

INTERNATIONAL
STANDARD

ISO
4399

Second edition
1995-05-01

**Fluid power systems and components —
Connectors and associated components —
Nominal pressures**

*Transmissions hydrauliques et pneumatiques — Raccords et éléments
associés — Pressions nominales*



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 4399 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This second edition cancels and replaces the first edition (ISO 4399:1977), which has been technically revised.

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Introduction

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within a circuit. Systems and components are generally designed and marketed for use at a specific fluid pressure level.

Components are connected through their ports and associated fluid conductor fitting ends.

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Fluid power systems and components — Connectors and associated components — Nominal pressures

1 Scope

This International Standard specifies a selection of nominal pressures for hydraulic and pneumatic fluid power connectors and associated components.

NOTE 1 There may be a need to provide a selection of nominal pressures for connectors and associated components used in applications where the external pressure on the components is greater than the internal pressure, for example vacuum service. An International Standard that deals with this subject will be established in due course.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2944:1974, *Fluid power systems and components — Nominal pressures*.

ISO 5598:1985, *Fluid power systems and components — Vocabulary*.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 5598 and the following definition apply.

3.1 nominal pressure: A pressure value assigned to a component or a system for the purpose of convenient designation.

NOTE 2 This definition is the same as that used in ISO 2944 and is intended solely to complete this International Standard. A more comprehensive definition for general purposes may be established subsequently.

4 Units

4.1 Nominal pressures shall be expressed in kilopascals (kPa) or megapascals (MPa), depending on the pressure level, with the equivalent value in bars¹⁾ in parentheses.

4.2 The nominal pressure shall be assumed to be gauge pressure, i.e. the pressure above atmospheric pressure, when no modifier is given.

4.3 Nominal pressures other than those specified here shall be selected from ISO 2944.

1) 1 bar = 100 kPa = 0,1 MPa

5 Nominal pressures

Nominal pressures for connectors and associated components shall be selected from table 1.

Table 1 — Nominal pressures (gauge)

0,25 MPa	(2,5 bar)
0,63 MPa	(6,3 bar)
1 MPa	(10 bar)
1,6 MPa	(16 bar)
2,5 MPa	(25 bar)
4 MPa	(40 bar)
6,3 MPa	(63 bar)
10 MPa	(100 bar)
16 MPa	(160 bar)
20 MPa	(200 bar)
25 MPa	(250 bar)
31,5 MPa	(315 bar)
[35 MPa]	[(350 bar)]
40 MPa	(400 bar)
50 MPa	(500 bar)
63 MPa	(630 bar)

NOTE — Non-preferred values are shown in square brackets.

6 Identification statement (Reference to this International Standard)

Use the following statement in test reports, catalogues and sales literature when electing to comply with this International Standard: "Nominal pressures for connectors and associated components selected from ISO 4399:1995, *Fluid power systems and components — Connectors and associated components — Nominal pressures.*"

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Descriptors: hydraulic fluid power, pneumatic fluid power, fluid circuits, pipe fittings, pipe joints, standard couplings, connectors, components, ratings, pressure.

Price based on 2 pages