PUBLICATIONS

Les publications du mois de juillet et août

VEHICULES ROUTIERS
VEHICULES ROUTIERS – INTERNATIONAL – BNA-TC-22
ISO 2958:2024 (Publiée le 22/07/2024) ISO/TC 22/WG 18 Véhicules routiers — Protection extérieure des voitures particulières **Scope** This document specifies the requirements and test methods for exterior protection for passenger cars. This document applies to passenger cars. The aim is to provide protection at the front and rear of the vehicle, of certain mechanical elements and, above all, for lighting, signals, charging ports and sensors (arranged at the front and rear of the vehicle and including but not limited to those used for automatic driving system, e.g. LiDAR, radar, camera) in cases of collision at low speed. Exterior protection is assured by protective devices, which are elements located at the front and rear ends of vehicles and designed in such a way as to allow contacts and small shocks to occur without causing any serious damage.
COMPOSANTS ELECTRIQUE ET ELECTRONIQUES ET SYSTEME GENERAL - BNA-CN-32
ISO 24089:2023/Amd 1:2024 (Publiée le 24/07/2024) ISO/TC 22/SC 32/WG 12 Véhicules routiers — Ingénierie de mise à jour du logiciel — Amendement 1
ISO 6518-2 :2024 (Publiée le 05/08/2024) ISO/TC 22/SC 32 WG1 Véhicules routiers — Systèmes d'allumage — Partie 2: Performances électriques et méthodes d'essai de fonctionnement **Scope** This document specifies the design and/or evaluation with the specific equipment, conditions and methods for distributorless battery ignition systems intended for use in various internal combustion engines including automotive, marine, motorcycle and utility engine applications. The test procedures listed in this document are limited to measurements performed on a test bench only and do not include

measurements made directly on engines or vehicles. This document is not intended to supply information for battery ignition systems used in aircraft applications of any type.

PROPULSION, GROUPE MOTOPROPULSEUR ET FLUIDES ASSOCIES - BNA-CN-34

ISO 6626-2 :2024 (Publiée le 01/07/2024)

ISO/TC 22/SC 34/WG 4

Moteurs à combustion interne — Segments de piston — Partie 2: Segments racleurs régulateurs d'huile étroits, en fonte, mis en charge par ressort hélicoïdal

Scope

This document specifies the essential dimensional features of coil-spring loaded oil control rings made of cast iron, types DSF-C, SSF, GSF, DSF, SSF-L, DSF-NG and DSF-CNP. It is applicable to those piston rings in sizes 60 mm up to 160 mm, inclusive for reciprocating internal combustion engines for road vehicles and other applications.

ISO 6626-1:2024 (Publiée le 22/07/2024)

ISO/TC 22/SC 34/WG 4

Moteurs à combustion interne — Segments de piston — Partie 1: Anneaux de contrôle de l'huile à ressort hélicoïdal en fonte

Scope

This document specifies the essential dimensional features of coil-spring loaded oil control rings made of cast iron, types DSF-C, DSF-CNP, SSF, GSF, DSF, DSF-NG and SSF-L. It is applicable to piston rings in sizes from 60 mm up to and including 200 mm for reciprocating internal combustion engines for road vehicles and other applications.

ISO 7299-1:2024 (Publiée le 22/07/2024)

ISO/TC 22/SC 34/WG 2

Moteurs diesels — Brides de montage des pompes — Partie 1: Pompes d'injection de carburant

Scope

This document specifies dimensional requirements for nine types of end-mounting flanges for fuel injection pumps (rotary, distributor and in-line fuel injection pumps) for use in diesel (compression-ignition) engines.

ISO 13948-2:2024 (Publiée le 16/08/2024)

ISO/TC 22/SC 34/WG 2

Moteurs diesels — Raccords basse pression pour pompes d'injection de combustible et porte-injecteurs de combustible complets — Partie 2: Raccords non filetés (à pression)

Scope

This document specifies requirements for the connection ends of push-on connections used with fuel injection equipment.

Three types of push-on connections (types A, B and C) are described in this document.

Pour rappel, les publications depuis janvier 2024

VEHICULES ROUTIERS
COMMUNICATION DE DONNEES - BNA-CN-31
ISO 11898-2:2024 (Publiée le 22/03/2024) ISO/TC 22/SC 31/WG3 Véhicules routiers — Gestionnaire de réseau de communication (CAN) — Partie 2: Sous-couche de l'unité d'accès au support à haute vitesse (PMA) **Scope** This document specifies physical medium attachment (PMA) sublayers for the controller area network (CAN). This includes the high-speed (HS) PMA without and with low-power mode capability, without and with selective wake-up functionality. Additionally, this document specifies PMAs supporting the signal improvement capability (SIC) mode and the FAST mode in Annex A. The physical medium dependent (PMD) sublayer is not in the scope of this document.
ISO 15765-2:2024 (Publiée le 05/04/2024) ISO/TC 22/SC 31/WG2 Véhicules routiers — Communication de diagnostic sur gestionnaire de réseau de communication (DoCAN) — Partie 2: Protocole de transport et services de la couche réseau **Scope** This document specifies a transport and network layer protocol with transport and network layer services tailored to meet the requirements of CAN-based vehicle network systems on controller area networks as specified in ISO 11898-1. The diagnostic communication over controller area network (DoCAN) protocol supports the standardized abstract service primitive interface as specified in ISO 14229-2 (UDS). This document supports different application layer protocols such as: — enhanced vehicle diagnostics (emissions-related system diagnostics beyond legislated functionality, non-emissions-related system diagnostics); — emissions-related on-board diagnostics (OBD) as specified in the ISO 15031 series and SAE J1979 series; — world-wide harmonized on-board diagnostics (WWH-OBD) as specified in the ISO 27145 series; and — end of life activation of on-board pyrotechnic devices (the ISO 26021 series). The transport protocol specifies an unconfirmed communication. NOTE This document does not determine whether CAN CC, CAN FD or both are recommended or required to be implemented by other standards referencing this document.
ISO 11898-1:2024 (Publiée le 24/05/2024) ISO/TC 22/SC 31/WG 3 Véhicules routiers — Gestionnaire de réseau de communication (CAN) — Partie 1: Couche liaison de données et sous-couche de codage physique

Scope

This document specifies the controller area network (CAN) data link layer (DLL) and the physical coding sub-layer (PCS). The CAN DLL features data fields of up to 2048 byte when the CAN extended data field length (XL) frame format is used.

This document divides the CAN DLL into the logical link control (LLC) and the medium access control (MAC) sub-layers. The DLL's service data unit (SDU), which interfaces the LLC and the MAC, is implemented by means of the LLC frame. The LLC frame also features the service data unit type (SDT) and the virtual CAN channel identifier (VCID), which provide higher-layer protocol configuration and identification information. How the higher-layer functions are handled is not specified in this document. There are five implementation options:

1) support of the CAN classic frame format only, not tolerating the CAN flexible data rate (FD) frame format;

2) support of the CAN classic frame format and tolerating the CAN FD frame format;

3) support of the CAN classic frame format and the CAN FD frame format;

4) support of the CAN classic frame format, the CAN FD frame format and the CAN XL frame format;

5) support of the CAN FD frame format for CAN FD light responders (Annex A).

NOTE Nodes of the first option can communicate with nodes of the third and fourth option when only the CAN classic frame format is used. Nodes of the first option cannot communicate with nodes of the fifth option: any attempt at communication generates error frames. Therefore, new designs implementing the fourth option can communicate with all other nodes.

COMPOSANTS ELECTRIQUES ET ELECTRONIQUES ET ASPECT SYSTEME GENERAL - BNA-CN-32

ISO/PAS 8926 :2024 (Publiée le 29/01/2024)

ISO/TC 22/SC 32/WG8

Véhicules routiers — Sécurité fonctionnelle — Utilisation d'éléments d'architecture logicielle préexistants

Scope

This document describes a framework for functional safety to enable the use of pre-existing software architectural elements not originally developed in accordance with the ISO 26262:2018 series, but intended to be integrated into safety-related embedded software conformant with the ISO 26262:2018 series by:

— determining relevant criteria when using the pre-existing software architectural element as a safety-related element of safety-related embedded software;

— determining relevant criteria inherent to the pre-existing software architectural element, e.g. needs for external safety mechanisms to detect and control failures caused by the pre-existing software architectural element;

— providing suitable evidence and arguments for use of the pre-existing software architectural element that can include applicable procedures, techniques and safety measures;

— supporting the fulfilment of software safety requirements when using the pre-existing software architectural element as a safety-related element of safety-related embedded software;

— supporting the integration of the pre-existing software architectural element as a safety-related element of safety-related embedded software.

ISO 11452-3:2024 (Publiée le 28/05/2024)

ISO/TC 22/SC 32/WG 3

Véhicules routiers — Méthodes d'essai d'un équipement soumis à des perturbations électriques par rayonnement d'énergie électromagnétique en bande étroite — Partie 3: Cellule électromagnétique transverse (TEM)

Scope

This document specifies transverse electromagnetic (TEM) cell tests for determining the immunity of electronic components of passenger cars and commercial vehicles to electrical disturbances from narrowband radiated electromagnetic energy, regardless of the vehicle propulsion system (e.g. spark-ignition engine, diesel engine, electric motor).

The electromagnetic disturbances considered are limited to continuous narrowband electromagnetic fields.

ISO 11451-3:2024 (Publiée le 11/06/2024)

ISO/TC 22/SC 32/WG 3

Véhicules routiers — Méthodes d'essai d'un véhicule soumis à des perturbations électriques par rayonnement d'énergie électromagnétique en bande étroite — Partie 3: Simulation des émetteurs embarqués

Scope

This document specifies methods for testing the immunity of passenger cars and commercial vehicles to electromagnetic disturbances from on-board transmitters connected to an external antenna and portable transmitters with integral antennas, regardless of the vehicle propulsion system (e.g. spark ignition engine, diesel engine, electric motor).

ISO 11565:2024 (Publiée le 11/06/2023)

ISO/TC 22/SC 32/WG 1

Véhicules routiers — Bougies d'allumage — Méthodes d'essai et exigences

Scope

This document specifies the test methods and requirements for the mechanical and electrical performance of spark-plugs for use with spark ignition engines.

DYNAMIQUE DES VEHICULES ET COMPOSANTS DE CHASSIS - BNA-CN-33

ISO 34504:2024 (Publiée le 09/02/2024)

ISO/TC 22/SC 33/WG9

Véhicules routiers — Scénarios d'essai pour les systèmes de conduite automatisée — Catégorisation des scénarios

Scope

This document defines an approach for the categorization of scenarios by providing tags that carry information about the scenarios.

This document is applicable to SAE level 3 to SAE level 5 Automated Driving System (ADS)[19]

ISO 23373:2024 (Publiée le 01/05/2024)

ISO/TC 22/SC 33/WG 6

Véhicules utilitaires lourds et bus — Simulation et validation de la dynamique du véhicule — Modèle de pneu pour l'estimation latérale des combinaisons de véhicules lourds exploités sur une surface de route pavée sèche

Scope

This document specifies a generic tyre model and model parameters for calculating lateral tyre forces, for use in lateral stability simulations of heavy commercial vehicle combinations with test cases according to ISO 14791. This tyre model is parameterized by easily understandable characteristics which can be estimated from tyre measurement data. If tyre data is not available, the parameters proposed in this document can be used.

One typical application area of this document is the comparing and ranking of various vehicle combination configurations with respect to on-road lateral and roll stability. Such an assessment is usually performed at close to constant speed levels typical for public roads, usually higher than 40 km/h. The tyre model, however, can be useful for both high- and low-speed manoeuvring.

This tyre model is relevant for representing the lateral performance of tyres on a vehicle combination when the longitudinal forces are insignificant, typically less than 10 % of the peak longitudinal friction utilization. The tyre model can be used for normal forces ranging from zero to twice the nominal normal force of the tyre. This tyre model has been developed for moderate lateral slip conditions; it is important that the model is used with care for scenarios where tyre slip angle exceeds 15°.

This tyre model is suitable for vehicle models operating in the yaw and roll plane which naturally include vertical load transfer between the wheels during manoeuvring. The tyre model can also be used in models with less complexity such as pure yaw plane models.

This document applies to heavy vehicles, including commercial vehicles, commercial vehicle combinations, buses and articulated buses as defined in ISO 3833 (trucks and trailers with a maximum weight above 3,5 tonnes and buses and articulated buses with a maximum weight above 5 tonnes, according to ECE and EC vehicle classification, categories M3, N2, N3, O3 and O4).

PROPULSION, GROUPE MOTOPROPULSEUR ET FLUIDES ASSOCIES - BNA-CN-34

ISO 6621-4:2024 (Publiée le 01/05/2024)

ISO/TC 22/SC 34/WG4

Moteurs à combustion interne — Segments de piston — Partie 4: Spécifications générales

Scope

This document specifies the general characteristics of piston rings for reciprocating internal combustion engines for road vehicles and other applications (the individual dimensional criteria for these rings are given in the relevant International Standards). It also provides a system for ring coding, designation, and marking. It is applicable to all such rings of a nominal diameter from 30 mm up to and including 200 mm.

ECLAIRAGE ET VISIBILITE - BNA-CN-35

ISO/TS 18571:2024 (Publiée le 15/05/2024)

ISO/TC 22/SC 36

Véhicules routiers — Mesures pour l'évaluation objective de signaux non ambigus

Scope

This document provides validation metrics and rating procedures to calculate the level of correlation between two non-ambiguous signals obtained from a physical test and a computational model and it is aimed at vehicle safety applications. The objective comparison of time-history signals of model and test is validated against various loading cases under different types of physical loads such as forces,

moments and accelerations. However, other applications can be possible too, but are not within the scope of this document.

NOTE Annex A gives some examples of the application of this document.

SECURITE ET ESSAIS DE COLLISION – BNA-CN-36

VEHICULES A PROPULSION ELECTRIQUE- BNA-CN-37

ISO/TS 5474-5:2024 (Publiée le 31/01/2024)

ISO/TC 22/SC 37

Véhicules routiers à propulsion électrique — Exigences fonctionnelles et de sécurité pour le transfert de puissance entre le véhicule et le circuit électrique externe — Partie 5: Transfert de puissance automatique par conduction

Scope

This document defines requirements for the onboard system (vehicle side) related to the automatic connection for conductive alternating current (AC) and/or direct current (DC) power transfer between electrically propelled road vehicles (EVs) and external electric circuits. This document addresses the following aspects:

— electrical and mechanical safety requirements;

— compatibility requirements;

— environmental conditions;

— functionality requirements;

— test procedures.

This document applies to:

— EVs supporting automatic connection of a vehicle inlet according to IEC 62196-2, IEC 62196-3, IEC TS 62196-3-1 or IEC TS 63379 (category 1) and

— EVs supporting automatic connection of a category 3 vehicle inlet or category 3 plug (typically at the underbody of the vehicle) according to IEC TS 61851-26.

NOTE 1 IEC TS 61851-26 does not include automatic connection of vehicle inlets or plugs of category 1 and category 2, that can also be mounted at the underbody of the vehicle.

Requirements for EVs equipped with an ACD or ACD counterpart of category 2 are specified in EN 50696 and IEC 63407.

Requirements for simultaneous operation of multiple power transfer interfaces are under consideration and not covered in this document.

NOTE 2 Requirements for ACD infrastructure, communication sequence and communication interface are specified in IEC 61851-23-1, IEC TS 61851-26 and IEC TS 61851-27.

NOTE 3 EMC requirements for vehicles conductively connected to the supply network are defined in IEC 61851-21-1.

ISO 5474-1:2024 (Publiée le 07/06/2024)

ISO/TC 22/SC 37

Véhicules routiers à propulsion électrique — Exigences fonctionnelles et exigences de sécurité pour le transfert de puissance entre le véhicule et le circuit électrique externe — Partie 1: Exigences générales pour le transfert de puissance par conduction

Scope

This document specifies general requirements for conductive power transfer with a voltage up to 1 000 V a.c. (alternative current) and up to 1 500 V d.c. (direct current) between electrically propelled road vehicles and external electric circuits.

This document provides general requirements for conductive charging in modes 2, 3 and 4 according to IEC 61851-1, and for reverse power transfer. This document does not provide requirements for mode 1. For mode 4, this document provides requirements regarding the power transfer only with isolated DC EV supply equipment according to IEC 61851-23.

NOTE External electric circuits are not part of the vehicle.

This document applies to the vehicle power supply circuits.

This document does not provide;

— requirements for simultaneous operation of multiple EV plugs or vehicle inlets, and

— requirements for power transfer while driving (electric road systems),

but they are under consideration.

This document does not provide:

— requirements for mopeds and motorcycles (which are specified in ISO 18246), and

— comprehensive safety information for manufacturing, maintenance and repair personnel.

ISO 5474-2:2024 (Publiée le 07/06/2024)

ISO/TC 22/SC 37/WG 5

Véhicules routiers à propulsion électrique — Exigences fonctionnelles et exigences de sécurité pour le transfert de puissance entre le véhicule et le circuit électrique externe — Partie 2: Transfert de puissance AC

Scope

This document in combination with ISO 5474-1 specifies requirements for conductive power transfer using alternating current (AC) with a voltage up to 1 000 V a.c. between electrically-propelled road vehicles and external electric circuits.

NOTE External electric circuits are not part of the vehicle.

This document provides requirements for conductive charging in modes 2, 3 according to IEC 61851-1 and reverse power transfer.

This document applies to vehicle power supply circuits. Examples of circuit diagrams for different configurations of chargers on-board electric vehicles are shown in Annex A.

This document also provides requirements for reverse power transfer through on-board standard socket-outlets and/or a EV plug or vehicle inlet according to IEC 62196-1 or IEC 62196-2 conductively connected to the vehicle power supply circuit. Requirements for AC power transfer using a charger without at least simple separation are under consideration.

This document does not provide:

— requirements for simultaneous operation of multiple EV plugs or vehicle inlets and

— requirements for power transfer while driving (electric road systems)

but they are under consideration.

This document does not provide:

— requirements for mopeds and motorcycles (which are specified in ISO 18246);

— comprehensive safety information for manufacturing, maintenance and repair personnel;

— requirements for vehicle to load adapters.

ISO 5474-3:2024 (Publiée le 07/06/2024)

ISO/TC 22/SC 37/WG5

Véhicules routiers à propulsion électrique — Exigences fonctionnelles et exigences de sécurité pour le transfert de puissance entre le véhicule et le circuit électrique externe — Partie 3: Transfert de puissance DC

Scope

This document in combination with ISO 5474-1 specifies requirements for conductive power transfer using direct current (DC) with a voltage up to 1 500 V d.c. between electrically propelled road vehicles and external electric circuits.

This document provides requirements for conductive charging in mode 4 according to IEC 61851-1. For mode 4, this document provides requirements regarding the power transfer only with isolated DC EV supply equipment according to IEC 61851-23.

The requirements in this document are applicable to vehicle power supply circuits.

An outlook of requirements for megawatt charging applications is given in Annex B.

This document does not provide:

— requirements for simultaneous operation of multiple power transfer interfaces and

— requirements for power transfer while driving (electric road systems)

but they are under consideration.

This document does not provide:

— requirements for mopeds and motorcycles (which are specified in ISO 18246);

— comprehensive safety information for manufacturing, maintenance and repair personnel.

MOTOCYCLES ET CYCLOMOTEURS - BNA-CN-38

ERGONOMIE – BNA-CN-39

ISO 2575:2021/Amd 1:2024 (Publiée le 12/06/2024)

ISO/TC 22/SC 39/WG5

Véhicules routiers — Symboles pour les commandes, indicateurs et témoins — Amendement 1

ASPECTS SPECIFIQUES DES VEHICULES COMMERCIAUX, AUTOBUS ET REMORQUES - BNA-CN-40

ASPECTS SPECIFIQUES DES COMBUSTIBLES GAZEUX – BNA-CN-41

ISO 5216:2024 (Publiée le 09/04/2024)

ISO/TC 22/SC 40/WG 1

Véhicules routiers utilitaires — Plateau tournant à roulement à billes — Interchangeabilité

Scope

This document specifies dimensions of ball-bearing turntable when mounted on a vehicle which is part of vehicle combinations specified in of ISO 18868:2013, Clause 4, to ensure their interchangeability.

This document also applies to the following:

— drawbar trailers using a ball-bearing turntable to steer the front axle;

— ball-bearing turntables assembled with the fifth-wheel of the road tractor (truck) to improve steering manoeuvre.

ISO 22760-3:2024 (Publiéé le 17/05/2024)

ISO/TC 22/SC 41/WG 8

Véhicules routiers — Composants des systèmes de combustible Diméthyle Ether (DME) — Partie 3: Valve de réservoir 85%

Scope

This document specifies definitions of and general requirements to the 85 % stop valve, intended for use on the types of motor vehicles defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles using gaseous fuels in accordance with ISO 16861. It is not applicable to the following:

a) fuel containers, except to the extent explicitly referred to in this document;

b) stationary, ship, railroad vehicle or aircraft dimethyl ether (DME) engine installations;

c) electronic fuel management;

d) refuelling receptacles.

NOTE 1 It is recognized that miscellaneous component properties not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 22760 series, including subjecting the component to the appropriate functional tests.

NOTE 2 All pressures referred to in this document are gauge pressures unless otherwise specified.

ISO 22760-4:2024 (Publiée le 17/05/2024)

ISO/TC 22/SC 41/WG 8

Véhicules routiers — Composants des systèmes de combustible Diméthyle Ether (DME) — Partie 4: Indicateur de niveau

Scope

This document specifies definitions of and general requirements to level indicators, intended for use on the types of motor vehicles defined in ISO 3833. It also provides general design principles, and specifies requirements for instructions and marking.

This document is applicable to vehicles using gaseous fuels in accordance with ISO 16861. It is not applicable to the following:

a) fuel containers, except to the extent explicitly referred to in this document;

b) stationary, ship, railroad vehicle or aircraft dimethyl ether (DME) engine installations;

c) electronic fuel management;

d) refuelling receptacles.

NOTE 1 It is recognized that miscellaneous component properties not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 22760 series, including subjecting the component to the appropriate functional tests.

NOTE 2 All pressures referred to in this document are gauge pressures unless otherwise specified.

ISO 22760-6:2024 (Publiée le 17/05/2024)

ISO/TC 22/SC 41/WG 8

Véhicules routiers — Composants des systèmes de combustible Diméthyle Ether (DME) — Partie 6: vannes de contrôle de la surpression

Scope

This document specifies definitions of and general requirements to a pressure relief valve for limiting internal pressure of dimethyl ether (DME) fuel containers intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles using gaseous fuels in accordance with ISO 16861. It is not applicable to the following:

a) fuel containers for any application other than as noted above;

b) stationary, ship, railroad vehicle or aircraft DME engine installations;

c) fuel container mounting hardware;

d) parts of vehicle fuel systems other than the fuel container;

e) electronic fuel management;

f) refuelling receptacles.

NOTE 1 It is recognized that miscellaneous component properties not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 22760 series, including subjecting the component to appropriate functional tests.

NOTE 2 All pressures referred to in this document are gauge pressures unless otherwise specified.

ISO 22760-9:2024 (Publiée le 17/05/2024)

ISO/TC 22/SC 41/WG 8

Véhicules routiers — Composants des systèmes de combustible Diméthyle Ether (DME) — Partie 9: Dispositif de limitation de pression

Scope

This document specifies definitions of and general requirements to a pressure relief device for limiting internal pressure of dimethyl (DME) fuel containers intended for use on the types of motor vehicles as defined in ISO 3833. It also provides general design principles and specifies requirements for instructions and marking.

This document is applicable to vehicles using gaseous fuels in accordance with ISO 16861. It is not applicable to the following:

a) fuel containers for any application other than as noted above;

b) stationary, ship, railroad vehicle or aircraft DME engine installations;

c) fuel container mounting hardware;

d) electronic fuel management.

NOTE 1 It is recognized that miscellaneous component properties not specifically addressed herein can be examined for compliance with the criteria of any applicable part of the ISO 20760 series, including subjecting the component to appropriate functional tests.

NOTE 2 All pressures referred to in this document are gauge pressures unless otherwise specified.

ISO 24605:2024 (Publiée le 12/06/2024)

ISO/TC 22/SC 41/WG8

Véhicules routiers — Connecteur de ravitaillement en éther diméthylique (DME) avec orifice d'égalisation de pression

Scope

This document applies only to dimethyl-ether refuelling connectors with a pressure-equalizing port, hereinafter referred to as devices, constructed entirely of new, unused parts and materials. Dimethyl-ether refuelling connectors with a pressure-equalizing port consist of the following components, as applicable:

a) nozzle with a pressure-equalizing port,

The refuelling nozzle and pressure-equalizing port are integrated so that the connecting of the refuelling path and pressure-equalizing path is performed with a single action (mounted on the dispenser side) (see Clause 5).

b) receptacle with a pressure-equalizing port (mounted on vehicle) (see Clause 7).

This document applies to devices which use dimethyl ether as fuel, hereinafter referred to in this document as M15 [see 9.2 c)]:

This document applies to devices with standardised mating components.

This document applies to connectors which prevent dimethyl-ether vehicles from being fuelled by fuel-station dispensers for other gaseous fuels.

This document is applicable to dimethyl ether in accordance with ISO 16861.

All references to pressures (kPa) throughout this document are considered gauge pressures unless otherwise specified.

ISO 24671:2024 (Publiée le 13/06/2024)

ISO/TC 22/C 41/WG 9

Véhicules routiers — Qualification et certification du personnel technique chargé des véhicules au gaz naturel

Scope

This document specifies requirements for the qualification and certification of personnel who perform operations on NGVs, according to the level of safety required by the role and/or position.

NOTE 1 The certification is required for the level 3 and 4 of competence as defined in ISO 23684.

NOTE 2 This document specifies requirements for what are, in effect, third-party conformity assessment schemes. These requirements do not directly apply to conformity assessment by second or first parties, but relevant parts of this document can be referred to in such arrangements.

ISO 24605:2024 (Publiée le 12/06/2024)

ISO/TC 22/SC 41/WG8

Véhicules routiers — Connecteur de ravitaillement en éther diméthylique (DME) avec orifice d'égalisation de pression

Scope

This document applies only to dimethyl-ether refuelling connectors with a pressure-equalizing port, hereinafter referred to as devices, constructed entirely of new, unused parts and materials. Dimethyl-ether refuelling connectors with a pressure-equalizing port consist of the following components, as applicable:

a) nozzle with a pressure-equalizing port,

The refuelling nozzle and pressure-equalizing port are integrated so that the connecting of the refuelling path and pressure-equalizing path is performed with a single action (mounted on the dispenser side) (see Clause 5).

b) receptacle with a pressure-equalizing port (mounted on vehicle) (see Clause 7).

This document applies to devices which use dimethyl ether as fuel, hereinafter referred to in this document as M15 [see 9.2 c)]:

This document applies to devices with standardised mating components. This document applies to connectors which prevent dimethyl-ether vehicles from being fuelled by fuel-station dispensers for other gaseous fuels. This document is applicable to dimethyl ether in accordance with ISO 16861. All references to pressures (kPa) throughout this document are considered gauge pressures unless otherwise specified.
SYSTEMES D'AIDE A LA CONDUITE ROUTIERE – BNA-CN-ADAS (ISO/TC 204/WG 14)
CYCLES – BNA-CN-333 (ISO/TC 149 et SC 1, CEN/TC 333)