

(1) TYPE EXAMINATION CERTIFICATE

(2) Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC

- (3) Type Examination Certificate Number: **KEMA 05ATEX1179** Issue Number: **2**
- (4) Equipment: **Load Cell Model MTB-5kg, MTB-10kg, MTB-20kg, MTB-30kg, MTB-50kg, MTB-75kg, MTB-100kg, MTB-200kg, MTB-300kg, MTB-500kg**
- (5) Manufacturer: **Mettler-Toledo (Chang Zhou) Measurement Technology Ltd.**
- (6) Address: **No. 111, West TaiHu Road, XinBei District, ChangZhou, JiangSu, 213125, P.R.China**
- (7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) KEMA Quality B.V. certifies that this equipment 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 test report no. 211929100/2.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- | | |
|---------------------------|--------------------------|
| EN 60079-0 : 2006 | EN 61241-0 : 2006 |
| EN 60079-15 : 2005 | EN 61241-1 : 2004 |
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This Type Examination Certificate relates only to the design, examination and tests of the specified equipment and not to the manufacturing process and supply of this equipment.
- (12) The marking of the equipment shall include the following:



**II 3 G Ex nA II T4 or
II 3 G Ex nL IIC T4 or
II 3 D Ex tD A22 IP6X T 135 °C**

This certificate is issued on February 2, 2009 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.


P.T. van Nijen
Certification Manager



(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 05ATEX1179**

Issue No. 2

(15) **Description**

The load cells Model MTB-5kg, MTB-10kg, MTB-20kg, MTB-30kg, MTB-50kg, MTB-75kg, MTB-100kg, MTB-200kg, MTB-300kg and MTB-500kg are used to convert a mechanical force or load into an electrical signal.

The load cells are provided with a permanently connected cable.

The enclosure of the load cell provides a degree of ingress protection of at least IP6X in accordance with EN 60529.

Ambient temperature range -40 °C to +50 °C.

The maximum surface temperature T135 °C, for applications in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 50 °C.

Electrical data

Signal and supply circuits:

In type of protection energy limited Ex nL IIC, only for connection to an associated energy limited circuit, with following maximum values (combining the parameters of all circuits):

$U_i = 25 \text{ V}$; $I_i = 600 \text{ mA}$; $P_i = 1,25 \text{ W}$; $C_i = 0,2 \text{ nF/m}$; $L_i = 1 \text{ }\mu\text{H/m}$.

Maximum cable length is 30m.

When used in type of protection Ex nA or Ex tD, the maximum supply voltage $U = 25 \text{ V}$.

Routine tests

A routine dielectric strength test, in accordance with EN 60079-15 Clause 34.2.1, shall be conducted on each unit between the signal/supply circuits and the base of the unit using a minimum test voltage of 500Vac.

(16) **Test Report**

KEMA No: 211929100/2.

(17) **Special conditions for safe use**

None.

(18) **Essential Health and Safety Requirements**

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 211929100/2.