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

GB/T 25140-2010

**Seal-less rotodynamic pumps -- Class II -- Specification
(English Translation)**

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Table of Contents

Preface
ISO Introduction
1 Scope
2 Normative references
3 Terms and definitions
4 Design
5 Material
6 Test
7 Shipping preparation
8 Using information
Appendix A (informative) This standard reg number and ISO 15783:2002 reg control number
Annex B (informative) This standard and ISO 15783:2002 technical differences and their reasons
Annex C (normative) magnetic drive pumps and canned motor pump data table
Annex D (informative) external forces acting on the flange 25 and the outer torque
Annex E (informative) RFQ, tender, purchase order
Appendix F (informative) after the purchase of a
Annex G (informative) magnetic drive pump shield pump circulation line typical aspect and feature
Appendix H (informative) internationally recognized pump parts material
Annex I (informative) 37 collation list
References

Foreword

This revised standard adopts ISO 15783:2002 (first edition) "sealless rotodynamic pump technical conditions II class" (in English).

This standard is based on ISO 15783:2002 redrafted. For ease of comparison, listed in Appendix A of this standard and reg number ISO 15783:2002 reg control list numbered.

According to our country, the present standard in the use of international standards has been modified. These technical differences identified by vertical lines involved in them and the terms of the margin of the page. In Appendix B gives a list of the technical differences

and the reasons for the reference.

For ease of use, this standard also made the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) use a decimal point instead of a decimal comma ".,", ".,";
- c) Delete the international standard "foreword";
- d) with "MPa" instead of as a pressure unit "bar", 1bar = 0.1MPa;
- e) with "r/min" instead of as a speed unit "min-1";
- f) in Annex A, Appendix G to increase the figure caption or table title;
- g) In Annex G, the Arabic numerals "1,2,3" instead of "a, b, c".

Appendix C of this standard is a normative appendix, Appendix A, Appendix B, Appendix D, Appendix E, Appendix F, Appendix G, Appendix H, Appendix I is Informative appendix.

The standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee pump (SAC/TC211) centralized.

Drafting of this standard. Shenyang Institute of pumps, Dandong Cloning Pioneer Pump Co., Ltd., KSB Pumps Limited, Zhejiang Teng-valve Equipment Co., Ltd., Shanghai East Pump (Group) Co., Ltd., Dalian Quartet Pump Co., Ltd., Gansu Academy of Sciences magnetic device Institute members, Shanghai Motor Co., Ltd., Shenyang Pump Manufacturing Co., Tektronix.

1 Scope

1.1

standard specifies the use of magnetic coupling (magnetic drive pumps) or shielded motor driven sealless rotodynamic pump (hereinafter referred to as "Pump") requirements, such pumps are used in chemical processes, water treatment and petrochemical industry, its use will be subject to space, noise, ring Limit environmental or safety regulations.

Sealless pump refers to the internal rotor is completely contained within the pressure vessel containing the infusion pump body, pressure vessel or the primary sealing means, such as by the pad or O-ring seals and other static sealing.

1.2

In addition to the special requirements specified in this standard, the pump normally shall conform to generally accepted standards (such as GB/T 5656, explosion-proof electrical

Magnetic compatibility, etc.).

1.3

This standard includes the installation of the pump, maintenance and operation of safety-related design features, and describes the required by the purchaser and manufacturer/supplier it agreed terms between providers.

1.4

In the application of this standard has requested the case, but also requires special design features that can propose an alternative design, but at the same time should indicate these are designed to meet the intent of this standard, and a detailed description of these designs. May submit for consideration by the pump does not fully comply with this standard, only to all non-compliant place are to be explained.

When present conflicting requirements between multiple files, the following shall be the order of execution of these documents.

- a) purchase order (or inquiry, if there is no purchase order), see Appendix E and Appendix F;
- b) the data table (see Appendix C) or technical drawings/technical requirements;
- c) of this standard;
- d) other standards.

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 755 rotary motor fixed and performance (GB 755-2008, IEC 60034-1:2004, IDT) GB/T 3216 rotary power pump hydraulic performance acceptance tests - Grades 1 and 2 (GB/T 3216-2005, ISO 9906:1999, MOD) Determination of sound power levels of noise sources reflecting plane free field engineering method GB/T 3767 sound pressure (GB/T 3767-1996, eqv ISO 3744:1994) GB/T 3768 Determination of sound pressure of sound power levels of noise sources using an enveloping surface reflectance measuring surface Simple Method (GB/T 3768-1996, eqv ISO 3746:1995) GB/T 4662 Rolling static load rating (GB/T 4662-2003, ISO 76. 1987, ISO 76. 1987/AMD.1.

1999, IDT)

GB/T 5656 centrifugal technical conditions (II type) (GB/T 5656-2008, ISO 5199:2002, IDT)

GB/T 6062 Geometrical product specifications (GPS) Surface texture Profile method of contact (stylus) instruments nominal characteristics (GB/T 6062-2009, ISO 3274:1996, IDT)
GB/T 6391 Rolling bearings - Dynamic load ratings and rating life (GB/T 6391-2003, ISO 281:1990, IDT) ISO 7005-1 metal flanges - Part 1. Steel flanges ISO 7005-2 metal flanges - Part 2. Cast iron flanges