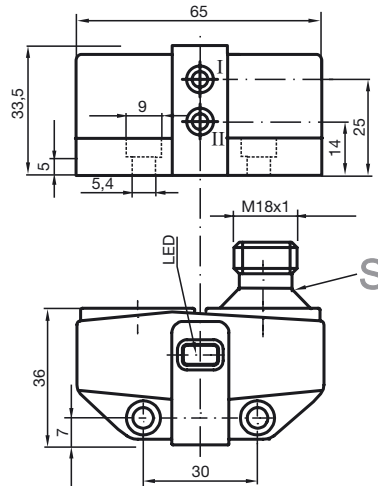


Direct mounting on stand-
ard actuators
Compact and stable hous-
ing
Fixed setting
Satisfies machinery direc-
tive
EU prototype test certifi-
cate TÜV99 ATEX 1479X
Usable up to SIL2 acc. to
IEC 61508

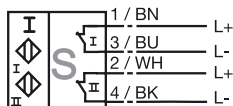


CE 0102

General specifications	
Switching element function	DC Dual Break function
Rated operating distance s_n	3 mm
Installation	embeddable
Assured operating distance s_a	0 ... 2.43 mm
Reduction factor r_{Al}	0.5
Reduction factor r_{Cu}	0.4
Reduction factor r_{V2A}	1
Reduction factor r_{St37}	1.2
Nominal ratings	
Nominal voltage U_o	8 V
Switching frequency f	0 ... 200 Hz
Reverse polarity protection	Protected against reverse polarity
Short-circuit protection	yes
Current consumption	
Measuring plate not detected	≥ 3 mA
Measuring plate detected	≤ 1 mA
Indication of the switching state	LED, yellow
Standard conformity	
EMC in accordance with	IEC / EN 60947-5-2:2004; NE 21
Standards	DIN EN 60947-5-6 (NAMUR)
Ambient conditions	
Ambient temperature	-25 ... 100 °C (248 ... 373 K)
Mechanical specifications	
Connection (system side)	V18-connector
Housing material	PBT
Sensing face	PBT
Protection degree	IP67
General information	
Use in the hazardous area	see instruction manuals
Category	2G; 3G

Connection type:

N4-V18



ATEX 2G

Instruction

Device category 2G

Directive conformity

Standard conformity

CE symbol

Ex-identification

EC-Type Examination Certificate

Appropriate type

Effective internal capacitance C_i

Effective internal inductance L_i

General

Highest permissible ambient temperature

Installation, Commissioning

Maintenance

Special conditions

Protection from mechanical danger

Manual electrical apparatus for hazardous areas

for use in hazardous areas with gas, vapour and mist

94/9/EG

EN 50014:1997, EN 50020:1994

Ignition protection "Intrinsic safety"

Use is restricted to the following stated conditions

CE 0102

II 2G EEx ia IIC T6

TÜV 99 ATEX 1479 X

NCN3-F31.-N4...

≤ 100 nF ; a cable length of 10 m is considered. The value is applicable for the sensor circuit.

≤ 100 μ H ; a cable length of 10 m is considered. The value is applicable for the sensor circuit.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The EU prototype test certificate must be observed. The special conditions must be adhered to!

The temperature ranges, according to temperature class, are given in the EU prototype test certificate.

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.

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

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

ATEX 3G (nL)

Instruction

Device category 3G (nL)

Directive conformity

Standard conformity

CE symbol

Ex-identification

Effective internal capacitance C_i

Effective internal inductance L_i

General

Installation, Commissioning

Maintenance

[Fett]Special conditions

Maximum permissible ambient temperature T_{Umax} at $U_i = 20 V$

for $P_i=34 mW$, $I_i=25 mA$, T6

for $P_i=34 mW$, $I_i=25 mA$, T5

for $P_i=34 mW$, $I_i=25 mA$, T4-T1

for $P_i=64 mW$, $I_i=25 mA$, T6

for $P_i=64 mW$, $I_i=25 mA$, T5

for $P_i=64 mW$, $I_i=25 mA$, T4-T1

for $P_i=169 mW$, $I_i=52 mA$, T6

for $P_i=169 mW$, $I_i=52 mA$, T5

for $P_i=169 mW$, $I_i=52 mA$, T4-T1

Protection from mechanical danger

Manual electrical apparatus for hazardous areas

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

EN 50021:2000 Ignition protection category "n"
Use is restricted to the following stated conditions

CE 0102

Ex II 3G EEx nL IIC T6 X

$\leq 100 nF$; A cable length of 10 m is considered.
The value is applicable for the sensor circuit.

$\leq 100 \mu H$; A cable length of 10 m is considered.
The value is applicable for the sensor circuit.

The apparatus has to be operated according to the appropriate data in the data sheet and in this instruction manual. The data stated in the data sheet are restricted by this operating instruction! The special conditions must be observed!

Laws and/or regulations and standards governing the use or intended usage goal must be observed. The sensor must only be operated with energy-limited circuits, which satisfy the requirements of IEC 60079-15. The explosion group depends on the connected, energy-limited power supply circuits.

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

Each sensor circuit can be operated with the stated maximum values.

77 °C (350 K)

92 °C (365 K)

100 °C (373 K)

75 °C (348 K)

90 °C (363 K)

100 °C (373 K)

67 °C (340 K)

82 °C (355 K)

90 °C (363 K)

The sensor must not be mechanically damaged.

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