

# Instruction manual

## Marking

Inductive sensor
NJ2-11-N-G-15M
106379
Pepperl+Fuchs GmbH
Lilienthalstraße 200, 68307 Mannheim, Germany

Range of application	Certification	Group, category, type of protection
ATEX 1G	PTB 00 ATEX 2048 X	Ⓜ II 1G Ex ia IIC T6...T1 Ga
ATEX 2G	PTB 00 ATEX 2048 X	Ⓜ II 1G Ex ia IIC T6...T1 Ga
ATEX 3G (ic)	PF 13 CERT 2895 X	Ⓜ II 3G Ex ic IIC T6...T1 Gc The Ex-relevant identification may also be printed on the accompanying adhesive label.
ATEX 1D	ZELM 03 ATEX 0128 X	Ⓜ II 1D Ex iaD 20 T 108 °C (226.4 °F) The Ex-relevant identification may also be printed on the accompanying adhesive label.
ATEX 3D (tD)		Ⓜ II 3D Ex tD A22 IP67 T80°C X The Ex-significant identification is on the enclosed adhesive label

## Validity

Specific processes and instructions in this document require special precautions to guarantee the safety of the operating personnel.

## Target group, personnel

Responsibility for planning, assembly, commissioning, operation, maintenance, and dismantling lies with the plant operator.  
Mounting, installation, commissioning, operation, maintenance and disassembly of any devices may only be carried out by trained, qualified personnel. The instruction manual must be read and understood.

## Reference to further documentation

Observe laws, standards, and directives applicable to the intended use and the operating location. Observe Directive 1999/92/EC in relation to hazardous areas. The corresponding datasheets, declarations of conformity, EC-type-examination certificates, certificates and control drawings if applicable (see datasheet) are an integral part of this document. You can find this information under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).  
Due to constant revisions, documentation is subject to permanent change. Please refer only to the most up-to-date version, which can be found under [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## Intended use

The device is only approved for appropriate and intended use. Ignoring these instructions will void any warranty and absolve the manufacturer from any liability.

## Range of application

### Manual electrical apparatus for hazardous areas

#### Range of application 1D

for use in hazardous areas with combustible dust

#### Range of application 3D (tD)

for use in hazardous areas with non-conducting combustible dust

#### Range of application 1G

for use in hazardous areas with gas, vapour and mist

#### Range of application 2G

for use in hazardous areas with gas, vapour and mist

#### Range of application 3G (ic)

for use in hazardous areas with gas, vapour and mist

## Improper use

Protection of the personnel and the plant is not ensured if the product is not being used according to its intended use.

## Mounting and installation

Prior to mounting, installation and commissioning of the device you should make yourself familiar with the device and carefully read the instruction manual.  
Mount the device so that it is not exposed to any mechanical hazard. For example, mount the device in a protective housing.

### Range of application 1D

#### Electrostatic charge

The connection cables are to be laid in accordance with EN 50281-1-2 and must not normally be subjected to chaffing during use.  
Electrostatic charges must be avoided on the mechanical housing components. Dangerous electrostatic charges on the mechanical housing components can be avoided by incorporating these in the equipotential bonding.

#### Range of application 3D (tD)

#### Protection from mechanical danger

The sensor must not be exposed to **ANY FORM** of mechanical danger.

#### Protection from UV light

The sensor and the connection cable must be protected from damaging UV-radiation. This can be achieved when the sensor is used in internal areas.

#### Protection of the connection cable

The connection cable must be prevented from being subjected to tension and torsional loading.

#### Electrostatic charge

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

### Range of application 1G

#### 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.

#### Electrostatic charge

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.

### Range of application 2G

#### 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.

#### Electrostatic charge

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

### Range of application 3G (ic)

#### Protection from mechanical danger

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.

#### Electrostatic charge

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

#### Connection parts

The connection parts are to be installed, such that a minimum protection class of IP20 is achieved, in accordance with IEC 60529.

## Operation, maintenance, repair

The device must not be repaired, changed or manipulated.  
In the event of a fault, always return the device to Pepperl+Fuchs.  
If there is a defect, the device must always be replaced with an original device from Pepperl+Fuchs.

## Delivery, transport, disposal

Check the packaging and contents for damage.  
Check if you have received every item and if the items received are the ones you ordered.  
Keep the original packaging. Always store and transport the device in the original packaging.  
Store the device in a clean and dry environment. The permitted ambient conditions (see datasheet) must be considered.  
Disposing of device, packaging material, and possibly contained batteries must be in compliance with the applicable laws and guidelines of the respective country.