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

Transmissions hydrauliques et pneumatiques — Raccords et composants associés — Pressions nominales

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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

This third edition cancels and replaces the second edition (ISO 4399:1995), which has been technically revised. The main changes compared to the previous edition are as follows:

— The complete document was reformatted and Table 1 was updated with the most commonly used pressures for connectors.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit.

Components may be connected through their ports by connections (fittings) and conduits. Tubes are rigid conduits.

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

1 Scope

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

NOTE There can 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. A document that deals with this subject will be established in due course.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO 5598, *Fluid power systems and components — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5598 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
nominal pressure
pressure value assigned to a component, piping or a system for the purpose of convenient designation and indicating its belonging to a series

[SOURCE: ISO 2944:2000, 3.1]

4 Units

4.1 When used in a sentence, the nominal pressure shall be expressed in megapascals (MPa), with the equivalent value in bar[1)] shown 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