

First edition 2003-11-15

# Hydraulic fluid power — Electrically controlled hydraulic pumps — Test methods to determine performance characteristics

Transmissions hydrauliques — Pompes hydrauliques à commande électrique — Méthodes d'essai pour déterminer les caractéristiques de fonctionnement



### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

### © ISO 2003

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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

Contents		Page	
1	Scope	1	
2	Normative references	1	
3	Terms and definitions	1	
4	Symbols	2	
5	Test installation — General requirements	2	
5.1	General	2	
5.2	General test apparatus	4	
6	General test conditions	5	
6.1	Test fluid	5	
6.2	Ambient conditions	5	
6.3	Steady-state conditions	5	
7	Tests of steady-state performance characteristics	5	
7.1	General	5	
7.2	Flow/pressure characteristics	5	
7.3 and	Characteristic test on output pressure against input pressure command signal: test procedure presentation of test results	€ 7	
	Characteristic test of output flow against input flow signal — Test procedure and expression or results		
7.5	Repeatability test	9	
7.6	Test for change in characteristics against oil temperature	12	
8	Tests of dynamic performance characteristics	13	
8.1	General	13	
8.2	Pressure compensator response and recovery	13	
8.3 of te	Test of step response versus output pressure — Test procedure and presentation est results	14	
8.4	Test of step response versus output flow — Test procedure and presentation of test results .	15	
8.5	Frequency response	16	
Ann	ex A (normative) Classes of measurement accuracy	19	
Bibl	Bibliography		

## **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 17559 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 8, *Product testing*.

# Introduction

This International Standard is intended to unify testing methods of positive-displacement electrically and electronically controlled hydraulic pumps so as to allow comparison of the performance of different components.

Requirements for test installations, procedures and expression of results are described.

This is a preview of "ISO 17559:2003". Click here to purchase the full version from the ANSI store.