



(1) **EC-TYPE-EXAMINATION CERTIFICATE**
(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**



(3) EC-type-examination Certificate Number:

PTB 98 ATEX 1068 U

(4) Component: Cable bushing of types PD../1100... and PD../2200...

(5) Manufacturer: Emil A. Peters GmbH & Co. KG

(6) Address: Westfalenstraße 85, 58636 Iserlohn

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

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component 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 confidential report PTB Ex 98-18096.

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

EN 50 014:1997

EN 50 018:1994

EN 50 019:1994

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type-examination Certificate relates only to the design and construction of the specified component in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this component.

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

II 2 G EEx de II IM 2 EEx de I

Zertifizierungsstelle Explosionsschutz

Braunschweig, January 20, 1999

By order:

Dr.-Ing. U. Klausmeier
Oberregierungsrat



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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE No. PTB 98 ATEX 1068 U

(15)

Description of component

The cable bushing of types PD../1100 and PD../2200 serve as electrical connection between flameproof compartments or between flameproof compartments and a terminal compartment of another recognized type of protection.

Connection is made at connection heads which are screwed on the threaded stem of the cable bushing and which are locked to prevent accidental loosening and rotation.

Electrical data

Rated insulation voltage up to

1100 V 2200 V

Rated cross-section *) max.

300 mm²

Number of studs **)

1

Type and size of thread *)

M 20 x 1,5 to M 48 x 2
other types and sizes of threads with
respective identification

Temperature range at place of
installation of the cable bushing, with the
electrical apparatus operated under rated
conditions

-55 °C to 120 °C

When the maximum current-carrying capacity of the bushing conductor studs and the connecting leads is determined, the self-heating and the heating of the enclosure at the place of installation at maximum permissible ambient temperature must be taken as a basis.

*) depending on the type and design of cable bushing and connection head

(16)

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(17)

Special conditions for safe use

Threaded holes into which cable bushings are screwed with the internal thread must meet the minimum requirements of EN 50 018, section 5.3 (Table 3). These cable bushings are suitable for installation in electrical apparatus of the type of protection flameproof enclosure "d" of groups I, IIA, IIB or IIC.

The cable bushing is to be included in the type test according to EN 50 018, section 15.1.3 (overpressure test), in compliance with the grouping of the respective electrical apparatus (group I, IIA, IIB or IIC), if the reference pressure exceeds 20 bar.

The cable bushings must be fastened in the electrical apparatus so that they are locked to prevent rotation and accidental loosening.

The connecting leads of the cable bushing must be connected inside enclosures which are in compliance with a standardized type of protection according to EN 50014, section 1.2.

The cable bushing is a constructional unit. The reproducible assembly and the installation conditions have been documented. According to EN 50 018. section 16.2 (13.4.4) a routine test together with the flameproof enclosure in compliance with section 16.1 is, therefore, not necessary.

The assignment of the temperatures to the temperature class of the cable bushing is to be laid down during the type test of the respective electrical apparatus.

The component can be used in both, group I and group II, as the requirements of the standard are identical in this case.

This EC-type-examination certificate and future supplements thereto are at the same time supplements to Component Certificate PTB No. Ex-97.D.1020 U.

(18) Essential health and safety requirements

The tests carried out and their positive results show that the cable bushing meets the requirements of Directive 94/9/EC and of the standards stated on the cover sheet.

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