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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 41981.2-2022

Connections for hydraulic fluid power - Couplings for diagnostic purposes - Part 2: Coupling for connection under pressure

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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 of Standardization Documents"

drafted.

This document is the second part of GB/T 41981 "Hydraulic Transmission Connection Pressure Measuring Joints". GB/T 41981 has issued the following

part.

--- Part 1.Non-pressurized connection type;

--- Part 2.Can be connected under pressure.

This document is modified from ISO 15171-2.2016 "Hydraulic Fittings for Fluid Transmission and General Purpose Fittings Diagnostics No.

Part 2.Type with M16x2 threaded end fittings.

The technical differences between this document and ISO 15171-2.2016 and their reasons are as follows.

--- Changed the scope (see Chapter 1, Chapter 1 of ISO 15171-2.2016) to adapt to the technical conditions of our country;

--- Replaced ISO 5598 (see Chapter 3) with the normatively quoted GB/T 17446 to adapt to the technical conditions of our country and improve the operability.

action;

--- Replaced ISO 19879 (see Chapter 4) with the normatively cited GB/T 26143 to adapt to the technical conditions of our country and improve the availability

operational;

--- Replaced ISO 724 (see Chapter 5) with the normatively quoted GB/T 196 to adapt to the technical conditions of our country and improve the operability.

action;

--- Replaced ISO 965-1 (see Chapter 5) with the normatively cited GB/T 197 to adapt to the technical conditions of our country and improve the operability.

action;

--- Replaced ISO 6149-2 (see Chapter 5) with the normatively cited GB/T 2878.2 to adapt to my country's technical conditions and improve

Operability;

--- Replaced ISO 9227 (see Chapter 6) with the normatively quoted GB/T 10125 to adapt to the technical conditions of our country and improve the operability.

action;

--- Changed the requirements for surface treatment (see 6.3, 6.3 of ISO 15171-2.2016) to adapt to the technical conditions of our country and improve the availability

operational;

--- Replaced ISO 1629 (see Chapter 7) with the normatively quoted GB/T 5576 to adapt to the technical conditions of our country and improve the operability.

Action.

The following editorial changes have also been made to this document.

--- In order to coordinate with existing standards, the name of the standard is changed to "Hydraulic Transmission Connection Pressure Measuring Joint Part 2.Pressurized Connection Type";

--- Deleted the note in Figure 2;

--- Deleted the informative Appendix A;

--- Removed references.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Pressure measuring joint is an important component of fluid transmission system testing, mainly used for sampling, pressure, temperature and other parameters of fluid system diagnosis.

GB/T 41981 aims to standardize the dimensions, performance requirements and test methods of pressure measuring joints in hydraulic transmission connections, and consists of two parts.

--- Part 1.Non-pressurized connection. The purpose is to determine the dimensions, performance requirements and

experiment method.

--- Part 2.Can be connected under pressure. The purpose is to determine the size, performance requirements and testing

test method.

Hydraulic transmission connection pressure measuring joint

Part 2.Pressure-connectable

1 Scope

This document specifies the design, manufacture, process and table of pressure measuring joints with M16x2 connection end thread and maximum working pressure of 63MPa.

Surface treatment, nomenclature and marking of the joint, this pressure measuring joint can be connected under pressure below 40 MPa, and the corresponding stud end size is provided.

GB/T 2878.2-M14x1.5, ISO 9974-2-M14x1.5, 1SO1179-2-G1/4, ISO 11926-2-7/16-20UNF.

This document applies to pipe joints of hydraulic systems using mineral oil as the working medium.

Note. When used for non-mineral oil working medium, it should be negotiated by both the supplier and the buyer.

2 Normative references

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

documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to

this document.

GB/T 196 Basic Dimensions of Ordinary Threads (GB/T 196-2003, ISO 724.1993, MOD)

GB/T 197 Common thread tolerance (GB/T 197-2018, ISO 965-1.2013, MOD)

GB/T 2878.2 Hydraulic transmission connections with metric threads and O-ring seals for oil ports and stud ends - Part 2.Heavy duty studs

End (S series) (GB/T 2878.2-2011, ISO 6149-2.2006, MOD)

GB/T 5576 Rubber and Latex Nomenclature (GB/T 5576-1997, idtISO 1629.1995)

GB/T 10125 Artificial Atmosphere Corrosion Test Salt Spray Test (GB/T 10125-2021, ISO 9227.2017, MOD)

GB/T 17446 Vocabulary of Fluid Transmission Systems and Components (GB/T 17446-2012, ISO 5598.2008, IDT)

GB/T 26143 Test method for hydraulic pipe joints (GB/T 26143-2010, ISO 19879.2010, IDT)

ISO 1179-2 General purpose and hydraulic transmission connections ISO 228-1 threads with elastomer seals or metal-to-metal seals

Split and Stud Ends Part 2.Heavy Duty (S Series) and Light Duty (L Series) Stud Ends with Elastomeric Seals (Type E) [Con-

ISO 9974-2 General purpose and hydraulic transmission connections ISO 261 thread opening with elastomer seals or metal-to-metal seals

ISO 11926-2 General purpose and fluid power connectors with ISO 725 inch thread and O-ring tapped holes and studs