

INTERNATIONAL STANDARD

ISO
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Hydraulic fluid power — Code for identification of valve mounting surfaces and cartridge valve cavities

*Transmissions hydrauliques — Code pour l'identification des plans de pose
et des logements de cartouche*



Reference number
ISO 5783:1995(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 5783 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 5, *Control products and components*.

This second edition cancels and replaces the first edition (ISO 5783:1981), which has been technically revised.

Annex A of this International Standard is for information only.

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Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. The control and regulation of the fluid are accomplished by valves which can be directly connected to fluid conductors, mounted on sub-plates, or installed as screw-in or slip-in cartridges in cavities.

Hydraulic fluid power — Code for identification of valve mounting surfaces and cartridge valve cavities

1 Scope

This International Standard defines an identification code for hydraulic valve mounting surfaces and for hydraulic cartridge valve cavities that are defined in International Standards.

Mounting surfaces and cartridge valve cavities that do not conform to International Standards should not be identified by this code.

This International Standard does not require that the hardware be marked with the identification code.

2 Identification code

Designate the mounting surfaces or the cartridge cavities by the five groups of numbers indicated below, written in the order given, and separated by spaced hyphens:

- a) the number of the International Standard in which the mounting surface or the cartridge cavity is described;
- b) two numerals representing
 - either the size of the valve mounting surface (see clause 3),
 - or the size of the slip-in cartridge valve (see clause 3),
 - or the cavity thread diameter of the screw-in cartridge valve;
- c) two numerals indicating which figure in the International Standard describes the mounting surface or the cavity;
- d) one numeral indicating whether an option exists
 - numeral 0 is used for the basic version,
 - numerals 1 to 9 are used to indicate all the different options;
- e) two numerals indicating the year of the latest edition of the International Standard that defines the specific mounting surface or cavity.

3 Size code

A size code shall be established in accordance with table 1 at the time a valve mounting surface or a slip-in cartridge valve cavity is first standardized, or when the codification defined in this International Standard is first applied to an existing standard. Any subsequent changes to the main port diameter shall not affect the size code.

Table 1 — Size code

| Size | Diameter of main port mm |
|------|------------------------------|
| 00 | $0 < \varnothing \leq 2,5$ |
| 01 | $2,5 < \varnothing \leq 4$ |
| 02 | $4 < \varnothing \leq 6,3$ |
| 03 | $6,3 < \varnothing \leq 8$ |
| 04 | $8 < \varnothing \leq 10$ |
| 05 | $10 < \varnothing \leq 12,5$ |
| 06 | $12,5 < \varnothing \leq 16$ |
| 07 | $16 < \varnothing \leq 20$ |
| 08 | $20 < \varnothing \leq 25$ |
| 09 | $25 < \varnothing \leq 32$ |
| 10 | $32 < \varnothing \leq 40$ |
| 11 | $40 < \varnothing \leq 50$ |
| 12 | $50 < \varnothing \leq 63$ |
| 13 | $63 < \varnothing \leq 80$ |
| 14 | $80 < \varnothing \leq 100$ |

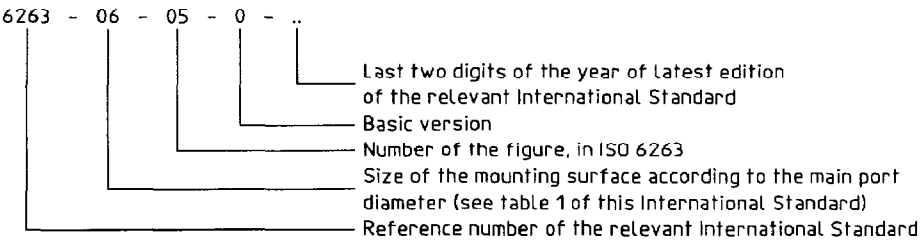
4 Examples of use of the code

Examples are given for each valve type.

NOTE 1 The options should be duly numbered (from 0 to 9) on the figures or tables of each valve mounting surfaces or cavity in the International Standards.

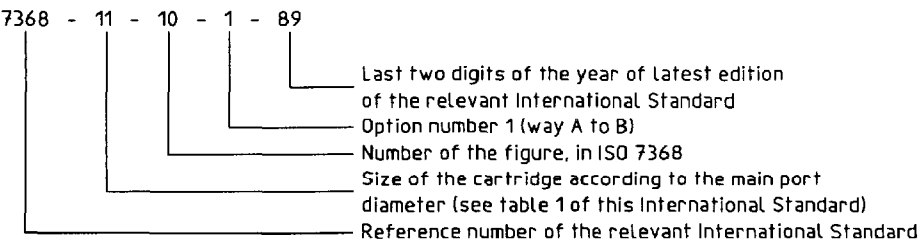
4.1 Mounting surface

Designate the mounting surface of compensated flow-control valves, with main ports of maximum diameter 14,7 mm, and flow from A to B, such as described in figure 5 of ISO 6263:— (see reference [1]), as follows:



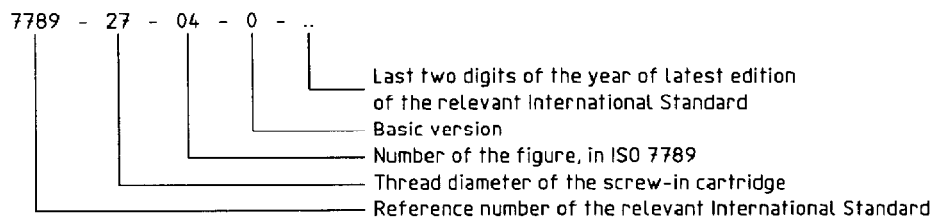
4.2 Slip-in cartridge cavity

Designate the cavity of two-port slip-in cartridge pressure-relief valves with main ports of 50 mm (size 11), and flow from A to B, such as described in figure 10 of ISO 7368:1989, as follows:



4.3 Screw-in cartridge cavity

Designate the cavity of three-port screw-in cartridge valves, with 6 mm to 20,5 mm maximum port diameter and 27 mm cavity thread diameter, such as described in figure 4 of ISO 7789:— (see reference [4]), as follows:



5 Identification statement (Reference of this International Standard)

Use the following statement in test reports, catalogues and sales literature when electing to comply with this International Standard:

“Mounting surface or cartridge cavity identification code in accordance with ISO 5783:1995, *Hydraulic fluid power — Code for identification of valve mounting surfaces and cartridge valve cavities*”.

Annex A

(informative)

Bibliography

- [1] ISO 6263:—¹⁾, *Hydraulic fluid power — Compensated flow-control valves — Mounting surfaces.*
- [2] ISO 6264:1987, *Hydraulic fluid power — Pressure-relief valves — Mounting surfaces.*
- [3] ISO 7368:1989, *Hydraulic fluid power — Two-port slip-in cartridge valves — Cavities.*
- [4] ISO 7789:—²⁾, *Hydraulic fluid power — Two-, three- and four-port screw-in cartridge valves — Cavities.*

1) To be published. (Revision of ISO 6263:1987)

2) To be published.

ICS 23.100.30

Descriptors: hydraulic fluid power, hydraulic valves, mounting surfaces, identification methods, codes, numeric codes, designation.

Price based on 4 pages
