device category 2G

Directive conformity

Standard conformity

for use in hazardous areas with gas, vapour and mist

94/9/EG

EN 60079-0:2006, EN 60079-11:2007, EN 60079-26:2007

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

CE symbol

CE 0102

Ex-identification

 II 1G Ex ia IIC T6

EC-Type Examination Certificate

PTB 99 ATEX 2219 X

Appropriate type

SJ5-...-N...

Effective internal capacitance C_i

≤ 50 nF ; a cable length of 10 m is considered.

Effective internal inductance L_i

≤ 250 μ H ; a cable length of 10 m is considered.

General

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EC-Type Examination Certificate has to be observed. The special conditions must be adhered to!

Highest permissible ambient temperature

The temperature ranges, according to temperature class, are given in the EC-Type Examination Certificate.

Installation, Commissioning

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

Maintenance

No changes can be made to apparatus, which are operated in hazardous areas. Repairs to these apparatus are not possible.

Special conditions

Protection from mechanical danger

When used in the temperature range below -20 °C the sensor should be protected from knocks by the provision of an additional housing.

ATEX 1D

Instruction

Manual electrical apparatus for hazardous areas

Device category 1D

Directive conformity

Standard conformity

for use in hazardous areas with combustible dust

94/9/EG

IEC 61241-11:2002: draft; prEN61241-0:2002


type of protection intrinsic safety "iD"

Use is restricted to the following stated conditions

CE symbol

CE 0102

Ex-identification

 II 1D Ex iaD 20 T 108 °C

EC-Type Examination Certificate

ZELM 03 ATEX 0128 X

Appropriate type

SJ5-...-N...

Effective internal capacitance C_i

≤ 50 nF ; a cable length of 10 m is considered.

Effective internal inductance L_i

≤ 250 μH ; a cable length of 10 m is considered.

General

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual.

The EC-Type Examination Certificate has to be observed.

The special conditions must be adhered to!

Maximum housing surface temperature

The maximum surface temperature of the housing is given in the EC-Type Examination Certificate.

Installation, Commissioning

Laws and/or regulations and standards governing the use or intended usage goal must be observed.

The intrinsic safety is only assured in connection with an appropriate related apparatus and according to the proof of intrinsic safety.

The associated apparatus must satisfy at least the requirements of category ia IIB or iaD. Because of the possibility of the danger of ignition, which can arise due to faults and/or transient currents in the equipotential bonding system, galvanic isolation in the power supply and signal circuits is preferable. Associated apparatus without electrical isolation must only be used if the appropriate requirements of IEC 60079-14 are met.

The intrinsically safe circuit has to be protected against influences due to lightning.

When used in the isolating wall between Zone 20 and Zone 21 or Zone 21 and Zone 22 the sensor must not be exposed to any mechanical danger and must be sealed in such a way, that the protective function of the isolating wall is not impaired. The applicable directives and standards must be observed.

Maintenance

No changes can be made to apparatus, which are operated in hazardous areas.

Repairs to these apparatus are not possible.

[Fett]Special conditions

Electrostatic charging

The connection cables are to be laid in accordance with EN 50281-1-2 and must not normally be subjected to chaffing during use.