

(1) **TYPE EXAMINATION CERTIFICATE**

(2) Equipment intended for use in potentially explosive atmospheres – Directive 94/9/EC

(3) Type Examination Certificate Number: **KEMA 02ATEX1171 X**

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

(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) 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 intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 2017441.


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

EN 50021 : 1999 EN 50281-1-1 : 1998

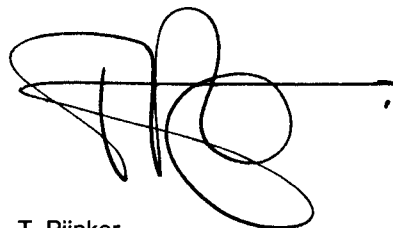
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and construction of the specified equipment and not to the manufacturing process and supply of the equipment.

(12) The marking of the equipment or protective system shall include the following:

 **II 3 GD EEx nL IIC T4 T 175 °C**

Arnhem, 8 November 2002
KEMA Quality B.V.



T. Pijpker
Certification Manager

• This Certificate may only be reproduced in its entirety and without any change

(13)

SCHEDULE

(14)

to Type Examination Certificate KEMA 02ATEX1171 X**(15) Description**

The load cells Model 0785, Model 0795 and Model 0805 convert a mass force into an electrical signal. Of all Models the circuits are covered by a compound and provided with a permanently connected cable of maximum 10 m length.

The circuits of the load cell are considered as one energy limited circuit.

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

The specified temperature T 175 °C, for applications in explosive atmospheres caused by air/dust mixtures, is based upon an ambient temperature of 50 °C.

Electrical data

Signal/supply circuits in type of explosion protection energy limited EEx nL IIC, only for connection to an energy limited circuit, with the following maximum total values under normal operating conditions:

$$\begin{aligned}U_i &= 25 \text{ V} \\I_i &= 600 \text{ mA} \\P_i &= 1,25 \text{ W}\end{aligned}$$

The effective internal capacitance $C_i = 5 \text{ nF}$ and the effective internal inductance $L_i = 30 \text{ }\mu\text{H}$.


Installation instructions

The load cells Model 0785, Model 0795 and Model 0805 can also be considered as non-sparking, when the load cells are fitted in an enclosure which complies with the requirements of clause 6 of EN 50021.

That enclosure shall be provided with the marking

 II 3 G EEx nA T4.

When that enclosure also complies with the requirements of clause 6 and 9 of EN 50281-1-1 and has an ingress protection of at least IP65 per EN 60529, the enclosure shall be provided with the marking

 II 3 GD EEx nA T4 T 135 °C IP65

In both cases the electrical data as specified above apply.

Routine tests

Dielectric strength test between the signal/supply circuits and the base of the unit with 500 Vac during one minute.

(13) **SCHEDULE**
 (14) **to Type Examination Certificate KEMA 02ATEX1171 X**

(16) **Report**

KEMA No. 2017441

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

For ambient temperature range and electrical data, see (15).

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

Essential Health and Safety Requirements not covered by the standards listed at (9)	
Clause	Subject
2.3.2.1 and 2.3.2.2.	Explosive atmospheres caused by air/dust mixtures

These Essential Health and Safety Requirements are examined and positively judged.
 The results are laid down in the report listed at (16)

(19) **Test documentation** dated dated

1. Drawing No.		Drawing No.	
141621R (2 sheets)	)	160850R)
14842700A	)	160990R)
15933500A	)	160991R)
15941400A	)	161787R)
159543R	)	163589R)
159545R	)	16359000A)
15954600A	)	16359000B)
15954600B	)	16359000C)
15954600C	)	16359000D)
15954600D	)	163591R)
15954600E	)	16359200A)
15954600F	)	16359200B)
15968100A	) 16.10.2002	16359200C	) 16.10.2002
160280R	)	16359200D)
16028100A	)	163595R)
16028100B	)	16359800A)
16028100C	)	16562500A)
160282R	)	16562600A)
16028300A	)	16568900A)
16028300B	)	166256R)
16028300C	)	166260R)
16028300D	)	A15954400A)
16028400A	)	A15954400B)
16075800A (2 sheets)	)	A15954400C)
16076800A	)	A15954400D)
16078700A	)	A16290600A (2 sheets))
160843R	)	A16563400A)