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

GB/T 42534.1-2023

**Fluid power - Specification of reference dictionary - Part 1:
General overview on organization and structure**

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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 the first part of GB/T 42534 "Specification for Reference Dictionary of Fluid Power System and Components": GB/T 42534 has issued

Published the following sections:

--- Part 1: Overview of organizational structure;

--- Part 2: Definition of pneumatic product categories and characteristics:

This document is equivalent to ISO 18582-1:2016 "Fluid Power System and Components Reference Dictionary Specification Part 1: Organizational Structure Overview

described":

The following minimal editorial changes have been made to this document:

--- Added note (see Note 2 in 5:4):

Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents:

Introduction

Modern business operations (that is, e-commerce, including e-commerce platforms, electronic product catalogs, and product lifecycle management) have the following two aspects

Characteristics:

a) The structure of the product life cycle is complex: Each stage of the product life cycle (from initial idea to product development, manufacturing, marketing sale, use and disposal), use information from other stages and generate new information: This information needs to be passed through the data

Interfaces are passed and exchanged between partners such as other manufacturers, suppliers and users: Each stage of operation, related parties

The transfer of information between is independent of the protocol for data exchange: Once created, these data can be directly used by the operation stage and relevant parties:

b) Availability of new electronic media: In order to effectively use the new medium, the product information provided by the supplier to the user must be clear and unambiguous:

Considering the above two aspects, the data information of products and business operation process has the following requirements:

--- Consistency and certainty;

---Neutrality (not targeting specific companies, software and products);

--- Electronic form that can be used directly:

For the field of fluid transmission, this document is formulated based on the following considerations:

a) Existing standards only provide textual definitions of characteristics, but do not provide detailed information for data exchange;

b) Commercial or self-developed software (such as CAD systems, ERP systems, Office tools) have different interfaces and different internal

Data forms (such as units of measurement, reference values), data exchange between them requires a multi-directional conversion mechanism, and there is a risk of introducing errors

risk, or even impossibility:

Through the standardization and electronicization of data characteristics, the software used by users can realize data exchange and directly use the data in the transmission process:

according to: The use of standardized data features can improve the comprehensive capabilities of user business processes and enhance IT-based linkages among business partners:

system, thereby shortening product development time and saving costs:

This document contains all relevant characteristics needed to fully describe fluid power products and business operations, including general rather than "fluid

properties specific to "Body Drives", as well as properties from specifications or references from other documents:

For maximum utility, reference dictionaries and their entire contents are often provided electronically for import into user applications

Use directly:

GB/T 42534 "Specification for Reference Dictionary of Fluid Transmission Systems and Components" aims to provide standardized product characteristics in the field of fluid transmission

This comprehensive reference dictionary specification is proposed to be composed of three parts:

--- Part 1: Overview of organizational structure: The purpose is to develop a reference dictionary on standardized product characteristics in the field of fluid power transmission, and

Provides the basis for specifying the entire contents of this reference dictionary and its electronic form:

--- Part 2: Definition of pneumatic product categories and characteristics: The purpose is to define the types and characteristics of pneumatic products in the field of fluid transmission systems and components

Refer to the dictionary specification for the definition of gender:

--- Part 3: Definition of hydraulic product categories and characteristics: The purpose is to define the categories and characteristics of hydraulic products in the field of fluid transmission systems and components

Refer to the dictionary specification for the definition of gender:

Fluid Power Systems and Components Reference Dictionary Specification

Part 1: Overview of Organizational Structure

1 Scope

This document gives the reference dictionary of fluid transmission systems and components (hereinafter referred to as "dictionary") and the contents and contents of its electronic database:

form:

This document is based on ISO 13584-42 and ISO /IEC Guide77-2, applicable to the description of the characteristics of products in the field of fluid transmission:

Note: Standardized product characteristics are determined according to standardized

attributes, and are divided according to definition categories, thereby forming a standardized reference level:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document:

ISO 13584-42 Industrial automation systems and integrated parts libraries - Part 42: Descriptive methodology: Methodology for constructing families of parts

Note: GB/T 17645:42-2013 Industrial automation system and integrated parts library Part 42: Descriptive methodology: Methodology for constructing part families (ISO

13584-42:2010, IDT)

ISO 80000 (all parts) Quantities and units (Quantities and units)

3 Terms and Definitions

The terms and definitions defined in ISO 13584-42 and ISO /IEC Guide77-2 apply to this document:

ISO and IEC maintain terminology databases for standardization at:

---ISO online browsing platform: <http://www.iso.org/obp>

Appendix A provides some basic definitions and principles given in ISO /IEC Guide77-2:

4 Normative principles

4.1 Attribute Sets to Describe Features

The characteristics shall be described according to the attributes given in Table 1:

Note: The content of Table 1 conforms to the data model specified in ISO 13584-42, and has been expanded according to the requirements of ISO /IEC Guide77-2: