



**ISO 19880-5**

**Gaseous hydrogen — Fuelling stations —**

Part 5:  
**Dispenser hoses and hose assemblies**

*Carburant d'hydrogène gazeux — Stations de ravitaillement —  
Partie 5: Flexibles et assemblages flexibles pour distributeurs*

**Second edition  
2025-07**

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This document was prepared by ISO/TC 197, *Hydrogen technologies*.

This second edition cancels and replaces the first edition (ISO 19880-5:2019), which has been technically revised.

The main changes are as follows:

- [subclause 7.2.3](#) revised test gas and pass/fail criteria;
- [subclause 7.7.2](#) revised to add temperature tolerance;
- editorial changes.

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This document specifies the implementation of performance-based testing for components of dispensing systems and fuelling stations that are based on proven engineering principles, research and the combined expertise of gas utilities, fuel providers, manufacturers, users, and others having specialized experience.

The successful commercialization of hydrogen vehicle technologies requires codes and standards pertaining to fuelling stations, vehicle fuel system components, and the global homologation of standards requirements for technologies with the same end use. Essentially this will allow manufacturers to achieve economies of scale by producing one product for use globally.

International harmonization contributes to reducing technical barriers and stimulates related markets. A series of documents that address hydrogen-fuelled vehicles and fuelling stations is being developed. These documents will provide internationally homologized minimum safety performance criteria at the component level, thus providing a foundation to build a safe “fuelling system”.

This document is based on ANSI/CSA HGV 4.2-2022.

This document was developed based on five pressure classes of wire or textile reinforced hoses and hose assemblies suitable for use with gaseous hydrogen for hydrogen dispensing. This is based on technologies in use at the time of the development of the requirements.

In the future, other types and classes of hoses and hose assemblies will need to be evaluated to determine the suitability of requirements in this document.

This document applies to newly manufactured hoses and hose assemblies for connecting a dispenser to a high-pressure fuelling nozzle.

A nozzle vent hose is included in this document; however; the pressure rating may be lower than the nozzle rating, based on the nozzle and dispenser design.

For general hydrogen safety information, see ISO/TR 15916.