



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx DEK 15.0017 Issue No: 1 Certificate history:
Status: **Current** Page 1 of 4 Issue No. 1 (2015-10-20)
Date of Issue: **2015-10-20** Issue No. 0 (2015-04-16)
Applicant: **Mettler-Toledo (Changzhou) Measurement Technology Ltd.**
No. 111 West Taihu Road, 213125, Changzhou, Jiangsu
China
Electrical Apparatus: **Load Cell model 0745A**
Optional accessory:
Type of Protection: **Ex Ia, Ex ic, Ex nA and Ex tc**
Marking: **Ex ia IIC T4 Gb**
Ex ia IIIC T100 °C Db
Ex ic IIC T4 Gc
Ex nA IIC T4 Gc
Ex tc IIIC T100 °C Dc

Approved for issue on behalf of the IECEx
Certification Body:

R. Schuller

Position:

Certification Manager

Signature:
(for printed version)



Date:

2015-10-20

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

DEKRA Certification B.V.
Meander 1051,
6825 MJ Arnhem
The Netherlands





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Manufacturer: **Mettler-Toledo (Changzhou) Measurement Technology Ltd.**
No. 111 West Taihu Road, 213125, Changzhou, Jiangsu
China

Additional Manufacturing
location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-15 : 2010 Edition:4	Explosive atmospheres - Part 15: Equipment protection by type of protection "n"
IEC 60079-31 : 2013 Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[NL/DEK/ExTR15.0013/00](#) [NL/DEK/ExTR15.0013/01](#)

Quality Assessment Report:

[NL/DEK/QAR11.0008/03](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The load cell model 0745A convert a mass force into an electrical signal.

The load cells are provided with a permanently connected cable of maximum 30 m length.
The circuits of each load cell are considered as one intrinsically safe circuit.

Ambient temperature range $-40\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$.

The specified temperature $T100\text{ }^{\circ}\text{C}$, for applications in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of $50\text{ }^{\circ}\text{C}$ and a dust layer of maximum 5 mm thickness.

The enclosure provides a degree of protection of at least IP68 as per IEC 60079-0.

Electrical data

Signal and supply circuits:

In type of protection intrinsic safety Ex ia IIC, Ex ia IIIC or Ex ic IIC only for connection to certified intrinsically safe circuits, with the following maximum total values (circuits combined):

$U_i = 25\text{ V}$; $I_i = 600\text{ mA}$; $P_i = 1.25\text{ W}$; $C_i = 5\text{ nF}$; $L_i = 30\text{ }\mu\text{H}$.

In type of protection Ex nA or Ex tc

$U_n = 25\text{ V}$; $C_i = 5\text{ nF}$.

CONDITIONS OF CERTIFICATION: NO



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DETAILS OF CERTIFICATE CHANGES (for Issues 1 and above):

Addition of type of protection Ex ic IIC, Ex nA IIC and Ex tc IIIC.