

ICS 23.100.50
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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 2514-2008

Replacing GB/T 8099-1987; GB/T 2514-1993

**Hydraulic fluid power -- Four-port directional control valves --
Mounting surfaces**

液压传动 四油口方向控制阀安装面

(English Translation)

Issued on: February 28, 2008

Implemented on: August 1, 2008

Issued by: Standardization Administration of China

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Foreword

This revised standard adopts ISO 4401:2005 "Hydraulic Four - port directional control valve mounting surface" (in English).

This standard and ISO 4401:2005 technical content is basically the same, only the following minor modifications.

- Remove introduction of international standards and references;
- The corresponding reference standards in place of national standards with international standards;
- Delete all tables on the required pressure "Notes to Table";
- The figures of "footnote" content into Chapter 7; Chapter 7 title changed to "technical requirements";
- Delete Table 2, Table 3, Table 8 "NOTE. The backplane connector should consider port seal";
- Table 9, G1 hole x0 axis position size 138.6 to 147.6.

This standard replaces GB/T 2514-1993 "Hydraulic fluid power - Four - port directional control valve mounting surfaces", GB/T 8099-1987 "hydraulic superimposed Valve mounting surface, "compared with its main changes are as follows.

- Change the code representation of the mounting surface.
- The main ports were changed to a maximum diameter 4,6.3,23.4 4.5,7.5,25.

The standard proposed by China Machinery Industry Federation.

This standard by the National Standardization Technical Committee of hydraulic and

pneumatic (SAC/TC3) centralized.

1 Scope

This standard specifies the hydraulic four - port directional control valve mounting surface dimensions and related data.

This standard applies to hydraulic four - port directional control valve and its connecting plate or manifold.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 1031 surface roughness parameters and their values GB/T 1182 General shape and position tolerances, definitions, symbols, indications on drawings (GB/T 1182-1996, eqv ISO 1101.

1996)

GB/T 1800.4-1999 Limits and fits standard tolerance grades and limit deviations for holes and shafts of (eqv ISO 286-2. 1988) GB/T 14043-2005 Hydraulic valve mounting surfaces and cartridge valve cavities identification code (ISO 5783:1995, IDT) GB/T 17446 Fluid power systems and components Terminology (GB/T 17446-1998, idt ISO 5598. 1985)

3 Terms and definitions

GB/T 17446 to determine the terms and definitions apply to this standard.

4 Symbol

4.1

Standard, the following letter symbols.

- a) A, B, L, P, T, T1, X, and Y represents a port;
- b) F1, F2, F3, F4, F5 and F6 represent a threaded hole;
- c) G, G1, G2 represents dowel hole.

4.2

standards adopted in line with the mounting surface Code GB/T 14043-2005 predetermined code rule.

5 Tolerance

5.1

mounting surface (that is, in an area chart crude within dotted line) using the following values.

- a) Surface roughness. according to GB/T 1031 regulations, $R_{Ra} \leq 0.8\mu\text{m}$;
- b) surface flatness. according to GB/T 1182 provides that any $100 \times 100\text{mm}^2$ range of 0.01mm ;
- c) locating pin hole diameter tolerance. according to GB/T 1800.4-1999 prescribed H12.

5.2

starting from the origin of coordinates along the x0 axis and y-axis position of the hole size tolerance as follows.

- a) locating pin hole. $\pm 0.1\text{mm}$;
- b) a threaded hole. $\pm 0.1\text{mm}$;
- c) Port. $\pm 0.2\text{mm}$.

6 Mounting surface and code size

6.1

Main port maximum diameter of 4.5 m1 m1 four-port control valve mounting surface (port Specification code. 02)

- a) mounting surface Code. GB/T 2514-02-01-0-2008;
- b) dimensions shown in Figure 1, Table 1.