SVENSK STANDARD
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SWEDISH STANDARDS INSTITUTE

Vägfordon – Koppling för påfyllning av blandade bränslen (ISO 16380:2014, including Amd 1:2016)

Road vehicles – Blended fuels refuelling connector (ISO 16380:2014, including Amd 1:2016)

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Europastandarden EN ISO 16380:2018 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 16380:2018.

The European Standard EN ISO 16380:2018 has the status of a Swedish Standard. This document contains the official version of EN ISO 16380:2018.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Planeringsgruppen för SIS bilstandardisering, SIS/TK 213.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 16380

June 2018

ICS 75.200

English Version

Road vehicles - Blended fuels refuelling connector (ISO 16380:2014, including Amd 1:2016)

Véhicules routiers - Pistolet de remplissage pour les mélanges de carburants gazeux (ISO 16380:2014, y compris Amd 1:2016)

Straßenfahrzeuge - Betankungsanschluss für Mischkraftstoffe (ISO 16380:2014, einschließlich Amd 1:2016)

This European Standard was approved by CEN on 2 February 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 16380:2018: E

Contents

Page

European foreword

The text of ISO 16380:2014, including Amd 1:2016 has been prepared by Technical Committee ISO/TC 22 “Road vehicles” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 16380:2018 by Technical Committee CEN/TC 301 “Road vehicles” the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16380:2014, including Amd 1:2016 has been approved by CEN as EN ISO 16380:2018 without any modification.

Introduction

A nozzle certified to this International Standard will be functionally compatible from a safety and performance perspective with all listed receptacles of compatible profile and system pressure. Similarly, a receptacle certified to this International Standard will be functionally compatible from a safety and performance perspective with all listed nozzles of compatible profile and system pressure.

As there can eventually be many different kinds of nozzles and receptacles available from a variety of manufacturers which, for safety reasons, shall all be compatible with each other, this International Standard specifies a series of receptacle profiles. These standard profiles incorporate the design specifications (mating materials, geometry, and tolerances) which can be considered in the certification of a submitted nozzle or receptacle.

The construction and performance of nozzles and receptacles are based on the observation that four main parameters affect user safety and system compatibility.

Road vehicles — Blended fuels refuelling connector

1 Scope

This International Standard applies to compressed blended fuels vehicle nozzles and receptacles hereinafter referred to as devices, constructed entirely of new, unused parts and materials. Compressed blended fuels fuelling connection nozzles consist of the following components, as applicable:

a) Receptacle and protective cap (mounted on vehicle) (see Clause 7);

b) Nozzle (mounted on dispenser side) (see Clause 5).

This International Standard applies to devices which have a service pressure of 20 MPa, 25 MPa, and 35 MPa hereinafter referred to in this International Standard as [see 9.1 c)]:

— size 1: M200, M250, and M350;

— size 2: N200 and N250.

This International Standard refers to service pressures of 20 MPa, 25 MPa, and 35 MPa for size 1 and 20 MPa and 25 MPa for size 2.

This International Standard applies to devices with standardised mating components (see 5.8 and 7.7).

This International Standard applies to connectors which

a) prevent blended fuels vehicles from being fuelled by dispenser stations with working pressures higher than the vehicle fuel system working pressure,

b) allow blended fuels vehicles to be fuelled by dispenser stations with working pressures equal to or lower than the vehicle fuel system working pressure,

c) allow blended fuels vehicles to be fuelled by dispenser stations for compressed natural gas,

d) allow blended fuels vehicles to be fuelled by compressed natural gas dispenser stations with working pressures equal to or lower than the vehicle fuel system working pressure,

e) prevent blended fuels vehicles size 1 being refuelled on blended fuels dispenser stations equipped with a size 2 nozzle and vice versa,

f) prevent natural gas vehicles from being fuelled by blended fuels station, and dispensers, and

g) prevent pure hydrogen vehicles from being fuelled by blended fuels station dispensers.

This International Standard is applicable to mixtures of hydrogen from 2 % to 30 % in volume and compressed natural gas containing:

a) natural gas in accordance with ISO 15403-1 and ISO 15403-2;

b) pure hydrogen in accordance with ISO 14687-1 or ISO/TS 14687-2.

All references to pressures (MPa) throughout this International Standard are to be considered gauge pressures unless otherwise specified.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.