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

GB/Z 43075-2023

**Connections for hydraulic fluid power - Designation and
nomenclature**

液压传动连接 标识与命名

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Foreword

This document was issued on 7 September 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 April 2024.

It is a GB/Z guiding technical document: it does not oblige, it guides.

It is classified under ICS 23.100.40, Chinese classification J20.

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is modified to adopt ISO /T S11672.2016 "Identification and naming of pipe joints for fluid transmission and general purposes", document type

The model was adjusted from ISO technical specifications to my country's national standardization guiding technical documents.

Compared with ISO /T S11672.2016, this document has made the following structural adjustments.

---4.2.3~4.2.6 corresponds to 4.2.2.2~4.2.2.5 in ISO /T S11672.2016;

---Adjust 4.2.2.1 in ISO /T S11672.2016 to 4.2.2.1~4.2.2.3, and change 4.2.2 in ISO /T S11672.2016

The contents of the suspended section are merged into 4.2.2.1;

---Change A.1 of ISO /T S11672.2016 to paragraph.

The following editorial changes have been made to this document.

---Change the standard name to "Hydraulic Transmission Connection Identification and Naming";

---Corrected the editorial error of ISO /T S11672.2016, changed "5.2" in Note 4 of Figure 1 to "4.2"; changed 4.2.2.4

"5.2.1" is changed to "4.2.1";

---Replaced ISO 6149-2 with the informative reference GB/T 2878.2 (see Table 5 and Table 6);

---Replaced ISO 6149-3 with the informative reference GB/T 2878.3 (see Table 5 and Table 6);

---Replaced ISO 6149-4 with the informative reference GB/T 2878.4 (see Table 5 and Table 9);

---Replaced ISO 12151-1 with the informative reference GB/T 9065.1 (see 4.2.4, Table 1, Table 2, Table 9);

---Replaced ISO 12151-2 with the informative reference GB/T 9065.2 (see 4.2.4, Table 1, Table 2, Table 6);

---Replaced ISO 12151-3 with the informative reference GB/T 9065.3 (see 4.2.4, Table 2, Table 6, Table 9);

---Replaced ISO 12151-4 with the informative reference GB/T 9065.4 (see 4.2.4, Table 1, Table 2, Table 6);

---Replaced ISO 12151-5 with the informative reference GB/T 9065.5 (see 4.2.4, Table 1, Table 2, Table 9);

---Replaced ISO 12151-6 with the informative reference GB/T 9065.6 (see 4.2.4, Table 1, Table 2, Table 9);

---Replaced ISO 8434-1 with the informative reference GB/T 14034.1 (see Table 1~Table 6);

---Replaced ISO 8434-2 with the informative reference GB/T 14034.2 (see Table 1~Table 5);

---Replaced ISO 8434-6 with the informative reference GB/T 14034.4 (see Table 1~Table 3, Table 5, Table 9);

---Replaced ISO 14743 with the informative reference GB/T 33636 (see Table 1 and Table 2);

---Changed the document list of references.

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

This document is proposed by China Machinery Industry Federation.

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Introduction

In a hydraulic transmission system, power is transmitted and controlled through pressurized fluid in a closed circuit.

The hydraulic component is connected to the conduit (hard pipe or hose) through its oil port with a pipe joint. The hard pipe is a rigid conduit and the hose is a flexible conduit.

This document is based on the type, shape, part type, stud end seal type, working pressure level, joint material, sealing material

materials and other differentiated characteristics, standardize the naming of pipe joints to promote the use of threaded pipe joints, plug-in pipe joints, flange pipe joints, soft

Standardized naming for products such as pipe fittings, screw plugs, and quick couplings.

Hydraulic transmission connection identification and naming

1 Scope

GB/Z 43075-2023 covers how a hydraulic connection is designated, so that a pipe joint can be specified, drawn, ordered and stocked without a sample travelling with the order. The naming and format clause builds the designation out of the features that actually tell one joint from another - the type and shape, the part type, the stud end seal type, the working pressure class, the joint material and the sealing material - and fixes the order in which they are written, including the rule that the stud end comes first when a threaded coupling carries more than one end type. Pipe joint size and pipe joint naming are handled as separate subclauses, and a normative annex gives the alphabetical index of the code names, which allows a designation to be read back as reliably as it was written. Informative annexes work through an application example and line up SAE dimensional specifications against the ISO dimensions for pipe joints, hard tube and hose. A joint ordered from an ambiguous description arrives with the wrong port thread or the wrong seal, and in a closed circuit under pressure that means a leak or an assembly that cannot be completed. Useful to hydraulic component makers, distributors, and the engineers who specify and maintain hydraulic systems.

This document provides the classification and naming methods for pipe joints and similar products, and establishes a unified product naming structure.

This document applies to the identification and naming of hydraulic pipe joints.

2 Normative reference documents

This document has no normative references.

3 Terms and definitions

There are no terms or definitions to be defined in this document.

4 Naming and format

4.1 General

When purchasing pipe joint parts described in the national standards formulated by SAC/TC3/SC5, the naming and code format is shown in Figure 1.

When a threaded pipe coupling has multiple end types, the stud end should be identified first (if applicable, e.g. SDSWS. Rotary Stud End Straight Pipe Coupling

head). If there is no stud end, the naming sequence should be specified according to the description of the part (for example, WDRDNP is used for a welded reducing pipe). If the takeover end