



Translation

EC-Type Examination Certificate

- (1)
- (2) **- Directive 94/9/EC -**
Equipment and protective systems intended for use
in potentially explosive atmospheres
- (3) **DMT 99 ATEX E 016**
- (4) **Equipment:** Cable Glands Type Perfect 50.***/EMV/EX
Cable Glands Type Perfect 50.***/EX
Screw Plugs Type Perfect 10** M/G/EX
Screw Plugs Type Perfect 10.*** M/G/EX
Reductions Type Perfect 6 ** ***/OM/EX
Reductions Type Perfect M ** PG **/OM/EX
Reductions Type Perfect M ** M **/6/OM/EX
Enlarger Type Perfect M ** M **/FR/EX
Enlarger Type Perfect M ** PG **/OM/EX
- (5) **Manufacturer:** Jacob GmbH Elektrotechnische Fabrik
- (6) **Address:** D - 71394 Kernen - Rommelshausen
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the schedule to this type examination certificate.
- (8) The certification body of Deutsche Montan Technologie 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 99.2010 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
EN 50014:1992 (VDE 0170/0171 Teil 1/3.94) General requirements
EN 50019:1994 (VDE 0170/0171 Teil 6/3.96) Increased safety 'e'
- (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 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 2G EEx e II



Page 2 of

EC-Type Examination Certificate

DMT 99 ATEX E 016

Deutsche Montan Technologie GmbH

Essen, dated 19. March 1999

Signed: Dr. Jockers

Signed: Dr. Dill

DMT-Certification body

Head of special services unit



(13) Appendix to

(14) **EC-Type Examination Certificate**

DMT 99 ATEX E 016

(15) 15.1 Subject and type

Cable Glands Type Perfect 50.***/EMV/EX
Cable Glands Type Perfect 50.***/EX
Screw Plugs Type Perfect 10** M/G/EX
Screw Plugs Type Perfect 10.*** M/G/EX
Reductions Type Perfect 6 ** ***/OM/EX
Reductions Type Perfect M ** PG **/OM/EX
Reductions Type Perfect M ** M **/6/OM/EX
Enlarger Type Perfect M ** M **/FR/EX
Enlarger Type Perfect M ** PG **/OM/EX

The placeholder ** or *** will be replaced by complement part number of appropriate thread.

15.2 Description

Cable Glands Type Perfect are used as cable entries in areas with protection type increased safety “e” or intrinsically safety “i”. Cable glands will alternatively be used in connection with maximal one appropriate reduction or enlarging. Screw plugs are used for closing not used openings.

15.3 Parameters

Allowed temperature range of the cable gland -20 °C ... +80 °C

Ambient temperature of electrical equipment is normally limited to $-20\text{ °C} \leq T_a \leq +40\text{ °C}$. The max. allowed ambient temperature may be exceeded for this cable entry, if for respective application the allowed temperature range is kept.

(16) Test and assessment report

No. BVS PP 99.2010 EG
15 pages

(17) Special conditions for safe use

None



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.

45307 Essen, 05.12.2002
BVS-Ld/Ar E 2131/02

Deutsche Montan Technologie GmbH


DMT Certification body


Head of special services unit



Translation



1. Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate DMT 99 ATEX E 016

Equipment:
Cable Glands Type Perfect 50.***/EMV/EX
Cable Glands Type Perfect 50.***/EX
Screw Plugs Type Perfect 10** M/G/EX
Screw Plugs Type Perfect 10.*** M/G/EX
Reductions Type Perfect 6 ** **/OM/EX
Reductions Type Perfect M ** PG **/OM/EX
Reductions Type Perfect M ** M **/6/OM/EX
Enlarger Type Perfect M ** M **/FR/EX
Enlarger Type Perfect M ** PG **/OM/EX

Manufacturer: Jacob GmbH Elektrotechnische Fabrik

Address: D - 71394 Kernen - Rommelshausen

Description

The cable glands will be delivered with changed dome nuts in accordance to the test certificate of the record no. BVS PP 99.2010 EG / N1.

The in such way modified cable glands are entended for permanently laying of cable entries.

In the course these changes the part number will modified and renamed:

Cable Glands Type Perfect 50.***/EMV/**/EX
Cable Glands Type Perfect 50.***/**/EX
Screw Plugs Type 10** M/G/EX
Screw Plugs Type 10.*** M/G/EX
Reductions Type 6 ** **/OM/EX
Reductions Type M ** PG **/OM/EX
Reductions Type M ** M **/6/OM/EX
Enlarger Type M ** M **/FR/EX
Enlarger Type M ** PG **/OM/EX

Test and assessment report

BVS PP 99.2010 EG / N1, as of 15.08.2001

Deutsche Montan Technologie GmbH

Essen, dated 15. August 2001

Signed: Dr. Jockers

signed: Dr. Dill

DMT-Certification body

Head of special services unit



We confirm the correctness of the translation from the German original.
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45307 Essen, 05.12.2002
BVS-Ld/Ar E 2131/02

Deutsche Montan Technologie GmbH


DMT-Certification body


Head of special services unit



Translation



2nd Supplement

(Supplement in accordance with Directive 94/9/EC Annex III number 6)

to the EC-Type Examination Certificate DMT 99 ATEX E 016

Equipment: Cable Glands Type Perfect 50.***/EMV/**/EX
Cable Glands Type Perfect 50.***/**/EX
Screw Plugs Type 10** M/G/EX
Screw Plugs Type 10.*** M/G/EX
Reductions Type 6 ** ***/OM/EX
Reductions Type M ** PG **/OM/EX
Reductions Type M ** M ***/6/OM/EX
Enlarger Type M ** M ***/FR/EX
Enlarger Type M ** PG **/OM/EX

Manufacturer: Jacob GmbH Elektrotechnische Fabrik

Address: D - 71394 Kernen - Rommelshausen

Description

The cable entries are also intended for the use in combustible dust atmospheres.

The Essential Health and Safety Requirements of the modified equipment are assured by compliance with:

EN 50014:1997+A1-A2	General requirements
EN 50018:2000	Flameproof enclosure
EN 50019:2000	Increased safety
EN 50281-1-1:1998	Dust protection

Test and assessment report

BVS PP 99.2010 EG as of 09.09.2002

Marking

The existing marking has to be extended and shall include :

II 2GD EEx e II IP 68

Deutsche Montan Technologie GmbH

Essen, dated 09. September 2002

Signed: Dr. Jockers

Signed: Dr. Eickhoff

DMT-Certification body

Head of special services unit

Page 1 of 2 to DMT 99 ATEX E 016 /N2

This certificate may only be reproduced in its entirety and without change.

Am Technologiepark 1, 45307 Essen, Telefon (0201)172-1416. Telefax (0201)172-1716




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45307 Essen, 05.12.2002
BVS-Ld/Ar E 2131/02

Deutsche Montan Technologie GmbH


DMT-Certification body


Head of special services unit