

**DIN SAE 70063**

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**Straßenfahrzeuge –
Nachfüllschnittstelle für Einspritzwasser;
Text Englisch**

Road vehicles –
Refilling interface for injection water;
Text in English

Voiture routière –
Interface de remplissage pour injection d'eau;
Texte en anglais

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Foreword

This document has been prepared by Working Group NA 052-00-34-52 AK “Water injection” of the DIN-Normenausschuss Automobiltechnik (NAAutomobil, DIN Standards Committee Automotive Engineering) in collaboration with SAE International.

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Introduction

Injection water can improve the combustion engine efficiency. The fluid is injected into the engine instead of enrichment of fuels at higher loads and revolutions to reduce CO₂ emissions of gasoline engines.

The ISO 22241 series was used for orientation to define the refilling interface for the customer.

The refilling system specified in this document has been developed by several industry stakeholders, including passenger vehicle manufacturers. The functional requirements describe a filling system that has minimal spill risk, limits pressure build-up and includes mismatch prevention.

1 Scope

This document specifies the essential functional and geometric requirements of the on-board refilling interface for injection water according to ISO 31120-1 in order to ensure compatibility between the on-board refilling system and the off-board refilling system. This includes requirements and recommendations for the design of the off-board refilling system and other on-board refilling interfaces (e.g. for gasoline).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2768-1:1989, *General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 31120-1:2022, *Road vehicles — injection water — Part 1: Quality requirements*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

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- DIN-TERMinologieportal: available at <https://www.din.de/go/din-term>
- DKE-IEV: available at <http://www.dke.de/DKE-IEV>

3.1

buttress thread

thread with an asymmetrical ridge that has one straight and one angled flank

3.2

canister

bottle, container, plastic bags with cardboard box, etc., used to refill the on-board tank of the vehicle

3.3

filler cap

part which is fitted to the *filler neck* (3.4) to prevent spillage as well as to minimize contamination of injection water and which is temporarily removed for refilling

3.4

filler neck

filler head

interfacing part of the *on-board refilling system* (3.8)