

Translation

(1) 2nd Supplement to the EC-Type Examination Certificate

- (2) Equipment and protective systems intended for use
in potentially explosive atmospheres - Directive 94/9/EC
Supplement accordant with Annex III number 6
- (3) No. of EC-Type Examination Certificate: **BVS 13 ATEX E 108 X**
- (4) Equipment: **Load cell type *** *_*_*_*****_*_*_***
- (5) Manufacturer: **Hottinger Baldwin Messtechnik GmbH**
- (6) Address: **Im Tiefen See 45, 64293 Darmstadt, Germany**
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this supplement.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, 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 the Test and Assessment Report BVS PP 14.2007 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|-----------------------------------|------------------------------------|
| EN 60079-0:2012 + A11:2013 | General requirements |
| EN 60079-11:2012 | Intrinsic safety "i" |
| EN 60079-15:2010 | Equipment protection "n" |
| EN 60079-31:2014 | Protection by enclosure "t" |
- (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 appendix to this certificate.
- (11) This supplement to the EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.
- (12) The marking of the equipment shall include the following:



See cl. 15.1

DEKRA EXAM GmbH
Bochum, dated 2015-05-21

Signed: Wiegand

Certification body

Signed: Dr. Wittler

Special services unit

- (15) 15.1 Subject and type

Load cell type *** *_*_*_*****_**_*_*

Instead of the *** in the complete denomination letters and numerals will be inserted which characterize the following variants:

C2
U2
HLC
PW
RSC
RTN
Z6
Z7
C16
PW10

* _ * _ * _ * _ * * * * _ * * _ * _ *

Earth connection:

E = earth connection outside in place
Blank = no earth connection for Ex i

C = insulating coating not for use in EPL Ga and EPL Da
blank = not coated

Over voltage protection:

blank = no circuit for overvoltage protection

$$OV1 = < 500 \text{ V}$$
$$OV2 = > 500 \text{ V}$$

Temperature coding

10 = min. ambient temperature -10 °C

25 = min. ambient temperature -25 °C

30 = min. ambient temperature -30 °C

only for type C16:

50 = min. ambient temperature -50 °C

Connection:

V = cable with 4 strands and cable length in m

S = cable with 6 strands and cable length in m

P4 = 4 pol connector and cable length in m

P6 = 6 pol connector and cable length in m

Screen connection

S = connected directly to the load cell

C or C1 = connected via a 1 nF capacitor

C2 = connected via a 2.2 nF capacitor

C5 = connected via a 4.7 nF capacitor

N or blank = not connected

Enclosure

H = welded

P = potted

Load cell material

S = stainless steel


A = aluminium

W = tool steel

I = Intrinsically safe variant

N or blank = Non IS variants

Marking

	Category and marking	Type
	I M1 Ex ia I Ma or	
	I M2 Ex ia I Mb or	
	II 1G Ex ia IIC T6/T4 Ga or	*** I-**-V*****-**-*
	II 2G Ex ia IIC T6/T4 Gb or	*** I-**-S*****-**-*
	II 1D Ex ia IIIC T125°C Da or	
	II 2D Ex ia IIIC T125°C Db or	
	II 1G Ex ia IIC T6/T4 Ga or	*** I-**-P*****-**-*
	II 2G Ex ia IIC T6/T4 Gb or	*** I-**-P*****-**-*
	II 3G Ex nA IIC T6/T4 Gc and	*** N-*-H-*-V*****-**-*
	II 2D Ex tb IIIC T125°C Db and	*** N-*-H-*-S*****-**-*

15.2 Description

The load cells can be modified according to the descriptive documents as mentioned in the pertinent test and assessment report.

The load cells have been evaluated in acc. with the actual standard version EN 60079-31:2014.

For type HLC a new capacity range (100 kg) has been added.

A new type of load cell has been tested:

Type PW10 *-**-*****-**-*

15.3 Parameters

Not changed

(16) Test and Assessment Report

BVS PP 14.2007 EG as of 2015-05-21

(17) Special conditions for safe use

17.1 If the load cells are installed in areas requiring EPL Ga gas group IIC, EPL Da or EPL Db equipment (depending on the variant), the cables (permanently connected or fastened at the connector) have to be installed in a way that electrostatic charging / discharging will be precluded.

17.2 Load cells type *** *-A-*-*****-**-* (aluminium enclosure) may only be installed in areas requiring EPL Ga or EPL Da or EPL Ma or EPL Mb equipment (depending on the variant), if they are mounted in a way that impact is precluded.

17.3 For load cells type *** *-S-*****-**-* and type *** *-S-*****-0V1-*- equipotential bonding along the external circuits has to be guaranteed.

17.4 Load cells type *** *-C-* may only be installed in areas requiring EPL Gb, EPL Gc, EPL Db, EPL Dc, EPL Ma or EPL Mb equipment (depending on the variant); installation in areas requiring EPL Ga or EPL Da equipment is only permitted if the load cells are protected against electrostatic charging / discharging.

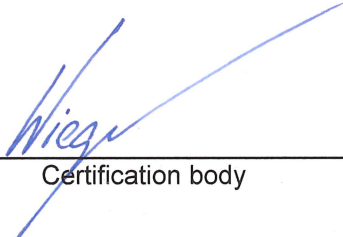
17.5 The enclosure of load cells type *** *-E has to be earthed.

17.6 The load cells can be used in following ambient temperature ranges (see instructions):
 Variants marked with temperature class T4: max. ambient temperature +70 °C
 Variants marked with temperature class T6: max. ambient temperature +30 °C
 Variants marked with EPL Da, Db, Ma or Mb: max. ambient temperature +70 °C
 Variants type *** *-10-**-*: min. ambient temperature -10 °C
 Variants type *** *-25-**-*: min. ambient temperature -25 °C
 Variants type *** *-30-**-*: min. ambient temperature -30 °C
 Type C16 *** *-50-**-*: min. ambient temperature -50 °C

17.7 For load cells type *** N-*-V*****-**-* or type *** N-*-S*****-**-* applies:
 The end of the permanently connected cable should either be connected outside the hazardous area or inside a suitable (e.g. Ex e, Ex n resp. Ex t) enclosure.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA EXAM GmbH
44809 Bochum, 2015-05-21
BVS-Schu/Ma A 20150414



Certification body



Special services unit