



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

GB/T 39831-2021

**Hydraulic fluid power - Four-port modular stack valves and
four-port directional control valves, sizes 02, 03, 05, 07, 08 and
10 - Clamping dimensions**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to the adoption of ISO 7790.2013 "The four-port stack of hydraulic transmission specifications 02, 03, 05, 07, 08 and 10.

Clamping size of valve and direction control valve".

The Chinese documents that have a consistent correspondence relationship with the normatively cited international documents in this standard are as follows.

---GB/T 2514-2008 Hydraulic transmission four-port directional control valve mounting surface (ISO 4401.2005, MOD)

---GB/T 14043-2005 Hydraulic drive valve mounting surface and cartridge valve hole identification code (ISO 5783.1995, IDT)

---GB/T 17446-2012 Fluid Power System and Components Vocabulary (ISO 5598.2008, IDT)

This standard was proposed by the China Machinery Industry Federation.

This standard is under the jurisdiction of the National Hydraulic and Pneumatic Standardization Technical Committee (SAC/TC3).

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Introduction

In the hydraulic transmission system, power is transmitted and controlled by the pressurized fluid in a closed circuit. The typical circuit in the system is composed of hydraulic

Valves or hydraulic superimposed valves. The circuit composed of these valves controls the direction, pressure, or flow of the fluid.

Hydraulic transmission specifications 02, 03, 05, 07, 08 and 10

Clamping size of four-port stacking valve and directional control valve

1 Scope

This standard specifies the specifications of 02, 03, 05, 07, 08 and 10, which conform to the four-port stacking valve and the four-port valve specified on the ISO 4401 mounting surface.

The clamping size of the directional control valve to ensure the interchangeability of the same specification valve and reduce the number of fasteners.

This standard is applicable to the clamping size of the four-port superimposed valve and the four-port directional control valve of commonly used industrial equipment.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

ISO 4401 Hydraulic fluid power-Four-port directional control valve mounting surface
(Hydraulicfluidpower-Four-portdirectional
controlvalves-Mountingsurfaces)

ISO 5598 Fluid power systems and components-Vocabulary
(Fluidpowersystemsandcomponents-Vocabulary)

ISO 5783 hydraulic fluid power valve mounting surface and cartridge valve hole
identification code (Hydraulicfluidpower-Codeforidenti-
ficationofvalvemountingsurfacesandcartridgevalvecavities)

3 Terms and definitions

The terms and definitions defined in ISO 5598 apply to this document.

4 symbols

The following symbols apply to this document.

- a) H1. The clamping length of the fastener on the directional control valve;
- b) H2. The total height of the stacking valve.

5 Tolerance

The tolerances and other data of the two mounting surfaces of a superimposed valve and another superimposed valve or directional control valve shall meet the requirements of ISO 4401.

6 size

The specification codes given in Figure 1, Table 1 and Table 2 are based on the four-port stacking valve and direction control of 02, 03, 05, 07, 08 and 10 in ISO 5783.

The clamping size of the control valve.

Table 1 lists the preferred sizes and applies to the design of new valves. Table 2 lists the valve sizes currently in use, but they are no longer used

Non-optimal dimensions of the new valve design. The mounting surface should meet the requirements of ISO 4401.