

INTERNATIONAL STANDARD

**ISO
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Refrigerated light hydrocarbon fluids — Measurement of liquid levels in tanks containing liquefied gases — Electrical capacitance gauges

*Hydrocarbures légers réfrigérés — Mesurage du niveau de liquide dans
les réservoirs contenant des gaz liquéfiés — Jauges à effet capacitif*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 8309 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*, Sub-Committee SC 5, *Measurement of light hydrocarbon fluids*.

Annexes A and B of this International Standard are for information only.

Refrigerated light hydrocarbon fluids — Measurement of liquid levels in tanks containing liquefied gases — Electrical capacitance gauges

1 Scope

This International Standard specifies the essential requirements and verification procedures for capacitance-type liquid level gauges to be used for ship and shore tanks containing refrigerated light hydrocarbon fluids.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IMO (International Maritime Organization). Resolution A.328(IX), *Code for the construction and equipment of ships carrying liquefied gases in bulk.*¹⁾

IEC 79-0:1983, *Electrical apparatus for explosive gas atmospheres — Part 0: General requirements.*²⁾

IEC 79-1:1971, *Electrical apparatus for explosive gas atmospheres — Part 1: Construction and test of flameproof enclosures of electrical apparatus.*²⁾

IEC 79-2:1983, *Electrical apparatus for explosive gas atmospheres — Part 2: Electrical apparatus — Type of protection "p".*²⁾

IEC 79-3:1972, *Electrical apparatus for explosive gas atmospheres — Part 3: Spark test apparatus for intrinsically-safe circuits.*²⁾

IEC 79-4:1975, *Electrical apparatus for explosive gas atmospheres — Part 4: Method of test for ignition temperature.*²⁾

IEC 79-5:1967, *Electrical apparatus for explosive gas atmospheres — Part 5: Sand-filled apparatus.*²⁾

IEC 79-6:1968, *Electrical apparatus for explosive gas atmospheres — Part 6: Oil-immersed apparatus.*²⁾

IEC 79-7:1969, *Electrical apparatus for explosive gas atmospheres — Part 7: Construction and test of electrical apparatus, type of protection "e".*²⁾

IEC 79-10:1986, *Electrical apparatus for explosive gas atmospheres — Part 10: Classification of hazardous areas.*²⁾

IEC 79-11:1984, *Electrical apparatus for explosive gas atmospheres — Part 11: Construction and test of intrinsically-safe and associated apparatus.*²⁾

IEC 79-12:1978, *Electrical apparatus for explosive gas atmospheres — Part 12: Classification of mixtures of gases or vapours with air according to their maximum experimental safe gaps and minimum igniting currents.*²⁾

1) Reference for level gauges in ship's tanks.

2) Reference for level gauges in shore tanks.