

CERTIFICATE

(1) Type Examination

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

(3) Type Examination Certificate Number: **KEMA 03ATEX1070**

Issue Number: **5**

(4) Equipment: **Load Cell Model 0743, 0743-SBK and 0745A**

(5) Manufacturer: **Mettler-Toledo Inc.**

(6) Address: **1900 Polaris Parkway, Columbus, OH 43240, U.S.A.**

(7) This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) DEKRA Certification 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. 212601700/2.

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

EN 60079-0 : 2012
EN 60079-15 : 2010

EN 60079-11 : 2012
EN 60079-31 : 2009

(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 ic IIC T4 Gc or
II 3 G Ex nA IIC T4 Gc or
II 3 D Ex tc IIIC T100 °C Dc

This certificate is issued on 25 June 2013 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.

DEKRA Certification B.V.

R. Schuller
Certification Manager

(13) **SCHEDULE**

(14) **to Type Examination Certificate KEMA 03ATEX1070**

Issue No. 5

(15) **Description**

The load cells Model 0743, 0743-SBK and 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 °C to +50 °C.

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

The enclosure provides a degree of protection of at least IP6X as per EN 60529.

Electrical data

Signal and supply circuits:

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

$U_i = 25 \text{ V}$; $I_i = 600 \text{ mA}$; $P_i = 1,25 \text{ W}$; $C_i = 5 \text{ nF}$ (= 2 nF for Model 0743-SBK); $L_i = 30 \text{ }\mu\text{H}$ (= 6 μH for Model 0743-SBK)

or

in type of protection Ex nA or Ex tc:

$U_n = 25 \text{ V}$.

Installation instructions

The instructions provided with the equipment shall be followed in detail to assure safe operation.

(16)

Test Report

No. 212601700/2.

(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. 212601700/2.