

DIN EN 1789



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Supersedes
DIN EN 1789:2014-12
See start of application

**Medical vehicles and their equipment –
Road ambulances;
English version EN 1789:2020,
English translation of DIN EN 1789:2020-12**

Rettungsdienstfahrzeuge und deren Ausrüstung –
Krankenkraftwagen;
Englische Fassung EN 1789:2020,
Englische Übersetzung von DIN EN 1789:2020-12

Véhicules de transport sanitaire et leurs équipements –
Ambulances routières;
Version anglaise EN 1789:2020,
Traduction anglaise de DIN EN 1789:2020-12

Document comprises 64 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

Start of application

The start of application of this standard is 2020-12-01.

The standard which this document replaces, DIN EN 1789:2014-12, may be used in parallel with this standard during a specified transition period where such has been laid down in the Official Journal of the European Union and/or the *Bundesanzeiger* (German Federal Gazette).

A transition period of a maximum of 18 months has been specified by Technical Committee CEN/TC 239 "Rescue systems" in order to give different organizational structures, which are responsible for the transportation of patients, sufficient time for the technical implementation. At the time of publication of this standard, the date of cessation of presumption of conformity of the superseded standard has not yet been specified in the Official Journal of the European Union and/or the *Bundesanzeiger*. Users of this standard should compare the date in the Official Journal of the European Union and/or the *Bundesanzeiger* with the transition period specified by CEN/TC 239. The decisive factor is the information given in the Official Journal of the European Union and/or the *Bundesanzeiger*.

National foreword

This document (EN 1789:2020) has been prepared by Technical Committee CEN/TC 239 “Rescue systems” (Secretariat: DIN, Germany).

The responsible German body involved in its preparation was *DIN-Normenausschuss Rettungsdienst und Krankenhaus* (DIN Standards Committee Rescue Services and Hospital), Working Committee NA 053-01-02 AA “Ambulances and their medical and technical equipment”.

This document represents the consensus developed for a minimum standard for road ambulances at European level. Depending on regional requirements, additional equipment may be necessary.

In Germany, road ambulances shall comply with the state of the art specified in the national ambulance service legislation and DGUV Regulation 70 (Vehicles).

Road ambulances are working equipment. According to § 5 (1) of the *Betriebssicherheitsverordnung* (BetrSichV – German Ordinance on industrial safety and health), the employer shall provide and allow the use of only those working appliances which are safe to use considering the operating conditions laid down.

For the assessment of occupational safety, the following employment protection provisions and individual risk assessments of the employer in particular apply:

- 1) ASR A 1.5/1,2 (floors);
- 2) DGUV Information 208-005 (stairs);
- 3) DGUV Information 208-007 (gratings);
- 4) DGUV Information 208-041 BGI/GUV-I 8687 (risk of slipping);
- 5) *Lastenhandhabungsverordnung* (LasthandhabV – Load Handling Regulation).

NOTE The provisions and regulations given under 1) to 4) serve orientation purposes only, as they are intended for buildings.

Power-assisted loading systems which allow an ergonomic loading and unloading of patients are newly listed in the standard as state of the art (see 4.3.6). This should be deviated from in exceptional cases only if the employer is able to do so on the basis of a risk assessment.

The equipment items marked with “1” or “X” in the tables of subclause 6.4 shall all be generally existent for the patient’s care. They may be omitted in exceptional cases only if, for example, their availability in the total operating system – for example through the loading of the emergency operational vehicle provided for the patient’s care – can be ensured on site. The most unfavourable regular scenario is to be considered in any case.

The choice of the Personal Protective Equipment (PPE) arises from national provisions such as DGUV Regulation 1 (basics of prevention), of DGUV Rule 105-003 (use of PPE in rescue services) and additional DGUV requirements for head protection, protective gloves etc. Table 17 in subclause 6.4 provides for storage for PPE only.

The DIN document corresponding to the international document referred to in this document is as follows:

ISO 5128:1980

DIN ISO 5128:1984-11

For current information on this document, please go to DIN's website (www.din.de) and search for the document number in question.

Amendments

This standard differs from DIN EN 1789:2014-12 as follows:

- a) requirements for ambulances intended to carry transport incubator systems have been specified;
- b) the Scope excludes the transportation of hospital beds;
- c) normative references and the figures have been updated;
- d) in order to allow the use of the standard independent of ECE regulations, EU regulations and EU directives, these references have been removed from the normative part of the standard according to the CEN Internal Regulations;
- e) references to Technical Services have been removed from the normative part of the standard according to the CEN Internal Regulations;
- f) the following clauses have been deleted: 4.1.2 "Maximum overall dimensions", 4.1.3 "Wheel arch clearance", 4.2 "Performance-breaking and acceleration", 5.3 "Testing of the acceleration", 6.4 "Mechanical strength — Test methods for medical devices for use in road ambulances", Clause 7 "Conformity assessment", Clause 8 "Requirements to be met for a Certificate of Compliance", Annex B "Definition of ambulance body styles";
- g) requirements for electrical installation and Table 2 "12 V connections for medical devices in patient's compartment" have been revised;
- h) requirements for visual warning lights and audible warning systems (siren) have been included;
- i) emergency exits have been rendered more precise;
- j) requirements for floor coverings have been included;
- k) requirements for hygiene have been included;
- l) requirements for heating and cooling systems in the patient compartment have been revised;
- m) requirements for the loading system have been included (Table 5) in 4.3.6;
- n) the patient's compartment illumination (Table 8) has been revised;
- o) the noise level in the patient and driver's compartments has been revised;
- p) requirements and tests for retention, fixation and restraint systems have been revised;
- q) requirements for the test body depending on the ambulance construction have been specified;
- r) testing of the stretcher fixation on the vehicle floor has been rendered more precise;
- s) the procedure to verify the loading angle has been revised;
- t) requirements for all electrical and non electrical medical devices have been revised;

- u) the tables on equipment have been revised;
- v) the standard has been editorially revised;
- w) a transition period has been introduced.

Previous editions

DIN FANOK 20 = DIN 13020: 1931-09
DIN FANOK 26 = DIN 13026: 1933-09
DIN 75080: 1955-07, 1960-08
DIN 75080-1: 1967-07, 1977-02, 1987-05
DIN 75080-2: 1967-07, 1982-07, 1989-01
DIN 75080-3: 1967-07, 1982-06, 1989-01
DIN EN 1789: 1999-12, 2003-08, 2007-08, 2010-11, 2014-12

National Annex NA (informative)

Bibliography

ASR A 1.5/1,2, *Technische Regeln für Arbeitsstätten — Fußböden*^{*}

BGV D 29, DGUV Vorschrift 70, *BG-Vorschrift — Fahrzeuge*^{**}

BGI/GUV-I 561 DGUV Information 208-005, *Information — Treppen*^{**}

BGI/GUV-I 588-1 DGUV Information 208-007, *Information — Roste — Auswahl und Betrieb*^{**}

Verordnung über Sicherheit und Gesundheitsschutz bei der Verwendung von Arbeitsmitteln (Betriebssicherheitsverordnung BetrSichV) (Ordinance on occupational health and safety in the provision of work equipment and its use)^{*}

DGUV Information 208-041 BGI/GUV-I 8687, *Bewertung der Rutschgefahr unter Betriebsbedingungen*^{**}

DIN ISO 5128:1984-11, *Acoustics; measurement of noise inside motor vehicles*

Landesrettungsdienstpläne der Bundesländer^{***}

provisions on rescue services specific for the corresponding federal state of Germany^{***}

Lastenhandhabungsverordnung (LasthandhabV – Load Handling Regulation)

^{*} Obtainable from Beuth Verlag GmbH, Berlin, Germany.

^{**} Obtainable from *Deutsche Gesetzliche Unfallversicherung e.V. (DGUV)*.

^{***} Obtainable from the ministries responsible for rescue services of the corresponding federal states of Germany.

English Version

Medical vehicles and their equipment - Road ambulances

Véhicules de transport sanitaire et leurs équipements -
Ambulances routières

Rettungsdienstfahrzeuge und deren Ausrüstung -
Krankenkraftwagen

This European Standard was approved by CEN on 13 April 2020.

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