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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 1973.3-2025

Replacing GB/T 1973.3-2005

**Small cylindrical helical springs - Part 3: Dimension and
parameters - Compression springs**

小型圆柱螺旋弹簧 第3部分：尺寸及参数 压缩弹簧

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 3 of GB/T 1973 Small cylindrical coil springs. GB/T 1973 has published the following parts.

- Part 1: Technical requirements;
- Part 2: Dimensions and parameters of tension springs;
- Part 3: Dimensions and parameters of compression springs.

This document replaces GB/T 1973.3-2005 "Dimensions and parameters of small cylindrical helical compression springs" and GB/T 1973.3-2005 In comparison, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The content of the element "Terms and Symbols" has been changed (see Chapters 3 and 4, Chapter 3 of the 2005 edition), and some symbols have been changed;
- b) The normative reference document YB(T)11 (see Chapter 4 of the 2005 edition) has been deleted;
- c) The content of "Materials" has been changed (see Chapter 5, Chapter 5 of the 2005 edition);
- d) Added the normative reference document GB/T 24588 (see Chapter 6);
- e) Change the material diameter in Table 2 and Table 3 from $\phi 0.35\text{mm}$ to $\phi 0.36\text{mm}$ (see Table 2 and Table 3, 2005 edition). 2, Table 3);
- f) Added the specification series of steel wire with a diameter of $\phi 0.48\text{mm}$ (see Table 2 and Table 3 in Chapter 12);

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Spring Standardization (SAC/TC235).

This document was drafted by: Xiamen Lizhou Precision Technology Co., Ltd., China Machinery Productivity Promotion Center Co., Ltd., Guangzhou Aotu Spring Co., Ltd., Kern-Liebers (Taicang) Co., Ltd., Xi'an Yilihua Spring Technology Co., Ltd., Zhejiang Meili Technology Co., Ltd.

Shanghai China Spring Manufacturing Co., Ltd., Ningbo Mingli Spring Co., Ltd., Jiaxing Saijie Spring Manufacturing Co., Ltd., Xiangyang Liqiang Machinery Co., Ltd., Yangzhou Vocational University.

Drafters of this document. Wang Liang, Cheng Peng, Ruan Guoyuan, Chen Shaomin, Xu Kai, Wang Jiangjin, Wang Xiaodi, Sun Jiaolin, Liu Jun, Chen Tao, Shao Chenxi, Zhang Zichao and Yao Haibin.

The previous versions of this document and the documents it replaces are as follows.

- First published in 1980 as GB/T 1973.3-1980, first revised in 1989 as GB/T 1973.3-1989, Second revision.
- This is the third revision.

Introduction

Cold-formed cylindrical coil spring is a commonly used elastic element, widely used in machinery, chemical industry, aviation, construction and other industries.

Cold-formed cylindrical coil springs made of circular cross-section materials with a diameter of 0.16mm~0.48mm are small cylindrical coil springs. GB/T 1973 Small Cylindrical Coil Springs is divided into 3 parts.

- Part 1: Technical conditions. The purpose is to give the technical requirements, test methods and inspection rules of small cylindrical coil springs and Packaging, marking, transportation and storage requirements.
- Part 2: Dimensions and parameters of tension springs. The purpose is to give the marking, dimensions and parameters of small cylindrical helical tension springs.
- Part 3: Dimensions and parameters of compression springs. The purpose is to give the marking, dimensions and parameters of small cylindrical helical compression springs. Small cylindrical coil spring Part 3: Dimensions and parameters of compression springs

1 Scope

This document specifies the marking, dimensions and parameters of small cylindrical helical compression springs.

This document applies to general purpose cold-formed cylindrical spiral compression parts made of round cross-section materials with a wire diameter of 0.16mm~0.48mm Springs (both ends tightened and ground flat type and both ends tightened and not ground type).

2 Normative references

GB/T 1805

GB/T 1973.1-2021

GB/T 4357

GB/T 4459.4

GB/T 13911

GB/T 24588

3 Terms and Definitions

The terms and definitions defined in GB/T 1805 apply to this document.

4 Symbols, units and parameter names

The symbols, units and parameter names given in Table 1 are applicable to this document.

Symbolic	Units	Parameter Name
d	mm	Material diameter
D	mm	Spring center diameter
De	mm	Spring outer diameter
Di	mm	Spring inner diameter
C	-	Convolution Ratio
Lo	mm	free length
nt		total number of laps