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

GB/T 2878.4-2011

**Connections for hydraulic fluid power -- Ports and stud ends
with metric threads and O-ring sealing -- Part 4: Hex plugs**

液压传动连接 带米制螺纹和O形圈密封的油口和螺柱端 第4部分：六角螺塞

(English Translation)

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Foreword

GB/T 2878 "Hydraulic fluid connection with metric threads and O-ring seal Ports and stud ends" is divided into four parts.

- Part 1. Ports;
- Part 2. Heavy stud ends (S series);
- Part 3. Light stud ends (L series);
- Part 4. Screw Plugs.

This section GB/T 42878 Part of.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses redrafted Law Amendment uses ISO 6149-4:2006 "fittings for hydraulic fluid power and general use of the band ISO 261 metric threads and O-ring seal Ports and stud ends - Part 4. external hex and hex plug Dimensions, design, test Methods and technical requirements. " this part of ISO 6149-4:2006 and the technical differences for the following reasons.

- On normative references, this part has been adjusted technical differences, in order to adapt our technical conditions, adjustments Focus reflected in Chapter 2;
- The plug material from low carbon steel to carbon steel (see 10.1);
- Canceled the plug tag name label (see Chapter 8);
- The plug identity changed in Size permit identification should be made (see Chapter 9);
- Increasing the variety of plug-molding method shall meet the performance requirements (see Chapter 10);
- Increasing the surface roughness of the sealing surface $Ra \leq 3.2\mu m$ (see 10.2);
- Increasing the hex right side view (see Figure 1).

This part made the following editorial changes.

--- Simplified standard name;

--- The "international standards in this section" to "this Part";

--- Increase the "References." this part is proposed by China Machinery Industry Federation.

This part of the National Standardization Technical Committee of hydraulic and pneumatic (SAC/TC3) centralized.

This section is responsible for drafting unit. Zhejiang Jiangsu Jiang grid hydraulic Co., Ltd., Jiangsu Machinery Research and Design Institute Co., Ltd., the machine Productivity Promotion Center.

Participated in the drafting of this section. Haiyan Pipe Manufacturing Co., Ltd., Shanghai Lixin Hydraulic Co., Ltd., China Shipbuilding Industry Corporation 704 Research the Zhejiang Huaxia Valve Co., Ltd. Ningbo City Hengtong Hydraulic.

Introduction

In fluid power systems, power is through a closed loop pressurized fluid (liquid or gas) and pass control. In general should Use, the fluid can be delivered under pressure.

Element fittings or hose connector to threaded ports connected by a tube or hose. By screwing plug port can be closed.

Hydraulic connection with metric threads and Ports and stud ends with O-ring seals Part 4. Screw Plugs

1 Scope

This section GB/T 2878 specifies the external hex and internal hex plugs the size of the provisions applicable to the GB/T 2878.1 and the oil port Performance requirements.

Compliance with plugs in this section applies to the maximum working pressure of 63MPa (630bar). Allowable working pressure should be based on the size of the plug end, Materials, structures, working conditions and other conditions to determine the application.

Only compliance with this predetermined size hex plug fails to satisfy the provisions of this part of the specified performance. In order to ensure compliance with its hexagonal plug Rated performance, the manufacturer shall be tested according to the technical specifications specified in this part.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 193 common thread diameter and pitch series GB/T 197-2003 common thread tolerance Ports and stud ends of GB/T 2878.2 Hydraulic connection with metric threads and O-ring seal 2. Heavy Stud Ends (S series) (ISO 6149-2) GB/T 3103.1-2002 Tolerances for fasteners - Bolts, screws, studs and nuts (ISO 4759-1) GB/T 3452.2-2007 hydraulic and pneumatic rubber O-ring Part 2. appearance quality inspection standard (ISO 3601-3) GB/T 5267.1 fasteners plating layer (ISO 4092) GB/T 5267.2 fasteners non-electrolytic zinc flake coatings (ISO 10683) GB/T 5576 rubber and latex nomenclature (ISO 1629) GB/T 6031 Determination of vulcanized rubber or thermoplastic rubber hardness (10 ~ 100IRHD) (ISO 48) GB/T 10125 artificial atmosphere corrosion test salt spray test GB/T 17446 Fluid power systems and components terminology (ISO 5598) GB/T 26143 hydraulic fittings test methods (ISO 19879)

3 Terms and Definitions

GB/T 17446 and as defined in the following terms and definitions apply to this section.

Plug plug

Stud fluid passage without end, for sealing off the oil.