

CERTIFICATE

(1) EU-Type Examination

(2) **Equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 02ATEX1170 X** Issue Number: **5**

(4) Product: **Load Cell Model 0785, 0795 and 0805**

(5) Manufacturer: **Mettler-Toledo GmbH**

(6) Address: **Im Langacher 44, CH-8606 Greifensee, Switzerland**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 number 211914200/03 issue 3.

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

EN IEC 60079-0 : 2018
EN 60079-15 : 2010

EN 60079-7 : 2015 + A1 : 2018
EN 60079-31 : 2014

EN 60079-11 : 2012

except in respect of those requirements listed at item 18 of the Schedule.

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:



II 2 G Ex ia IIC T4 Gb
II 2 D Ex ia IIIC T100 °C Db
II 3 G Ex ic IIC T4 Gc
II 3 G Ex nA IIC T4 Gc
II 3 G Ex ec IIC T4 Gc
II 3 D Ex tc IIIC T100 °C Dc

Date of certification: 7 December 2021

DEKRA Certification B.V.

R. Schuller
Certification Manager



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(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 02ATEX1170 X**

Issue No. 5

(15) **Description**

The load cells Model 0785, 0795 and 0805 convert a mass force into an electrical signal.

The load cells are provided with a permanently connected cable of maximum 10 m length.
The circuits of each load cell are considered as one intrinsically safe circuit.

The enclosure of the load cell provides a degree of protection of at least IP64 in accordance with EN 60079-0.

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

The maximum surface temperature T100 °C, for applications in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 50 °C.

Electrical data

Apparatus in type of protection intrinsic safety "I":

Signal and supply:

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

$U_i = 25 \text{ V}$; $I_i = 500 \text{ mA}$; $P_i = 1,25 \text{ W}$; $C_i = 5 \text{ nF}$; $L_i = 30 \text{ }\mu\text{H}$.

Apparatus in type of protection Ex nA, Ex ec or Ex tc:

Signal and supply:

$U_n = 20 \text{ V}$; $I_n = 55 \text{ mA}$.

Installation instructions

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

(16) **Report Number**

211914200/03 issue 3.

(17) **Specific conditions of use**

For type of protection Ex ia IIIC, Ex nA, Ex ec and Ex tc:

The load cell shall be installed in such way that non metallic enclosure parts are physically obstructed from any possible impact.

For type of protection Ex nA:

Provisions shall be made to prevent the rated voltage from being exceeded by transient disturbances of more than 40% for the type of protection Ex nA IIC.

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

Covered by the standards listed at item (9).

(19) **Test documentation**

As listed in Report No. 211914200/03 issue 3.

(13) **SCHEDULE**

(14) **to EU-Type Examination Certificate KEMA 02ATEX1170 X**

Issue No. **5**

(20) **Certificate history**

Issue 1 - project no. 201744100	Initial certificate
Issue 2 - project no. 211391500	Update to the EN 60079 series standards
Issue 3 - project no. 211914200	Update to the EN 61241 series standards Assessed for the new max. surface temperature
Issue 4 - project no. 219478800	Added category III Manufacturer name has been changed Entity parameters (I_i and U_n) decreased in value Update to latest standards
Issue 5 - project no. 225785900	Assessed to latest edition of the EN IEC 60079-0 and EN 60079-7.