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## **Pneumatic fluid power — Electro- pneumatic continuous flow control valves —**

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

*Transmissions pneumatiques — Distributeurs électropneumatiques à  
commande continue de débit —*

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



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## Contents

Page

Foreword .....	iv
Introduction.....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	2
4 Symbols and units.....	2
5 Test conditions .....	3
5.1 Gas supply .....	3
5.2 Temperature .....	3
5.3 Pressures .....	3
5.4 Electrical supply .....	3
6 Test procedure.....	3
6.1 Test conditions .....	3
6.2 Inlet pressure .....	3
6.3 Static tests .....	3
7 Tests to determine control signal-flow rate characteristics .....	4
7.1 Test circuits .....	4
7.2 Test procedures.....	7
7.3 Calculation of characteristics .....	12
8 Test to determine flow rate characteristics .....	14
8.1 Test circuit .....	14
8.2 Test procedures.....	14
8.3 Calculation of global characteristics.....	15
9 Test to determine pressure gain characteristics .....	16
9.1 General .....	16
9.2 Test circuit .....	16
9.3 Test procedure.....	17
9.4 Characteristic curve of pressure gain at null operating flow rate.....	17
10 Test to determine leakage at null operating flow rate characteristics.....	18
10.1 Test circuit .....	18
10.2 Test procedure.....	18
10.3 Calculation of characteristic .....	18
11 Test to determine dynamic characteristics .....	19
11.1 Test installation .....	19
11.2 Test to determine frequency response .....	19
11.3 Test to determine step responses .....	20
12 Presentation of test results .....	22
12.1 General .....	22
12.2 Control signal-flow rate characteristics.....	22
12.3 Global flow rate characteristics .....	23
12.4 Pressure gain characteristics at null operating flow rate .....	23
12.5 Leakage characteristic at null operating flow rate.....	23
12.6 Dynamic characteristics .....	23
13 Identification statement (reference to this part of ISO 10041) .....	24
Bibliography.....	25

## 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 10041-2 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 5, *Control products and components*.

ISO 10041 consists of the following parts, under the general title *Pneumatic fluid power — Electro-pneumatic continuous flow 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*

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## Introduction

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

Electro-pneumatic continuous flow control valves continuously modulate the pneumatic power of a system in response to a continuous electrical control signal and link the electrical control quantity to the effective section of each variable port of the output stage (flow rate stage). The mass flow rate that crosses each restriction depends on the downstream and upstream pressures and the type of gas.

When control of position or force, including position- or force-tracking of a pneumatic cylinder, is required, electro-pneumatic continuous flow control valves can be used to precisely modulate the mass flow rates entering or exiting each cylinder chamber, resulting in a precise positioning. It is therefore necessary to know some performance characteristics of these electro-pneumatic continuous flow control valves in order to determine their suitability for a particular application.