This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

BS EN 16397-1:2014



# **BSI Standards Publication**

# Flexible couplings

Part 1: Performance requirements



BS EN 16397-1:2014 BRITISH STANDARD

This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

This British Standard is the UK implementation of EN 16397-1:2014.

The UK participation in its preparation was entrusted to Technical Committee B/505, Wastewater engineering.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2014. Published by BSI Standards Limited 2014

ISBN 978 0 580 77787 5

ICS 23.040.60

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2014.

Amendments issued since publication

Date Text affected

### EN 16207 1

This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

# **EUROPÄISCHE NORM**

November 2014

ICS 23.040.60

### **English Version**

# Flexible couplings - Part 1: Performance requirements

Raccords flexibles - Partie 1: Exigences de performance

Flexible Kupplungen - Teil 1: Leistungsanforderungen

This European Standard was approved by CEN on 30 August 2014.

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, 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

This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

Contents		Page
Foreword3		
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Symbols and abbreviations	8
5.1 5.2 5.3 5.4.1 5.4.2 5.4.3 5.4.4 5.4.5 5.5.1 5.5.2 5.6.1 5.6.2 5.7	Product characteristics General	
5.7.2	Durability of watertightness	11
5.8	Dangerous substances	
6 6.1 6.1.1 6.1.2 6.1.3 6.1.4	Test methods Tightness test methods for joint assemblies General Internal pressure Vacuum Deflection test	12 12 12 12
6.1.5 6.1.6	Shear testThermal cycling test	13

BS EN 16397-1:2014 **EN 16397-1:2014 (E)** 

This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

## **Foreword**

This document (EN 16397-1:2014) has been prepared by Technical Committee CEN/TC 165 "Waste water engineering", 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 May 2015 and conflicting national standards shall be withdrawn at the latest by August 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.

EN 16397 "Flexible couplings" contains the following parts:

- Part 1: Performance requirements;
- Part 2: Characteristics and testing for metal banded flexible couplings, adaptors and bushes.

This European Standard takes into account the requirements of EN 476.

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.

This is a preview of "BS EN 16397-1:2014". Click here to purchase the full version from the ANSI store.

# 1 Scope

This European Standard specifies the performance requirements for flexible couplings and adaptors and bushes for use with pipes and fittings in drain and sewer systems, usually operated under gravity and periodic hydraulic surcharge, both above and below ground inside or outside buildings and intended to connect pipes for:

- repair of damaged pipelines;
- connecting pipes of different materials and/or diameters;
- jointing short/cut lengths of pipe;
- jointing specific pipe systems;
- jointing post-inserted preformed junctions.

Typically a coupling consists of a moulded or extruded flexible sleeve with two clamping bands with or without a shear band. The clamping bands enable the sleeve to form a seal with the pipes to be jointed. The shear band gives resistance to shear forces. Connections may be made between pipes which cannot be satisfactorily jointed by a coupling alone, of dissimilar sizes or material, by using an appropriate bush or bushes with the coupling or by using an appropriate adaptor.

#### 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 476:2011, General requirements for components used in drains and sewers

EN 1055:1996, Plastics piping systems - Thermoplastics piping systems for soil and waste discharge inside buildings - Test method for resistance to elevated temperature cycling

EN 13501-1, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

EN 16397-2, Flexible couplings – Part 2: Characteristics and testing for metal banded flexible couplings, adaptors and bushes

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

#### flexible coupling

moulded or extruded and joined flexible sleeve, with or without bushes or shear band, with adjustable clamping bands by which it is secured to the ends of pipes with outside diameters within the tolerance range covered by the coupling

Note 1 to entry: Examples are shown in Figures 1 to 3.