

ICS 29.160.01

CCS K24



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

GB/T 11281-2009

Replacing GB 11281-1989

**General specification for reduction gearhead of electrical
micro-machine**

微电机用齿轮减速器通用技术条件

Issued on: September 30, 2009

Implemented on: February 1, 2010

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

1 Scope	1
2 Normative references	1
16 Appendix A (informative) Outline structure reducer Size	17

Foreword

This standard replaces GB/T 11281-1989 "control micro-motor with gear reducer series."

This standard compared with GB/T 11281-1989 main changes are as follows:

- Increased the reducer servo relevant content, technical parameters and shape dimension structure;
- Increase terminology and definitions, test methods, inspection rules, delivery preparation, customer service and other related content;
- The original type, technical parameters and structural plans were modified and extended;
- Changes will shape the structure size information appendix (Appendix A), delete the GB/T 11281-1989 Appendix A "recommendation adopted Mounting control micro-motor used "and Appendix B" reducer input shaft parameters "and diagrams related content recommendation adopted;
- According to GB/T 1.1-2000. provisions "Standardization Guide Part 1 standard structure and write rules," and in order to With the relevant harmonized standards, in terms of choreography on a relatively large adjustment. Appendix A of this standard is an informative annex. The standard proposed by China Electrical Equipment Industrial Association. This standard by the National Standardization Technical Committee micromotor (SAC/TC2) centralized. This standard was drafted. Hengdian Group to the Motor Co., Ltd., Beijing and advantage Motor Co., Secretary of Shanghai Zhuang Motor Co. The company, Xi'an Institute of micro-motor, Zibo Boshan Jerry Motor Co., Ltd., Ningbo vigorously de Transmission Equipment Co., Ltd., Dongyang City, East G Motor Limited. The main drafters of this standard. Ye Hui, Shen Tu Jun, Wang Jian, Xu Zhiming, Kim Dong Shao, Zhao Donghong, Wang Fujie, Cen Guo-jian, Chen, Zhou Jianzhong. This standard replaces the standards previously issued as follows:
- GB/T 11281-1989. Micro-motor gear General technical reducer

1 Scope

GB/T 11281-2009 is the Chinese national standard on general specification for reduction gearhead of electrical micro-machine, in the field of electrical engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 September 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 February 2010. Classification: ICS 29.160.01, CCS K24. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the use of micro-motor classification, technical requirements and test methods, inspection rules and other gear reducer series. This standard applies to micro-motor with gear reducer (hereinafter referred to as reducer).

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 2828.1 Sampling procedures for inspection - Part 1. by acceptance quality limit (AQL) retrieval batch inspection sampling plan (GB/T 2828.1-2003, ISO 2859-1.1999, IDT)

GB/T 7345 motor control basic technical requirements

GB/T 13384 mechanical and electrical products packaging General technical conditions

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 For precision motion control applications for servo motor or stepper motor deceleration by twisting in order to distinguish the level of transmission accuracy gear reduction Pacer.

3.2 Ploidy gear mechanism inside the gearbox. A gear reducer mechanism called single-stage, two sets of gear mechanism is called second reducer.

3.3 In operation, when the one-way rotation of the output shaft, the actual angle of the output shaft and the difference between the theoretical corner.

3.4 Also known as the backlash (backlash), or backlash, in response to an error by the

decelerator assembly precision and accuracy due to transmission operation, and when When the input shaft (or hole) starts running, the output of the shaft (or hole) do not operate simultaneously, but only at an angle hysteresis response, this lag Angle, called backlash. Usually on both operating and intermittent run-time show.

3.5 General backlash and transmission errors.

3.6 At the rated speed of the output torque.

chinastandards.org - PREVIEW