



SLOVENSKI STANDARD
SIST EN 6138:2017

01-junij-2017

**Aeronavtika - Pokrov, zaščita, nekovinska, za končno vgradnjo ≤ 3 000 PSI
hidravlični sistemi**

Aerospace series - Cap, protective, non-metallic for fitting ends ≤ 3 000 PSI hydraulic systems

Luft- und Raumfahrt - Kappe, nicht metallisch zum Schutz für Endfittings ≤ 3 000 PSI
Hydraulik Systeme

Série aérospatiale - Chapeau, protecteur, non métallique pour raccord ≤ 3 000 PSI
circuits hydrauliques

iTeh STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

Ta slovenski standard je istoveten z: EN 6138:2017

ICS:

49.080

Letalski in vesoljski
hidravlični sistemi in deli

Aerospace fluid systems and
components

SIST EN 6138:2017

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 6138:2017

<https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

EUROPEAN STANDARD

EN 6138

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 49.080

English Version

Aerospace series - Cap, protective, non-metallic for fitting ends $\leq 3\ 000$ PSI hydraulic systems

Série aérospatiale - Chapeau, protecteur, non métallique pour raccord $\leq 3\ 000$ PSI circuits hydrauliques

Luft- und Raumfahrt - Kappe, nicht metallisch zum Schutz für Endfittinge $\leq 3\ 000$ PSI Hydraulik Systeme

This European Standard was approved by CEN on 2 January 2017.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Requirements	5
4	Technical requirement	6
5	Designation	7
6	Marking	7
7	Packaging	7
8	Example of installation	7
9	Technical specification	8

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 6138:2017

<https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

European foreword

This document (EN 6138:2017) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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.

[SIST EN 6138:2017](https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017)

<https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

EN 6138:2017 (E)**1 Scope**

This European Standard specifies the dimensions, tolerances and required characteristics of protective caps to seal fluid ports during transportation and storage in order to prevent:

- contamination by moisture, fluids, chemicals and particles;
- spillage inside package or aircraft section;
- port and pipe end damages;
- port and pipe clogging due to plug ingestion.

Because of the cleanliness requirements, parts shall only be used once.

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.

EN 2424, *Aerospace series — Marking of aerospace products*

EN 6079, *Aerospace series — Pipe coupling 24° cone — Female fitting ends, flareless type — Inch series¹⁾*

EN 6102, *Aerospace series — Fluid-hydraulic, phosphate ester-base, fire resistant — Technical specification¹⁾*

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications* <https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*

SAE-AS4059, *Aerospace Fluid Power — Contamination Classification for Hydraulic Fluids²⁾*

SAE-AS4375, *Fitting End, Flareless, Design Standard²⁾*

SAE-AS4395, *Fitting End, Flared, Tube Connection, Design Standard²⁾*

SAE-AS33514, *Fitting End, Standard Dimensions for Flareless Tube Connection and Gasket Seal²⁾*

FED-STD-595C, *Colors used in government procurement*

¹⁾ In preparation at the date of publication of this European Standard.

NOTE Until publication of EN 6079 use SAE-AS4375 and until publication of EN 6102 use AS1241.

²⁾ Published by: SAE National (US) Society of Automotive Engineers. <http://www.sae.org/>

EN 6138:2017 (E)**3.2 Material, surface treatment and colour**

The material and colour shall be in accordance with Table 2.

The caps shall be resistant to phosphate ester hydraulic fluids according to EN 6102.

The surface of the parts shall be free of burrs and moulding joints.

Table 2 — Material

Code	Material	Density	Melt Flow Index (MFI)	Colour
—	Polyethylene (HD-PE)	0,940 to 0,970	7,5 to 15,0	Red (e. g. FED-STD-595C No. 11302 or No. 11310)

3.3 Sealing areas

Contact surface mates with the dimensions and tolerances of the fitting part (see Figure 2).

3.4 Proof pressure

100 kPa (1 bar).

3.5 Temperature range**3.5.1 Storage and transportation temperature**

–54 °C to 85 °C.

3.5.2 Installation and removal

At room temperature (25 ± 10) °C.

3.5.3 Cleanliness

Parts shall be in accordance with SAE-AS4059 class 7 or better.

4 Technical requirement**4.1 General**

For qualification, three specimens per size shall be tested at a temperature of (25 ± 10) °C. The requirements given in 3.3 have to be fulfilled.

On the sealing area, there shall be a consistently good contact between cap and end fitting when hand tightened.

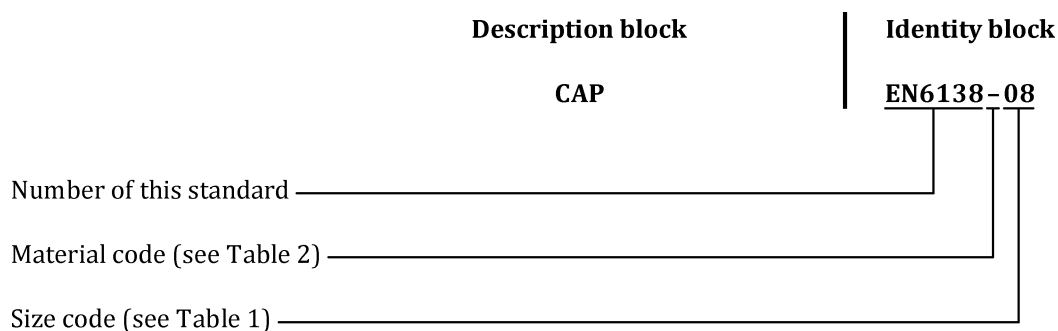
After removal of the plugs, chips inside the equipment/tube/hose are not allowed.

4.2 First article inspection

For first article inspection, the test assembly shall withstand a pressure equal the proof pressure (see 3.4) without leakage, evidence of permanent deformation or other malfunction, a period of 3 min after pressure stabilization. Six specimens shall be tested at a temperature of (25 ± 10) °C.

5 Designation

This type of standard shall be designated according to the philosophy of the following example:



6 Marking

The caps shall be legibly and permanently marked per EN 2424 style A with the following:

- the full standard part designation;
 - manufacturer's name;
- or trademark;
- or CAGE code.

[SIST EN 6138:2017](https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017)
<https://standards.iteh.ai/catalog/standards/sist/54298d33-f6dd-4597-b361-0e88e1df9b2e/sist-en-6138-2017>

7 Packaging

All parts shall be delivered individually in suitable bags, which are marked per EN 2424 style G. The standard parts shall be protected against humidity, embitterment, impact, contamination and other negative influences by suitable approved materials, so that no damage or deterioration will occur under normal transport and storage conditions. The packaging materials used shall conform with national health and safety requirements and shall not affect the appearance or quality of the packaged items.

Cleanness requirements shall be kept up to package opening.

Chlorine free package shall be used.

8 Example of installation

See Figure 2 and Figure 3.