Third edition 2015-03-01

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

Transmissions pneumatiques — Régulateurs de pression et filtresrégulateurs pour air comprimé —

Partie 1: Principales caractéristiques à inclure dans la documentation des fournisseurs et exigences de marquage du produit



Reference number ISO 6953-1:2015(E)

ISO 6953-1:2015(E)

This is a preview of "ISO 6953-1:2015". Click here to purchase the full version from the ANSI store.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Co	Contents Pag				
ForewordIntroduction				iv	
				v	
1	Scon	e		1	
_	•				
2			ferences		
3	Tern	ıs and de	finitions	2	
4	Technical requirements			2	
	4.1 General				
	4.2	Genera	l characteristics	3	
		4.2.1	General dimensions	3	
		4.2.2	Port forms		
		4.2.3	Rated pressure		
		4.2.4	Range of operating temperatures		
	4.3		lar requirements		
		4.3.1	General		
		4.3.2	Adjustable pressure ranges (outlet regulated pressure)		
		4.3.3	Flow-pressure characteristics		
		4.3.4	Pressure regulation characteristic		
		4.3.5	Pilot pressure/regulated pressure characteristics		
		4.3.6 4.3.7	Repeatability (optional characteristic)		
		4.3.7 4.3.8	Maximum air consumption at null forward flow rate or relief flow rate for		
		4.5.0	operated regulator with air bleed		
		4.3.9	Useful retention capacity of the reservoir		
		4.3.10	Filter-regulator draining devices		
		4.3.11	Materials of construction		
_	Onor				
5	Operation and maintenance				
6	Marking				
7	Identification statement (Reference to ISO 6953)			10	
Ann	ex A (in	formative	e) Port forms from ISO 1179-1:1981	11	
Bibliography				12	

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.

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: Foreword — Supplementary information.

The committee responsible for this document is ISO/TC 131, *Fluid power systems*, Subcommittee SC 5, *Control products and components*.

This third edition cancels and replaces the second edition (ISO 6953-1:2000), which has been technically revised. It also incorporates ISO 6953-1:2000/Cor 1:2006.

ISO 6953 consists of the following parts, under the general title *Pneumatic fluid power — Compressed air pressure regulators and filter-regulators*:

- Part 1: Main characteristics to be included in the supplier's literature and product-marking requirements
- Part 2: Test methods to determine the main characteristics to be included in supplier's literature
- Part 3: Alternative test methods for measuring the flow-rate characteristics of pressure regulators

Introduction

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

When pressure reduction or pressure regulation is required, regulators and filter-regulators are components designed to maintain the pressure of the gas at an approximately constant level.

It is therefore necessary to know some performance characteristics of these components in order to determine their suitability for an application.