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

GB/T 9065.1-2015

Replacing GB/T 9065.3-1988

**Hydraulic hose fittings -- Part 1: Hose fittings with O-ring face
seal ends**

液压软管接头 第1部分：O形圈端面密封软管接头

(English Translation)

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Reference

Foreword

GB/T 9065 "hydraulic hose connector" is divided into the following six parts.

- Part 1. O - ring end seal hose connector;
- Part 2. 24 ° cone seal end hose connector;
- Part 3. Flange end hose couplings;
- Part 4. stud end hose couplings;
- Part 5. 37 ° flared end hose connector;
- Part 6. 60 ° tapered hose connector.

This part is part 1 of GB/T 9065.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part of the replacement GB/T 9065.3-1988 "hydraulic hose connector connection size

welded or quick change type". With GB/T 9065.3-1988 compared to the main technical changes as follows.

- increased performance requirements, naming, design, manufacturing processes, assembly procedures, procurement information and logos;
- Increases the nominal size of the metric thread and increases the size and size of the 45 ° and 90 ° curved rotary hose fittings Claim;
- Increased specification, type and size requirements for hose threads with uniform threads.

This part uses the re-drafting method to modify the use of ISO 12151-1.:2010 "for hydraulic transmission and general purpose pipe fittings hose connection Header Part 1. Hose Coupling with ISO 8434-3O Ring End Face Seal "(English version).

The technical differences between this section and ISO 12151-1.:2010 are as follows.

--- on the normative reference documents, this part made a technical differences in the adjustment to meet China's technical conditions, adjust the situation is reflected in Chapter 2, "normative reference documents", the specific adjustments are as follows.

Replace ISO 4397 (see Chapter 1) with GB/T 2351 equivalent to international standards;

Replace GB 6149-1 (see Figure 1) with GB/T 2878.1 equivalent to the international standard;

Replace ISO 4759-1 (see 6.2, Tables 2 to 9) with GB/T 3103.1 equivalent to the international standard;

Replace GB 6605 (see 4.1, 4.3) with GB/T 7939 with an international standard;

Replace GB 9227 (see 7.3) with GB/T 10125 equivalent to international standards;

Replace GB 5598 (see Chapter 3) with GB/T 17446 equivalent to the international standard;

Replace GB 5864 (see 6.5, Table 3, Table 5, Table 7, Table 9) with GB/T 20666 with an international standard;

Replace GB 68-2 (see 6.5, Table 3, Table 5, Table 7, Table 9) with GB/T 20669 with an international standard;

Replace GB 263 (see 6.5, Table 3, Table 5, Table 7, Table 9) with GB/T 20670 with an international standard;

Replace GB 1987 (see 4.3) with GB/T 26143 equivalent to international standards;

- Added references to GB/T 3 (see 6.5), GB/T 196 (see 6.5), GB/T 197-2003 (see 6.5);

--- through the metric screw thread through the external thread hose connector, the internal thread rotary through the hose connector and the internal thread rotation 45 ° bend and 90

° bend hose fittings (see Figure 2 and Table 2, Figure 4 and Table 4, Figure 6 and Table 6, Figure 8 and Table 8).

--- Correction of ISO 12151-1:2010 Table 3, Table 4, Table 5 nut length dimension L3 error (see Table 5, Table 7, Table 9).

--- Correction of ISO 12151-1:2010 Table 2, Table 3, Table 4, Table 5 thread unit (mm) error (see Table 3, Table 5, Table 7, Table 9 and Table A.1).

--- Added normative appendix A, provides a uniform internal thread swivel joint with snap-on nut hexagon head minimum width size and Icon.

This part also makes the following editorial changes.

- to simplify the standard name according to our national standard naming rules;

--- Added information Appendix B, provided with this part of the ISO standard chart, table number comparison table.

--- Corrected the drawing error of the threaded part of the internal thread rotary joint in ISO 12151-1:2010 (see Figure 5, Figure 7, Figure 9).

This part is made by the China Machinery Industry Federation.

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

This part is responsible for drafting units. Tianjin R & D Engineering Machinery Transmission Co., Ltd., Haiyan Pipe Fittings Manufacturing Co., Ltd.

This part participates in the drafting unit. Zhejiang Suqiang Ge Hydraulic Co., Ltd., Eaton Hydraulic (Ningbo) Co., Ltd., Panzhihua Iron and Steel Group Technology Co., Ltd. Industrial Branch.

1 Scope

This part of GB/T 9065 specifies the general requirements and dimensional requirements for the design and performance of the O-ring end seal hose connector. This class the hose connector is made of carbon steel and is suitable for hose diameters in accordance with GB/T 2351, which includes two connecting threads. one is compliant ISO 8434-3:2005 specified O-ring end of the sealing end, using a unified thread, the applicable hose nominal diameter of 6.3mm ~ 38mm;

The other using ordinary (metric) thread, the applicable hose nominal diameter of 5mm ~ 51mm.

Note 1: Materials other than carbon steel may be used by the manufacturer and the user.

Note 2: For hose couplings for hydraulic or pneumatic braking devices on road vehicles, see ISO 4038, ISO 4039-1 and ISO 4039-2.

This type of hose connector (shown in Figure 1 for a typical example) is suitable for use in a hydraulic drive system after fitting with a hose that meets the requirements of the corresponding hose standard.

Appropriate hose assembly can be used for general applications.

Description.

- 1 --- hose connector;
- 2 --- meet the GB/T 2878.1 requirements of the port;
- 3 --- O-ring;
- 4 --- pipe fittings;
- 5 --- nuts;
- 6 --- O-ring.

Figure 1 Typical example of O-ring end seal hose connection

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all revisions) applies to this document.

GB/T 3 Common thread finish, shoulder distance, undercut and chamfer (GB/T 3-1997, eqvISO 3508. 1976 and ISO 4755.

1983)

GB/T 196 Common thread basic dimensions (GB/T 196-2003, ISO 724.:1993, MOD) GB/T 197-2003 Common thread tolerances (ISO 965-1.:1998, MOD) GB/T 2351 External diameter and hose diameter for hydraulic pneumatic systems (GB/T 2351-2005, ISO 4397.:1993, IDT) GB/T 2878.1 Hydraulic drive connections for metric and O-ring seals of oil and stud ends Part 1. Ports (GB/T 2878.1-2011, ISO 6149-1.:2006, IDT)