

# CESI

CESI  
Centro Elettrotecnico  
Sperimentale Italiano  
Giacinto Motta SpA

Via R. Rubattino 54  
20134 Milano - Italia  
Telefono +39 022125.1  
Fax +39 0221255440  
www.cesi.it

Capitale sociale 8 550 000 €  
interamente versato  
Codice fiscale e numero  
iscrizione CCIAA 00793580150

Registro Imprese di Milano  
Sezione Ordinaria  
N. R.E.A. 429222  
P.I. IT00793580150

Schema di certificazione

# CESI-ATEX

Il CESI è stato autorizzato  
dal governo italiano ad  
operare quale organismo di  
certificazione di apparecchi  
e sistemi destinati a essere  
utilizzati in atmosfera  
potenzialmente esplosiva  
con D.M. 1/3/1983, D.M.  
19/6/1990, D.M. 20/7/1998  
e D.M. 27/9/2000

# CERTIFICATE



## [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:  
**CESI 02 ATEX 107**

[4] **Equipment: Melt Pressure Transmitter  
Series MX and WX**

[5] **Manufacturer: Gefran Sensori S.r.l.**

[6] **Address: Via Sebina, 74 – 25050 Provaglio d'Iseo (BS) - Italia**

[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] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, 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 confidential report n. EX-A2/032442.

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 50014: 1997 A1..A2    EN 50020: 2002    EN 50284: 1999**

[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, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] The marking of the equipment or protective system shall include the following:



**II 1 G**

**EEx ia IIC T5 or T4**

This certificate may only be reproduced in its entirety and without any change, schedule included.

**Date** October 15, 2002 - Translation issued the October 15, 2002

**Prepared**  
Francesco A. Esposito  
*Francesco A. Esposito*

**Verified**  
Damiano Cavanna  
*D. Cavanna*

**Approved**  
Ulisse Colombo

**CESI**  
CENTRO ELETTROTECNICO SPERIMENTALE ITALIANO  
Business Unit Certificazione

*Il Responsabile*



[13]

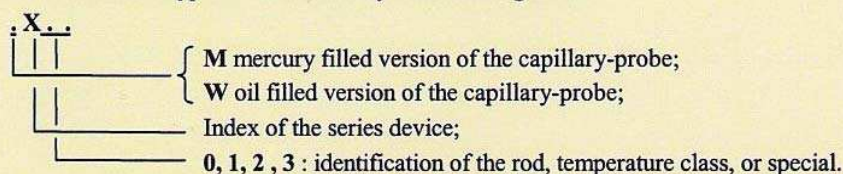
## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 107**

### [15] Description of equipment

The Melt Pressure Transmitter series MX and WX are devices for pressure measurement used in control and measurement system. They consist of an electronic housing and a capillary-probe connected to the process. These devices provide a  $4\div 20$  mA output signal proportional to the measured variable.

The transmitters types are identified by the following code:



The Melt Pressure Transmitter series MX and WX shall be supplied by associated apparatus certified according to EN 50014 and EN 50020 standards. The thermal measurement types with thermocouple MX2 and WX2 shall be supplied by galvanically separating barriers.

### Electrical characteristics

U <sub>i</sub>	:	30Vdc
I <sub>i</sub>	:	100 mA
P <sub>i</sub>	:	0,75W
C <sub>i</sub>	:	26 nF
L <sub>i</sub>	:	0,23 mH

### Temperature Class

Type	Temperature Class (T <sub>amb</sub> )	Distances of electronic housing from the process [mm]
MX . and WX .	T4 (-20°C ÷ 60°C)	≥ 165
	T4 (-20°C ÷ 70°C) ; T5 (-20°C ÷ 55°C)	≥ 665

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[13]

## Schedule

[14] **EC-TYPE EXAMINATION CERTIFICATE n. CESI 02 ATEX 107**

[16] **Report n. EX-A2/032443.**

### Routine tests

The manufacturer must carry out the routine tests provided for at clause 24 of the EN 50014 standard.

### Descriptive documents (prot. EX-A2/032444)

- Technical specification ST 024	dated	11.10.2002
- Electrical schematic SME082	dated	02.09.2002
- Components list DME082	dated	02.09.2002
- Printed circuit board CSE082-1÷6	dated	05.09.2002
- Assembly SN1203	dated	16.07.2002
- Application SN1200	dated	19.07.2002
- Application SN1201	dated	19.07.2002
- Application SN1202	dated	19.07.2002
- Nameplate SN1199	dated	19.07.2002
- Safety Note	dated	11.10.2002

One copy of all documents is kept in CESI files.

[17] **Special conditions for safe use**

None.

[18] **Essential Health and Safety Requirements**

Assured by the conformity to the standards listed on page 1.

*C*



## EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 02ATEX107

Equipment: MELT pressure transmitters series MX and WX

Manufacturer: GEFran S.p.A

Address: Via Sebina, 74 – 25050 Provaglio d'Iseo (Brescia) - Italy

### Admitted variation

Updating of the documentation for conformity to EN60079-0 (2006), EN60079-11 (2007), EN60079-26 (2007) Standards and change of the Company name.

### Identification and description of equipment

MELT pressure transmitters series MX and WX

The equipment shall be marked as follows

II 1 G Ex ia IIC T5 or T4

The MELT pressure transmitters series MX and WX shall be supplied by associated apparatus subject of a separate certification with type of protection [Ex ia] IIC and with linear output.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 107.

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date 5 May 2007 - translation issued the 5<sup>th</sup> May 2007

prepared Enrico Radaelli

verified Mirko Balaz

approved Fiorenzo Bregani

**CESI**

Centro Elettrotecnico Sperimentale Italiano  
Giacinto Motta SpA

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## EXTENSION n. 01/07

to EC-Type Examination Certificate CESI 02ATEX107

### Electrical characteristics

Unchanged.

### Temperature class

Type	Temperature class (Tamb)	Distances of electronic housing from the process [mm]
MX and WX	T4 (-20 °C ÷ +60 °C)	≥ 165
	T4 (-20 °C ÷ +70 °C); T5 (-20 °C ÷ +55 °C)	≥ 665

Report n. EX-A7012368

### Routine tests

The manufacturer shall carried out the routine tests prescribed at paragraph 27 of EN 60079-0 Standard

### Descriptive documents (prot. EX-A7012371)

- Technical note ST036	(3 pg.)	dated	26/02/2007
- Document 85170_MX-WX-0307_ITA	(4 pg.)	dated	03/2007
- Document 85171_MX4-VX4_0307_ITA	(2 pg.)	dated	03/2007
- Drawing nr. SN1199 rev. 2		dated	28/02/2007
- Declaration of conformity EC		dated	01/03/2007

One copy of all documents is kept in CESI files.

### Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following standards:

- EN 60079-0: 2006 – Electrical apparatus for explosive gas atmosphere -General requirements.
- EN 60079-11: 2007 – Intrinsic Safety “i”.
- EN 60079-26: 2007 – Construction, test and marking of group II Category 1G electrical apparatus.

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**EXTENSION n. 02/13**

to EC-Type Examination Certificate CESI 02 ATEX 107

**Equipment:** MELT pressure transmitters series MX and WX**Manufacturer:** GEFRA S.p.A**Address:** Via Sebina, 74 – 25050 Provaglio d'Iseo (Brescia) - Italia**Admitted variation**

- Conformity to Standards:

EN 60079-0 (2009), EN60079-11 (2012)

- Marking updating

**Identification and description of the equipment**

MELT pressure transmitters series MX and WX.

The equipment shall be marked according to the following::

**II 1 G Ex ia IIC T5 or T4 Ga**

The MELT pressure transmitters series MX and WX shall be exclusively interfaced to intrinsically safe associated apparatuses furnished with a separate certification with type of protection [Ex ia Ga] IIC and designed with linear output.

This extension and annexed descriptive documents must be annexed to the EC-Type Examination Certificate CESI 02 ATEX 107.

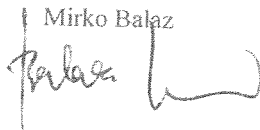
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**Date**

27 June 2013 - Translation issued the 27 June 2013

**Prepared**  
Paolo Corbo**Verified**

Mirko Balaz


**CESI****Approved**
**Testing & Certification**  
**Business Area**  
**Responsible**  
 Firenze Bregani

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PRD N. 018B  
 Membro degli Accordi di Mutuo  
 Riconoscimento EA, IAF e ILAC  
 Signatory of EA, IAF and ILAC  
 Mutual Recognition Agreements

CESI S.p.A.

Via Rubattino 54

I-20134 Milano - Italy

Tel. +39 02 71251

Fax +39 02 71255440

e-mail: info@cesi.it

www.cesi.it

Capitale sociale € 8.550.000 interamente versato

C.F. e numero iscrizione Reg. Imprese di Milano 00793580150

P.I. IT00793580150

N. R.P.A. 429222

## EXTENSION n. 02/13

to EC-Type Examination Certificate CESI 02 ATEX 107

### Electrical characteristics

Unchanged.

### Temperature class

Type	Temperature class (Tamb)	Distances of electronic transmitter from the process [mm]
MX e WX	T4 (-20°C ÷ +60°C)	≥ 165
	T4 (-20°C ÷ +70°C); T5 (-20°C ÷ +55°C)	≥ 665

Report n. EX-B3016311

### Routine tests

The manufacturer shall carry out the routine test prescribed at paragraph 27 of the Standard EN60079-0.

### Descriptive documents (prot. EX-B3016316)

- Technical Specification ST036 Rev.1 (3 pg.) dated 24/06/2012
- Fac-Simile Template TAR285-Drawing SN1199 rev.3 (1 pg.) dated 26/06/2013
- Document n. 85170A\_MX-WX-09-2012\_ITA (2 pg.) dated 09/2012
- Document n. 85171A\_MX4-WX4-09-2012\_ITA (4 pg.) dated 09/2012
- CE Declaration of Conformity (Fac-Simile)

One copy of all documents is kept in CESI files.

### Essential Health and Safety Requirements

The Essential Health and Safety Requirements are assured by compliance to the following Standards:

- EN60079-0: 2009 - Explosive atmospheres - Part 0: Equipment - General requirements
- EN60079-11: 2012 - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety 'i'
- EN60079-26: 2007 - Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga

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