

BS EN 2591-315:2015



BSI Standards Publication

# Aerospace series — Elements of electrical and optical connection — Test methods

Part 315: Fluid resistance

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**National foreword**

This British Standard is the UK implementation of EN 2591-315:2015. It supersedes BS EN 2591-316:1998 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

## Aerospace series - Elements of electrical and optical connection - Test methods - Part 315: Fluid resistance

Série aérospatiale - Organes de connexion électrique et optique - Méthodes d'essais - Partie 315 : Résistance aux fluides

Luft- und Raumfahrt - Elektrische und optische Verbindungselemente - Prüfverfahren - Teil 315: Beständigkeit gegen Flüssigkeiten

This European Standard was approved by CEN on 8 June 2015.

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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

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## European foreword

This document (EN 2591-315:2015) 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 European 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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

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

This document supersedes EN 2591-315:1998.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies the method of determining the fluid resistance of a connector, or cable accessory.

It shall be used together with EN 2591-100 and EN 3909.

## 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 2591-100, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 100: General*

EN 2591-101, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 101: Visual examination*

EN 2591-206, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 206: Measurement of insulation resistance*

EN 2591-408, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 408: Mating and unmating forces*

EN 2591-409, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 409: Contact retention in insert*

EN 3909, *Aerospace series — Test fluids for electrical and optical components and sub-assemblies*

## 3 Test fluids

Unless otherwise specified in the Product Standard, the samples under test shall be exposed to each of the fluid types listed in Table 1 below. Each fluid shall be selected from the fluid groups in EN 3909.

**Table 1 — Types of test fluid to be used**

Fluid group number	Fluid family name	Test fluid type (variant)	No of fluids to be selected per test	Remarks (e.g. test temperature)
Group 1	Fuels	Hydrocarbon	1	-
		Biofuel	1	-
Group 2	Hydraulic Fluids	Mineral	1	-
		Synthetic	1	-
Group 3	Oils	Mineral	1	-
		Synthetic	1	-
Group 4	Cleaning Fluids	Optional	1	-
Group 5	De-Icing Fluids	Runway	1	-
		Aircraft	1	-
Group 6	Fire Extinguishant	-	1	- <sup>a</sup>
Group 7	Cooling Fluid	-	1	-

<sup>a</sup> Due to restrictions and applicable by local laws, fire extinguishant shall not be discharged in non-critical situations.