

**Inflation devices and accessories for inflatable
consumer products - Part 1: Compatibility of valves and
valve adapters**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16051-1:2012 sisaldab Euroopa standardi EN 16051-1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 16051-1:2012 consists of the English text of the European standard EN 16051-1:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 11.01.2012.	Date of Availability of the European standard is 11.01.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 23.080

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

ICS 23.080

English Version

Inflation devices and accessories for inflatable consumer products - Part 1: Compatibility of valves and valve adapters

Dispositifs et accessoires de gonflage pour biens de consommation gonflables - Partie 1: Compatibilité des valves et adaptateurs de valves

Pumpen und Pumpenzubehör für aufblasbare Verbraucherartikel - Teil 1: Kompatibilität von Ventilen und Ventiladaptern

This European Standard was approved by CEN on 29 October 2011.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Valves.....	6
4.1 Dimensions, designation	6
4.1.1 General.....	6
4.1.2 Screw valve with non-return device.....	6
4.1.3 Valve with non-return device and a twist lock closure.....	10
4.1.4 Plug valve	11
4.2 Pressure classes.....	12
4.3 Requirements and testing.....	13
4.3.1 Test conditions	13
4.3.2 Requirements for valves with non-return device	13

Foreword

This document (EN 16051-1:2012) has been prepared by Technical Committee CEN/TC 136 “Sports, playground and other recreational facilities and equipment”, the secretariat of which is held by DIN.

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 July 2012, and conflicting national standards shall be withdrawn at the latest by July 2012.

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.

EN 16051, *Inflation devices and accessories for inflatable consumer products*, consists of the following parts:

- *Part 1: Compatibility of valves and valve adapters*
- *Part 2: Safety requirements, durability, performance, compatibility and test methods of inflators*

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Introduction

The process of inflating a floating leisure article should be considered in two ways:

- a) the device for inflating the product, a pump;
- b) the compatibility between the pump and the valve or valves on the product itself.

This standard, EN 16051, is in two parts and addresses the performance, safety requirements, durability and test methods that should be applied to the pump and the compatibility between a pump and the device to be inflated to ensure that the inflation process can be conducted efficiently and safely.

Unless a device is supplied and sold with a pump, by the manufacturer, where it is reasonable to expect the pump to be compatible with the product, there is generally a requirement to have an adaptor between a pump and the device valves to ensure that the air hose or other connector fits into or onto the valves on the device.

This part of the standard, Part 1, addresses the requirements for valves and where necessary, adaptors to ensure good fit and mechanical efficiency when inflating the device.

1 Scope

This document specifies the valve side interface geometry between valves and pump adapters as well as strength requirements of valves and valve adapters for inflatable consumer articles (see definition in 3.1).

This document does not apply for

- valves of personal flotation devices according to EN ISO 12402;
- diving accessories and buoyancy compensators according to EN 1809.

This document excludes the following valve types:

- valves used for bicycles and vehicles;
- needle valves (e. g. valves used for team sport balls).

2 Normative references

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

EN 16051-2, *Inflation devices and accessories for inflatable consumer products — Part 2: Safety requirements, durability, performance, compatibility and test methods of inflators*