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**Pneumatic fluid power — Electro-  
pneumatic pressure control valves —**

**Part 2:**

**Test methods to determine main  
characteristics to include in the  
supplier's literature**

*Transmissions pneumatiques — Appareils électropneumatiques de  
distribution à commande continue de pression —*

*Partie 2: Méthodes d'essai pour déterminer les principales  
caractéristiques à inclure dans la documentation des fournisseurs*



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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 10094-2 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 5, *Control products and components*.

ISO 10094 consists of the following parts, under the general title *Pneumatic fluid power — Electro-pneumatic pressure control valves*:

- *Part 1: Main characteristics to include in the supplier's literature*
- *Part 2: Test methods to determine main characteristics to include in the supplier's literature*

## Introduction

In pneumatic fluid power systems, power is transmitted and controlled through a gas under pressure within a circuit.

When pressure tracking or pressure regulation is required, electro-pneumatic continuous pressure control valves can be used to track a variable set point with low tracking error or to maintain the pressure of the gas at an approximately constant level.

These control valves continuously modulate the pneumatic power of a system in response to a continuous electrical input signal and link the electrical input value to a proportional pressure value.

It is therefore necessary to know some performance characteristics of these electro-pneumatic continuous pressure control valves in order to determine their suitability.

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# Pneumatic fluid power — Electro-pneumatic pressure control valves —

## Part 2:

## Test methods to determine main characteristics to include in the supplier's literature

### 1 Scope

This part of ISO 10094 specifies the test procedures and a method of presenting the results concerning the parameters which define the main characteristics to be included in the supplier's literature of the electro-pneumatic continuous pressure control valves, conforming to ISO 10094-1.

The purpose of this part of ISO 10094 is:

- to facilitate the comparison by standardizing the test methods and the presentation of the test results, and
- to assist in the proper application of these components in compressed air systems.

The specified tests are intended to allow comparison between the different types of continuous pressure control valves; these are not production tests to be carried out on each manufactured product.

NOTE 1 The tests related to non-electrically modulated pneumatic continuous pressure control valves are specified in ISO 6953-2.

NOTE 2 The tests related to electro-pneumatic continuous flow control valves are specified in ISO 10041-2.

NOTE 3 The tests described in this part of ISO 10094 are realised on components with an exhaust port vented to the atmosphere.

### 2 Normative references

The following referenced documents are indispensable for the application 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*

ISO 6358-1<sup>1)</sup>, *Pneumatic fluid power — Determination of flow-rate characteristics of components — Part 1: General rules and test methods for steady-state flow*

ISO 6953-1, *Pneumatic fluid power — Compressed air pressure regulators and filter-regulators — Part 1: Main characteristics to be included in literature from suppliers and product-marking requirements*

ISO 10094-1:2010, *Pneumatic fluid power — Electro-pneumatic pressure control valves — Part 1: Main characteristics to include in the supplier's literature*

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