Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

(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 01 ATEX 3104 X

(4) Equipment: Cable entry, type series 2 .. .. st . .. ex made from stainless steel

(5) Manufacturer: Pflitsch GmbH & Co. KG

(6) Address: Mühlenweg 30, 42499 Hückeswagen, Germany

(7) This equipment 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 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 confidential report PTB Ex 01-30020.

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

EN 50014:1997 + A1 + A2 EN 50019:1994

(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 the 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 2 G EEx e II

Zertifizierungsstelle Explosionsschutz Braunschweig, April 18, 2001
By order:

(signature)

Dr.-Ing. U. Engel
Regierungsdirektor

3 pages, correct and complete as regards content.
By order:

Dr.-Ing. M. Thedens Braunschweig, September 08, 2003

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 PTB 01 ATEX 3104 X

(15) Description of equipment

The cable entry with metric thread, type 2 .. .. .st . .. ex (in-company designation: U 28. UNI Dicht EExe II, metrisch) made of stainless steel serves to enter permanently laid cables into electrical apparatus of the Increased Safety "e" type of protection. The cable entry is installed in enclosures provided with through-holes or threaded holes. In the case of through-holes, stainless-steel lock nuts are used for fastening.

The cable entry is composed of a clamping bolt, a double nipple, a sealing unit made from different materials, and a fitting thread sealing ring which ensures sealing towards the enclosure. Accessories: multiple sealing unit, blanking sealing unit, and lock nut.

Technical data

Nominal size M 16 to M 63	to be used for cable and conduit diameters from 4 to 51 mm (depending on product designation, see technical documents attached to test report)
Nominal temperature range (depending on type of sealing unit)	Siloprene (LSR): -60 °C to +180 °C Santoprene (TPE): -40 °C to +115 °C PVC: -20 °C to +70 °C
Suitable for equipment of group II with degree of mechanical hazard:	high
Min. wall thickness when installed in devices with threaded holes:	5.0 mm (plastics); 3.0 mm (metal)
Max. wall thickness when installed in devices with through-holes:	2.0 mm (plastics); 1.0 mm (metal)
Protection against contact, foreign matter and water:	at least IP 54 acc. to EN 60529:1991

(16) Test report PTB Ex 01-30020

(17) Special conditions for safe use

The temperatures at the fitting thread sealing ring must not exceed -30 °C to +80 °C.

Only permanently laid cables may be entered. The user must guarantee that a suitable cable grip is provided.

The maximum thermal load of the cables entered is to be taken into account.

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When using multiple sealing units, care shall be taken that all the sealing openings actually accommodate a cable.

(18) Essential health and safety requirements

The degree of protection - at least IP 54 according to EN 60529:1991 - will be guaranteed only by adequate selection of cable entries, of the sealings tested, and by proper installation of the cable entries into the electrical apparatus.

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, April 18, 2003

(signature) *L.S.*

Dr.-Ing. U. Engel
Regierungsdirektor

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Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

2nd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 3104 X

(Translation)

Equipment: Cable entry, type U 28. UNI Dicht Kabelverschraubung, made from stainless steel

Marking: Ⓔx **II 2 G EEx e II**

Manufacturer: Pflitsch GmbH & Co. KG

Address: Mühlenweg 30, 42499 Hückeswagen, Germany

Description of supplements and modifications

The cable entry of type U 28. UNI Dicht Kabelverschraubung in stainless steel may also be used in areas in which explosive atmospheres with dust/air mixtures have to be expected to occur.

The marking is therefore changed to read:

Ⓔx **II 2 G/D EEx e II IP 68**

Technical data

Protection against contact, foreign matter and water: IP68 according to EN 60529

Test report: PTB Ex 03-13206

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, September 08, 2003

Dr.-Ing. U. Klausmeyer
Regierungsdirektor

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.
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