# PD ISO/TR 10946:2019



**BSI Standards Publication** 

Hydraulic fluid power — Gas-loaded accumulators with separator — Selection of preferred hydraulic ports



# National foreword

This Published Document is the UK implementation of ISO/TR 10946:2019. It supersedes BS ISO 10946:1999, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/18, Fluid power systems and components.

A list of organizations represented on this committee can be obtained on request to its secretary.

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# Hydraulic fluid power — Gas-loaded accumulators with separator — Selection of preferred hydraulic ports

Transmissions hydrauliques — Accumulateurs hydropneumatiques avec séparateur — Sélection des orifices hydrauliques préférentiels



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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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 <u>www.iso</u> .org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*.

This first edition cancels and replaces ISO 10946:1999, which has been technically revised.

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 <u>www.iso.org/members.html</u>.

# Introduction

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

Gas-loaded accumulators are components that are able to store and to return energy in accordance with the principle of the compressibility of gases. Hydraulic fluid enters and leaves these accumulators through ports.

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# Hydraulic fluid power — Gas-loaded accumulators with separator — Selection of preferred hydraulic ports

# 1 Scope

This document specifies the types and selection of hydraulic ports of gas-loaded accumulators with separator, which are used in hydraulic fluid power systems.

## 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 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:

- IEC Electropedia: available at <u>http://www.electropedia.org/</u>
- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>

#### 3.1

#### bladder type accumulator

gas-loaded accumulator in which the liquid and gas are separated by a flexible bag or bladder that is normally retained at one end of the shell

### 3.2

### diaphragm type accumulator

gas-loaded accumulator in which the liquid and gas are separated by a flexible membrane that is normally retained at its largest diameter to the shell

#### 3.3

#### piston type accumulator

gas-loaded accumulator in which the liquid and gas are separated by a rigid sliding piston

#### 3.4

## reducing bush

interface between accumulator and its connection to the hydraulic circuit