

STANDARD INFORMATION

Standard: CSA C22.2 No. 208

Standard ID: Alarm and Signal Cable [CSA C22.2#208:2018 Ed.4+U1]

Previous Standard ID: Fire Alarm and Signal Cable [CSA C22.2#208:2018 Ed.4]

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **June 1, 2026**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

Overview of Changes:

- New optional cold impact test
- New optional low temperature ratings/markings
- Direct Burial rating/marking not eligible for cables with mechanical protection without an overall covering
- Cables with interlocked armour will no longer be able to omit the jacket under armour. Specific jacket under interlocked armour wall thickness requirements have been added

Specific details of new/revise requirements are found in table below

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 – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records.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>
4	Info	Construction
4.9	Info	Jacket
4.9.1		Except for non-shielded single-conductor constructions, an overall jacket shall be applied over the core assembly of single- or multiple-conductor constructions with a thickness not less than that specified in Table 3. If mechanical protection in accordance with the requirements of Clause 4.10.2 is provided, this jacket <u>may have a reduced thickness in accordance with Table 11. If mechanical protection in accordance with the requirements of Clause 4.10.3 is provided, this jacket thickness is not specified, or it may be omitted entirely.</u>
4.9.2		Clause deleted
4.9.3		Isolating jackets may be incorporated. <u>The thickness of isolating jackets is not specified.</u>
		New clause added;
4.9.5		The thickness shall be measured with the apparatus and in accordance with the method specified in the thickness test of CSA C22.2 No. 2556.
5	Info	Marking
5.1	Info	Marking on cable
5.1.1		Except for cables that have interlocked armour without an outer covering or that cannot be surface marked because of the nature of the outer surface, cables shall have the following information surface marked (ink printed, embossed, or indent printed) at least every 1 m: h) "DIRECT BURIAL" or "DIR BUR" if the cable, without <u>mechanical protection or with mechanical protection plus an overall covering per Clause 4.11 of this Standard</u> , meets the requirements for wet locations in Clause 6.2.3 and for <u>cold impact in Clause 6.5.13 of this Standard</u> and also meets the crush test requirements of mechanical damage-crushing method 1 (TC types only) of CSA C22.2 No. 230; i) "HALOGEN-FREE" or "HAL-FREE" if the cable meets the requirements of Clause 6.5.12; and j) <u>"-40 °C" or "MINUS 40 °C"; "-25 °C" or "MINUS 25 °C", as applicable, if the cable meets the requirements of Clauses 6.5.13 and 6.5.3.</u>



CLAUSE	VERDICT	COMMENT
		<p>Marking on tags</p> <p>Each coil and reel of cable shall be legibly tagged or marked to indicate the following:</p> <p>i) “DIRECT BURIAL” or “DIR BUR” if the cable, without <u>mechanical protection or with mechanical protection plus an overall covering in accordance with Clause 4.11 of this Standard</u>, meets the requirements for wet locations in Clause 6.2.3 <u>and for cold impact in Clause 6.5.13 of this Standard</u> and also meets the crush test requirements of the mechanical damage-crushing method 1 (TC types only) of CSA C22.2 No. 230;</p> <p>j) “HALOGEN-FREE” or “HAL-FREE” if the cable meets the requirements of Clause 6.5.12; and</p> <p>k) “-40 °C” or “MINUS 40 °C”; “-25 °C” or “MINUS 25 °C”, as applicable, if the cable <u>meets the requirements of Clauses 6.5.13 and 6.5.3.</u></p>
5.2		
6	Info	Tests
6.5	Info	Completed cable
6.5.2	Info	Cold bend
		Insulation
6.5.3.1		Specimens of insulated conductors taken from the completed cable shall not have any cracks when they are wound six close turns around a mandrel having the applicable diameter specified in Table 8 at $-30 \pm 2 \text{ °C}$ (or optional $-40 \pm 2 \text{ °C}$ for cables marked “-40 °C”), after being conditioned at that temperature for 1 h.
		Cracks
6.5.3.2		The jacket and the insulation on the individual conductors shall not have any cracks when specimens of the completed cable are conditioned at $-30 \pm 2 \text{ °C}$ (or optional $-40 \pm 2 \text{ °C}$ for cables marked “-40 °C”) for 4 h and, while still at that temperature, are wound the applicable number of turns
		New section added;
6.5.13		Cold impact test (optional)
6.5.13.1		The non-metallic components of at least eight specimens shall not crack when ten specimens of completed cable, taken from the same length of cable, are subjected to the cold impact test specified in CSA C22.2 No. 2556 at one of the following temperatures:
		a) $-40 \pm 2 \text{ °C}$ for cables marked “-40 °C”; or b) $-25 \pm 2 \text{ °C}$ for cables marked “-25 °C”.
6.5.13.2		Compliance with Clause 6.5.13.1 shall be determined in accordance with the cold impact test specified in CSA C22.2 No. 2556.



CLAUSE VERDICT COMMENT

New table added;

Jacket thickness under interlocked armour
(See Clause 4.9.1.)

Table 11

Diameter of assembly under cable jacket*, mm	Minimum thickness at any point, mm
0–12.70	0.41
12.71–19.05	0.61
Over 19.05	1.02

* For parallel cable, use the minor diameter.