

STANDARD INFORMATION

Standard Number: UL 2225

Standard Name: Cables and Cable-Fittings for Use in Hazardous (Classified) Locations

Standard Edition and Issue Date: 4th Edition Dated September 30, 2013

Date of Revision: March 24, 2017

Date of Previous Revision of Standard: 4th Edition Revised January 29, 2016

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **April 13, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revised requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revised requirements.

Overview of Changes: Addition of Low Ambient Requirements for Cable Glands. Specific details of new/revised requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revised paragraphs noted in the attached or explain why these new/revised requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
<i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i>		
23	Info	Explosion Tests
23.16		<p>For explosionproof cable fittings specified and marked for use at ambient temperatures lower than minus 25°C (minus 13°F) or for flameproof cable fittings specified and marked for use at ambient temperatures lower than minus 20°C (minus 4°F), the Explosion Tests shall be performed at the minimum ambient specified, $\pm 5^{\circ}\text{C}$ ($\pm 9^{\circ}\text{F}$). When the ambient specified is such that common materials within the Group are not flammable, a test temperature shall be specified that represents the minimum temperature at which the test gasses shown in Table 23.3 remain gasses.</p> <p><i>Exception: For explosionproof cable fittings for use in Group A, B, C or D classified locations, rated less than minus 25°C (minus 13°F) but not less than minus 50°C (minus 58°F) or flameproof cable fittings for use in Groups IIA, IIB or IIC classified locations, rated less than minus 20°C (minus 4°F) but not less than minus 50°C (minus 58°F), shall be permitted to alternatively be subjected to the Hydrostatic Pressure Test in accordance with 24.4 and 24.5.</i></p>
24	Info	Hydrostatic Pressure Tests
		<i>New clause added;</i>
24.4		<p>For explosionproof cable sealing fittings for use in Groups A, B, C, or D classified locations, rated less than minus 25°C (minus 13°F) but not less than minus 50°C (minus 58°F), that have been determined to comply with the Explosion Tests requirements in Section 23 at $20 \pm 5^{\circ}\text{C}$ (68°F), the fittings shall be subjected to the Hydrostatic Pressure Test of Section 24 using the test factor of six times the maximum explosion test pressures (based on room ambient explosion testing) or the values from Table 24.2.</p>
		<i>New clause added;</i>
24.5		<p>For flameproof cable sealing fittings for use in Groups IIA, IIB, or IIC classified locations, rated less than minus 20°C (minus 4°F) but not less than minus 50°C (minus 58°F), that have been determined to comply with the Explosion Tests requirements in Section 23 at $20 \pm 5^{\circ}\text{C}$ (68°F), the fittings shall be subjected to the Hydrostatic Pressure Test of Section 24 using the test factor of six times the maximum explosion test pressures (based on room ambient explosion testing) or the values from Table 24.2.</p>



CLAUSE	VERDICT	COMMENT
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New table added;

Hydrostatic pressures for cable fitting seals rated and marked as low as minus 50°C (minus 58°F)

Table 24.2

Class I area classification	Required hydrostatic pressure in psig (MPa)			
	Group A	Group B or IIC	Group C or IIB	Group D or IIA
Division 1 or Zone 1	3,000 (20.7)	3,000 (20.7)	1,800 (12.4)	900 (6.2)
Division 2 or Zone 2	750 (5.17)	750 (5.17)	750 (5.17)	750 (5.17)

Info **MARKINGS**

37 Info **Details**

Marking for Class I, II, and III, Division 1 and 2 shall be marked with the following:

37.2

- a) Class, Group and Division, as appropriate. For Division 1 or Division 2, designation of the hazardous location Group need not be marked on a fitting if the size or design of the fitting is such that there is insufficient space for this marking, and:
 - 1) The designations of both the hazardous location class and group appear on the smallest package in which the fitting is shipped; and
 - 2) The fitting is suitable for all hazardous location groups in the Division 1 or Division 2 hazardous location class marked on the fitting.
- b) For explosionproof cable sealing fittings for use in Groups A, B, C, or D classified locations. The minimum ambient temperature rating when less than minus 25°C (minus 13°F).

37.3

- AEx marking for explosive gas atmospheres shall be marked with the following:
 - a) Class I;
 - b) The applicable Zone marking - i.e. Zone 0, Zone 1, or Zone 2;
 - c) The symbol AEx;
 - d) The symbol for each type of protection used:
 - 1) "d": flameproof;
 - 2) "e": increased safety;
 - e) The symbol of the group:
 - 1) IIA, IIB or IIC for electrical equipment for places with an explosive gas atmosphere other than mines susceptible to firedamp.
 - f) For flameproof cable sealing fittings for use in Groups IIA, IIB, or IIC classified locations. The minimum ambient temperature rating when less than minus 20°C (minus 4°F).

CUSTOMERS PLEASE NOTE: This Table and column "Verdict" can be used in determining how your current or future production is or will be in compliance with new/revised requirements.