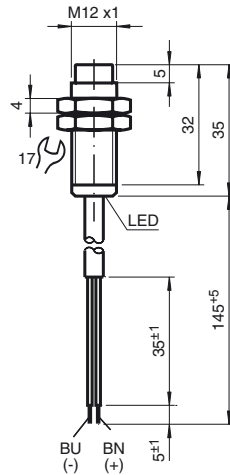


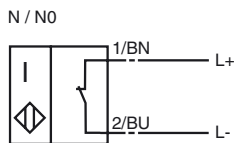
Comfort series  
4 mm not embeddable



CE 0102

General specifications	
Switching element function	NAMUR NC
Rated operating distance $s_n$	4 mm
Installation	not embeddable
Output polarity	NAMUR
Assured operating distance $s_a$	0 ... 3.24 mm
Reduction factor $r_{AI}$	0.37
Reduction factor $r_{Cu}$	0.36
Reduction factor $r_{V2A}$	0.74
Nominal ratings	
Nominal voltage $U_o$	8 V
Switching frequency $f$	0 ... 1800 Hz
Hysteresis $H$	1 ... 10 typ. 5 %
Reverse polarity protection	protected against reverse polarity
Short-circuit protection	yes
Current consumption	
Measuring plate not detected	$\geq 3$ mA
Measuring plate detected	$\leq 1$ mA
Indication of the switching state	all direction 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)
Storage temperature	-40 ... 100 °C (233 ... 373 K)
Mechanical specifications	
Connection type	0,145 m, PVC Cable
Core cross-section	2x0.34
Housing material	Stainless steel
Sensing face	PBT
Protection degree	IP67
General information	
Use in the hazardous area	see instruction manuals
Category	2G

**Connection type:**



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## 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

[Fett]Special conditions

Protection from mechanical danger

Electrostatic charging

## 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

PTB 00 ATEX 2048 X

NCN4-12GM...-N0...

$\leq 95$  nF ; a cable length of 10 m is considered.

$\leq 100$   $\mu$ H ; a cable length of 10 m is considered.

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!

Directive 94/9/EG and hence also EC-Type Examination Certificates apply in general only to the use of electrical apparatus under atmospheric conditions. The use in ambient temperatures of  $> 60$  °C was tested with regard to hot surfaces by the mentioned certification authority.

If the equipment is not used under atmospheric conditions, a reduction of the permissible minimum ignition energies may have to be taken into consideration.

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

Electrostatic charges on the metal housing components must be avoided. Dangerous electrostatic charges on the metal housing components can be avoided by incorporating these components in the equipotential bonding.