

Translation

(1) EC TYPE-EXAMINATION CERTIFICATE

- (2) Equipment or protective system intended for use in potentially explosive atmospheres **Directive 94/9/EC**
- (3) EC-Type Examination Certificate Number



TÜV 01 ATEX 1718

(4) Equipment: Namur sensors types MC... and MJ...

(5) Manufacturer: Pepperl + Fuchs GmbH

(6) Address: Königsberger Allee 87

D - 68307 Mannheim

- (7) This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Hannover/Sachsen-Anhalt e.V., TÜV CERT-Certification Body, notified body number N° 0032 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential report N° 01 PX 13610.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50 014: 1997 EN 50 020: 1994

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type examination certificate relates only to the design and construction of the specified equipment or protective system according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and placing on the market of this equipment or protective system.
- (12) The marking of the equipment or protective system must include the following:

II 2 G EEx ib IIC T6

TÜV Hannover/Sachsen-Anhalt e.V. TÜV CERT-Zertifizierungsstelle Am TÜV 1 D-30519 Hannover

Head of the Certification Body

10/014d TÚV Nord o. DAR 5.97



Hanover, 2001-06-12

(13)

SCHEDULE



(14) EC-TYPE EXAMINATION CERTIFICATE N° TÜV 01 ATEX 1718

(15) Description of equipment

The Namur sensors types MC... and MJ... meet the requirements of category 2. The full type designation has to be taken from the following table:

	Sensor type
Г	MC60-12GM50-1N
	MC60-12GM50-1N-V1
	MJ35-F12-1N

The permissible ambient temperature range is – 25°C to 70°C.

Electrical data

Signal and supply circuit (pre-fabricated connection cable)

in type of protection "Intrinsic Safety" EEx ib IIC only for the connection to certified intrinsically safe circuits with the following maximum values:

 $U_i = 16 \text{ V}$ $I_i = 30 \text{ mA}$ $P_i = 75 \text{ mW}$

effective internal capacitance: $C_i \le 15 \text{ nF}$ effective internal inductance: $L_i \le 25 \mu\text{H}$

- (16) Test documents are listed in the test report No.: 01 0PX 13610.
- (17) Special conditions for safe use

none

(18) Essential Health and Safety Requirements no additional ones

1. Supplement

to

EC TYPE EXAMINATION CERTIFICATE No. TÜV 01 ATEX 1718

Equipment: Namur sensor types MC... and MJ...

Manufacturer: Pepperl+Fuchs GmbH Address: Königsberger Allee 87 D-68307 Mannheim

In the future the Namur sensor types MC... and MJ... may manufactured and operated according the documents listed in the test report.

The changes concerns the add-on of the sensor type

MJM3V-R12A-N-S 5M.KA

and the electrical data of all Namur sensor types.

Electrical data

Signal and supply circuit in type of protection "Intrinsic Safety" EEx ib IIC only for

the connection to certified intrinsically safe circuits with

the following maximum values:

 $U_i = 16 \text{ V}$ $I_i = 30 \text{ mA}$ $P_i = 75 \text{ mW}$

effective internal capacitance: $C_i \le 15 \text{ nF}$ effective internal inductance: $L_i \le 35 \text{ }\mu\text{H}$

All other data apply unchanged for this Supplement.

The tested equipment incl. of this amendments meets the requirements of:

EN 50014:1997+A1+A2 EN 50020:20002

Test documents are listed in the test report No.: 05 YEX 552301b.

TÜV NORD CERT GmbH

Hannover, 02.08.2005



Translation

2. SUPPLEMENT

to

EC-TYPE EXAMINATION CERTIFICATE No. TÜV 01 ATEX 1718

Equipment:

Namur sensor types MC... und MJ...

Manufacturer:

Pepperl+Fuchs GmbH

Address:

Königsberger Allee 87

D-68307 Mannheim

Amendments:

In the future the namur sensor type MJM3V-R12A-N-S 5M.KA may only be manufactured with the type designation MJ35-F12-1N 5M.

The amendment concerns only the correction of the type designation.

The electrical data and all other data apply unchanged for this Supplement.

The equipment incl. of this amendments meets the requirements of:

EN 50 014:1997 +A1+A2

EN 50 020:2002

- (16) The test documents are listed in the test report N° 06 YEX 552725.
- (17) Special conditions for safe use

no additional ones

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH & Co. KG

Am TÜV 1

D-30519 Hannover

Tel.: +49 (0) 511 986-1455 Fax: +49 (0) 511 986-1590 Hannover, 2006-02-02

Head of the Certification Body



Translation

3. SUPPLEMENT

to Certificate No.

TÜV 01 ATEX 1718

Equipment:

Namur sensors types MC... and MJ...

Manufacturer:

Pepperl+Fuchs GmbH

Address:

Lilienthalstraße 200 68307 Mannheim

Germany

Order number:

8000555165

Date of issue:

06.02.2009

Amendments:

In the future, the namur sensors types MC... and MJ...may also be manufactured according to the documents listed in the test report.

The changes concern the electrical data.

Electrical data

(pig-tail cable)

Signal- and supply circuit..... in type of protection Intrinsic Safety Ex ib IIC

only for the connection to certified intrinsically safe

circuits.

Maximum values:

 $U_{\rm i} = 16 \ {\rm V}$

 $I_i = 30 \text{ mA}$

 $P_{\rm i} = 100 \, \text{mW}$

Effective internal capacitance: $C_i \le 15$ nF

Effective internal inductance: $L_i \leq 35 \mu H$

All other data apply unchanged for this supplement.

The equipment meets the requirements of these standards:

EN 60079-0:2006

EN 60079-11:2007

- (16) The test documents are listed in the test report No. 09 203 555165.
- (17) Special conditions for safe use

none



3. Supplement to Certificate No. TÜV 01 ATEX 1718

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body

Schwedt

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