

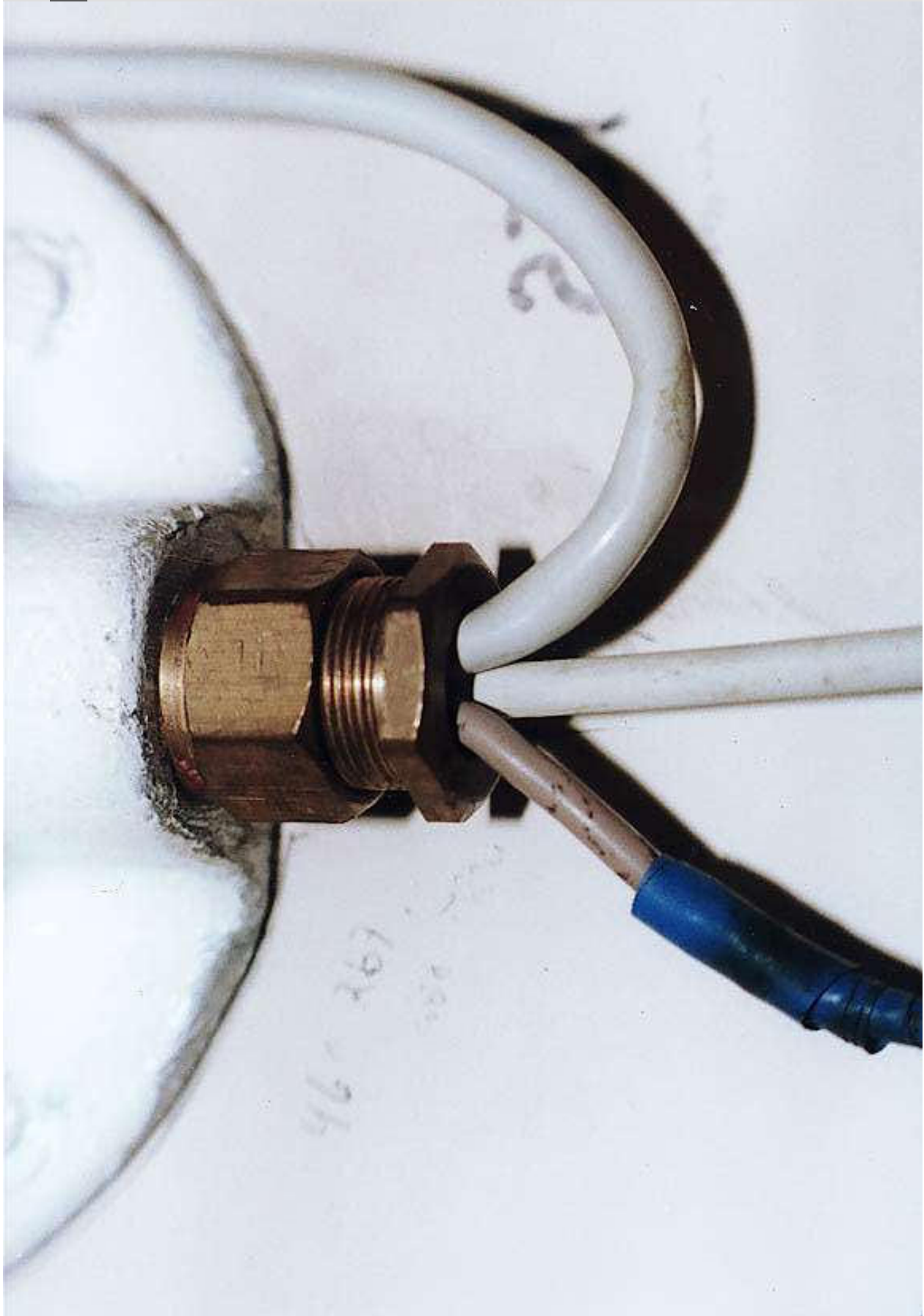


IECEx International Conference 2017
Shanghai, China

**Electrical Installations Design,
Selection, Erection and Inspection**
Part 2 of 2



10. Cable entry systems and blanking elements



10.2 Selection of cable glands

Protection technique for the equipment	Ex “d” see 10.6	Ex “e” see 10.4	Ex “n” see 10.4	Ex “t” see 10.7
Ex “d”	X			
Ex “e”	X	X		
Group II Ex “i” / Ex “nL”	X	X	X see 16.5	
Group III Ex “j”				X See 16.5

10.2 Selection of cable glands

Protection technique for the equipment	Ex “d” see 10.6	Ex “e” see 10.4	Ex “n” see 10.4	Ex “t” see 10.7
Ex “n” Excluding Ex “nL” Ex “nR” Siehe 10.8	X	X	X	
Ex “pxb” , Ex “pyb” or Ex “pzc”	X	X		

Glands, adapters and blanking element protection technique

10.2 Selection of cable glands

Protection technique for the equipment	Ex “d” see 10.6	Ex “e” see 10.4	Ex “n” see 10.4	Ex “t” see 10.7
Ex “pxb”, Ex “pyb” or Ex “pzc”	X	X		X
Ex “t”				X



71-TA1.N1

CE 1180 Ex II 2G

BASECATEDBY0220X IECEx BAS 09.0104X

Vmax=32V Wmax=5W

Ex d Ia MC T4 Gb (-40°C ≤ T_{amb} ≤ +75°C)

WARNING: DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE MAY BE PRESENT.

71-TA1.N1

Abingdon, United Kingdom, OX14 4SD



II 2G

Certificate with the suffix “X”

If an additional clamping is required to prevent pulling and twisting of the cable transmitting the forces to the conductor terminations inside the enclosure, a clamp shall be provided, as close as practicable to the gland along the cable.

NOTE 1

Cable clamps within 300 mm of the end of the cable gland are preferred.

10.3 Connections of cables to equipment

evoprene: -50 °C to +70 °C

low

Suitable for equipment of group II with a degree of mechanical hazard:

Installation in equipment with wall thicknesses of: at least 1,5 mm

Protection against contact, foreign matter and water: at least IP 54 acc. to EN 60 529:1991

(16) Report PTB Ex 99-30113

(17) Special conditions for safe use

Only permanently laid cables and conduits may be entered. The user must guarantee suitable clamping.

The maximum mechanical load of the cables and conduits entered is to be taken into account.

The cable entries may be used only in places where they are protected against the influence of mechanical damage.

(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 and conduit entries, of the sealings tested and by proper installation of the cable and conduit entries into the electrical apparatus.

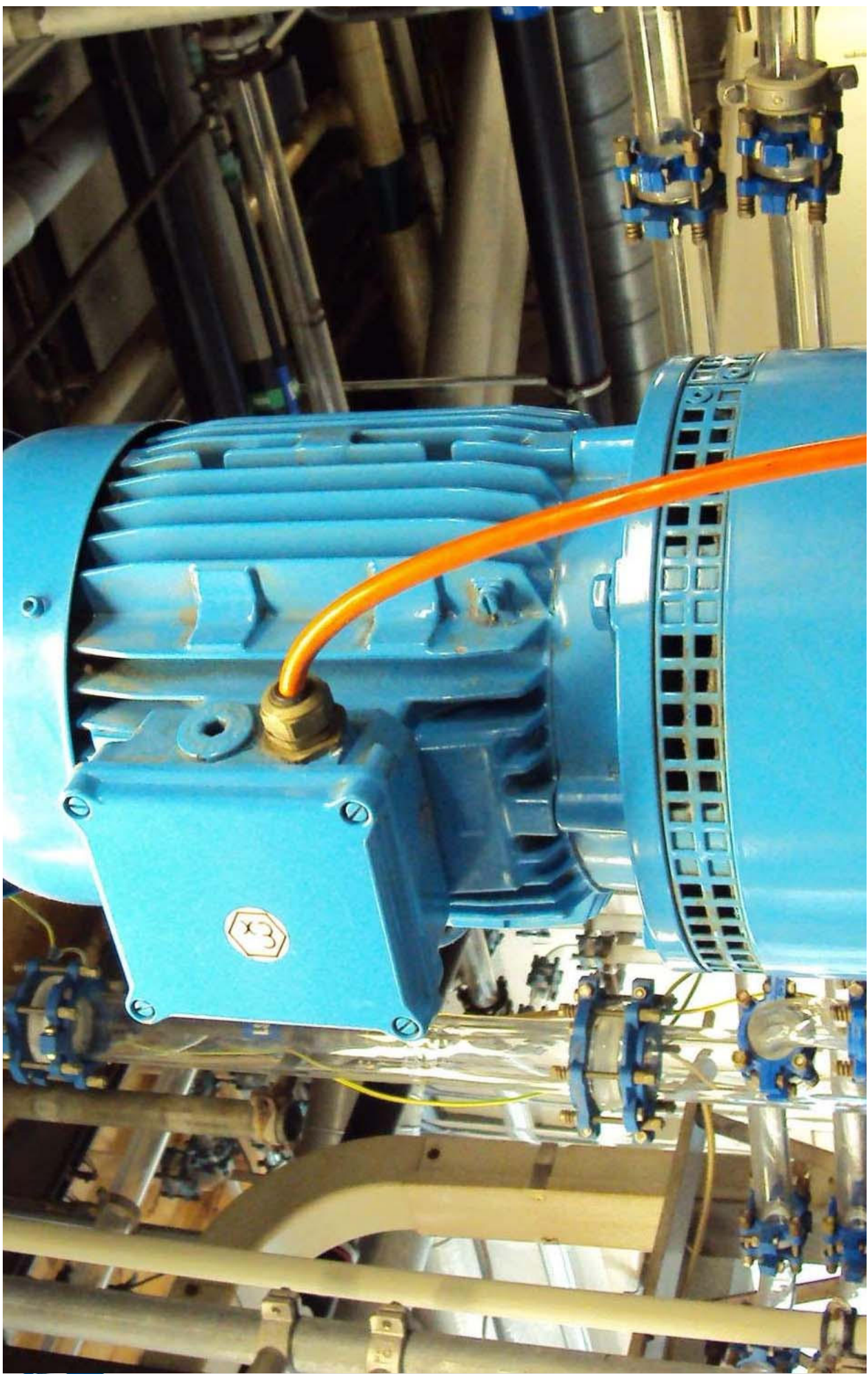
Zertifizierungsstelle Explosionsschutz

By order:

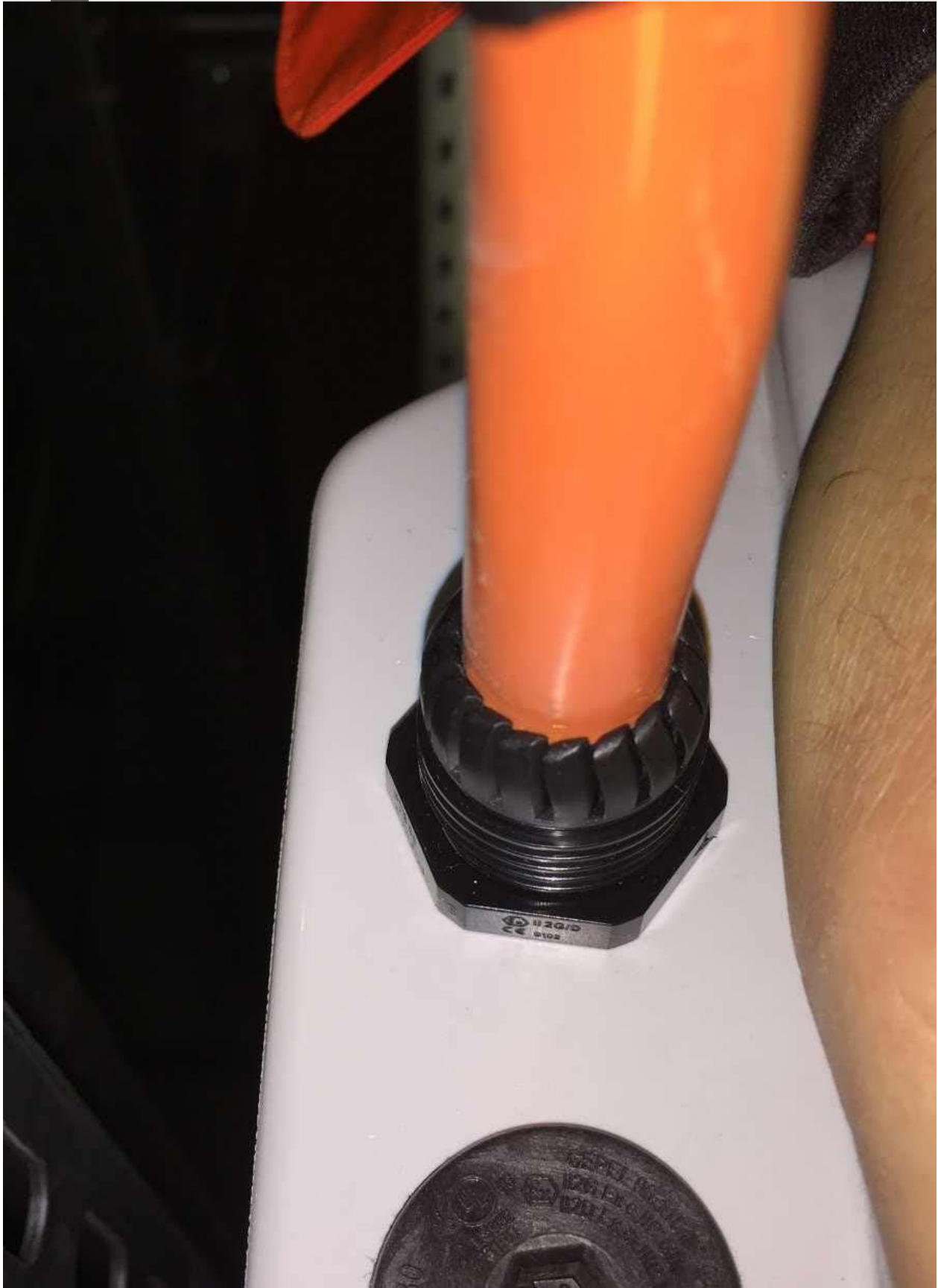
Braunschweig, November 16, 1999



Dr.-Ing. U. Endel







With the exception of enclosures containing only one intrinsically safe circuit unused entries in the enclosure shall be sealed by blanking elements in accordance with table 10 and that maintain the **degree of ingress protection IP 54** or that required by the location, whichever is the higher.

Blanking elements shall **comply with IEC 60079-0**, and be of a type that can only be removed with the aid of tools.



10.5 Unused openings







The cable entry system shall comply with one of the following:

- barrier cable glands in compliance with IEC 60079-1 and certified as equipment;
- **cable glands in compliance with IEC 60079-1, certified as an equipment and combined with the cables complying with 9.3.2(a) and with a minimum length of the connected cable of 3 m**

NOTE 1

The minimum length is required to minimize the negative effects of gas migration through the cable (see also Annex E).



