

**Cylindrical helical springs made of round wire -  
Quality specifications for cold coiled compression  
springs**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15800:2009 sisaldab Euroopa standardi EN 15800:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 29.01.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 03.12.2008.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15800:2009 consists of the English text of the European standard EN 15800:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.01.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 03.12.2008.

The standard is available from Estonian standardisation organisation.

ICS 21.160

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English Version

## Cylindrical helical springs made of round wire - Quality specifications for cold coiled compression springs

Ressorts cylindriques hélicoïdaux en fils ronds -  
Prescriptions de qualité des ressorts de compression  
façonnés à froid

Zylindrische Schraubenfedern aus runden Drähten -  
Gütevorschriften für kaltgeformte Druckfedern

This European Standard was approved by CEN on 18 October 2008.

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 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 Management Centre has the same status as the official versions.

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## Foreword

This document (EN 15800:2008) has been prepared by Technical Committee CEN/TC 378 "Project Committee – Springs", 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 June 2009, and conflicting national standards shall be withdrawn at the latest by June 2009.

This European Standard has been prepared by the initiative of the Association of the European Spring Federation ESF and is based on the German Standard DIN 2095 "Helical springs made of round wire — Specification for cold coiled compression springs", which is known and used in many European countries.

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## 1 Scope

This European Standard applies to cylindrical helical compression springs made of round spring wire. Cold coiled compression springs can be made with wire up to about 16 mm diameter. (See also EN 13906-1).

Cylindrical helical springs made of round wire from European Standard materials are subject to the limiting values in Table 1:

**Table 1**

Characteristic	Cold coiled compression springs
Wire diameter	$0,07 \text{ mm} \leq d \leq 16 \text{ mm}$
Mean coil diameter	$0,63 \text{ mm} \leq D \leq 200 \text{ mm}$
Length of unloaded spring	$L_0 \leq 630 \text{ mm}$
Number of active coils	$n \geq 2$
Spring index	$4 \leq w \leq 20$

A specification for the parameters of cold formed helical compression springs is given in Annex B.

## 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 10270-1, *Steel wire for mechanical springs — Part 1: Patented cold drawn unalloyed spring steel wire*

EN 10270-2, *Steel wire for mechanical springs — Part 2: Oil hardened and tempered spring steel wire*

EN 10270-3, *Steel wire for mechanical springs — Part 3: Stainless spring steel wire*

EN 12166, *Copper and copper alloys — Wire for general purposes*