



Translation

EC-Type Examination Certificate

(1)

(2)

- Directive 94/9/EC -

Equipment and protective systems intended for use
in potentially explosive atmospheres

(3)

BVS 09 ATEX E 086 X

(4)

Equipment: Load cell type ***-***-***-***

(5)

Manufacturer: Flintec GmbH

(6)

Address: 74909 Meckesheim, Germany

(7)

The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.

(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 09.2098 EG.

(9)

The Essential Health and Safety Requirements are assured by compliance with:

IEC 60079-0:2007	General requirements
EN 60079-11:2007	Intrinsic safety 'i'
EN 60079-26:2007	Equipment Protection Level (EPL) Ga
EN 61241-0:2006	General requirements
EN 61241-11:2006	Intrinsic safety 'iD'

(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 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:



II 1G Ex ia IIC T6/T5 Ga

resp.

II 2G Ex ia IIC T6/T5 Gb

II 1D Ex ia IIIC IP67 T100°C Da

II 2D Ex ia IIIC IP67 T100°C Db

DEKRA EXAM GmbH

Bochum, dated 06. July 2009

Signed: Simanski

Signed: Ruhnau

Certification body

Special services unit

(13)

Appendix to

(14)

EC-Type Examination Certificate

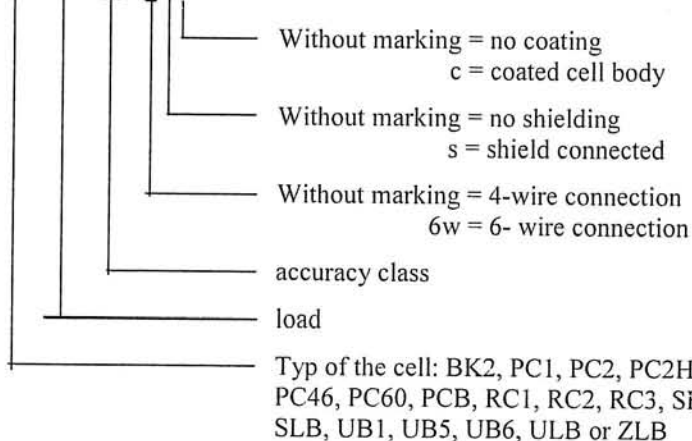
BVS 09 ATEX E 086 X

(15) 15.1 Subject and type

Load cell type ***-***-***-***

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

Type ***-***-***-***



15.2 Description

The load cells are used for converting a load into an electrical signal.
The cells have a metal enclosure with inside fixed resistance strain gauges.
The electrical connection is carried out by a permanently connected cable.
The cells are "simple apparatus".

15.3 Parameters

Voltage	Ui	DC	30	V
Power	Pi		4	W
Ambient temperature range	Ta			
for Temperature Class T6				-40 °C up to +45 °C
for Temperature Class T5				-40 °C up to +60 °C
for Dust application				-40 °C up to +60 °C

(16) Test and assessment report

BVS PP 09.2098 EG as of 06.07.2009

(17) Special conditions for safe use

- 17.1 The load cells type PC22, PC42, PC46, PC60 and ZLB have an aluminium enclosure; if those cells are used in areas requiring Category 1G apparatus, avoid an ignition hazard due to impact or friction.
- 17.2 The load cells type BK2, PC1, PC22, PC42, PC46, PC60, SB5, SLB, UB5, ULB and ZLB have a plastic surface larger than 4 cm²; if those cells are used in areas requiring Category 1G apparatus, avoid risk from electrostatic discharge.
- 17.3 If the load cell is used in areas requiring Category 1G apparatus for gas group IIC, they should be installed in a way that intensive electrostatic charges are avoided.
- 17.4 The load cells type ***-***-***-***c have a coated cell body; if they are used in areas requiring Category 1D or 2D apparatus, avoid an ignition hazard due to propagating brush discharges.

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.

44809 Bochum, 06. July 2009
BVS-Schu/Her A 20090180

DEKRA EXAM GmbH



Certification body



Special services unit

Translation

(1) 1. 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 09 ATEX E 086 X**
- (4) Equipment: **Load cell type ***_***_***_******
- (5) Manufacturer: **Flintec GmbH**
- (6) Address: **Bemannsbruch 9, 74909 Meckesheim, 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 09.2098 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- IEC 60079-0:2011 General requirements**
EN 60079-11:2012 Intrinsic safety 'i'
EN 60079-26:2007 Equipment Protection Level (EPL) Ga
- (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:



II 1G Ex ia IIC T6/T5 Ga
II 1D Ex ia IIIC IP67 T100°C Da

resp.

II 2G Ex ia IIC T6/T5 Gb
II 2D Ex ia IIIC IP67 T100°C Db

DEKRA EXAM GmbH
Bochum, dated 25.09.2012

Signed: Simanski

Certification body

Signed: Dr. Eickhoff

Special services unit

(13) Appendix to

(14) **1. Supplement to the EC-Type Examination Certificate**
BVS 09 ATEX E 086 X

(15) 15.1 Subject and type

Load cell type ***-***-***-****

15.2 Description

The load cells have been assessed in acc. with IEC 60079-0:2011 and EN 60079-11:2012.

15.3 Parameters

Voltage	Ui	DC	30	V
Power	Pi		4	W
Ambient temperature range	Ta			
for Temperature Class T6				-40 °C up to +45 °C
for Temperature Class T5				-40 °C up to +60 °C
for Dust application				-40 °C up to +60 °C

(16) Test and Assessment Report

BVS PP 09.2098 EG as of 25.09.2012

(17) Special conditions for safe use

- 17.1 The load cells type PC22, PC42, PC46, PC60 and ZLB have an aluminium enclosure; if those cells are used in areas requiring Category 1G apparatus, avoid an ignition hazard due to impact or friction.
- 17.2 The load cells type BK2, PC1, PC22, PC42, PC46, PC60, SB5, SLB, UB5, ULB and ZLB have a plastic surface larger than 4 cm²; if those cells are used in areas requiring Category 1G apparatus, avoid risk from electrostatic discharge.
- 17.3 If the load cell is used in areas requiring Category 1G apparatus for gas group IIC, they should be installed in a way that intensive electrostatic charges are avoided.
- 17.4 The load cells type ***-***-***-***c have a coated cell body; if they are used in areas requiring Category 1D or 2D apparatus, avoid an ignition hazard due to propagating brush discharges.

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, 25.09.2012
BVS-Schu/Dj A 20121005



Certification body



Special services unit

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 09 ATEX E 086 X**
- (4) Equipment: **Load cell type ***-***-***-******
- (5) Manufacturer: **Flintec GmbH**
- (6) Address: **Bemannsbruch 9, 74909 Meckesheim, 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 09 2098 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"
- (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:



II 1G Ex ia IIC T6/T5 Ga
II 1D Ex ia IIIC T100°C Da

bzw.

II 2G Ex ia IIC T6/T5 Gb
II 2D Ex ia IIIC T100°C Db

DEKRA EXAM GmbH
Bochum, dated 2015-11-06

Signed: Dr. Eickhoff

Certification body

Signed: Dr. Wittler

Special services unit

(13) Appendix to

(14) **2nd Supplement to the EC-Type Examination Certificate**
BVS 09 ATEX E 086 X

(15) 15.1 Subject and type

Load cell type ***-***-***-****

15.2 Description

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

Two new types have been added:

Type PC7-***-***-****

Type Q50-***-***-****

15.3 Parameters

Voltage	Ui	DC	30	V
Power	Pi		4	W
Internal capacitance	Ci		0.16	nF/m
Internal inductance	Li		0.8	μH/m
Ambient temperature range	Ta			
for Temperature Class T6			-40 °C up to +45 °C	
for Temperature Class T5			-40 °C up to +60 °C	
for Dust application			-40 °C up to +60 °C	

(16) Test and Assessment Report

BVS PP 09.2098 EG as of 2015-11-06

(17) Special conditions for safe use

- 17.1 The load cells type PC22, PC42, PC46, PC60 and ZLB have an aluminium enclosure; if they are used in areas, requiring Ga apparatus, avoid an ignition hazard due to impact or friction.
- 17.2 The load cells type BK2, PC1, PC22, PC42, PC46, PC60, SB5, SLB, UB5, ULB and ZLB have a plastic surface larger than 4 cm²; if they are used in areas, requiring Ga apparatus, avoid risk from electrostatic discharge.
- 17.3 For use of the load cells in areas, requiring Ga Group IIC resp. Da or Db Group IIIC apparatus, the connection cables must be installed in a way that a risk from electrostatic discharge is avoided.
- 17.4 The load cells type ***-***-***-****c have a coated cell body; if they are used in areas, requiring Da or Db apparatus, avoid an ignition hazard due to propagating brush discharges.

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, 2015-11-06
BVS-Schu/Nu A 20130454



Certification body



Special services unit