
Hydraulic fluid power — Marking of performance characteristics on hydraulic filters

*Transmissions hydrauliques — Marquage des caractéristiques de
performance sur les filtres hydrauliques*



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.

This document is a preview generated by EVS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2010

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

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols, abbreviated terms and units	2
5 Filtration characteristics communicated	2
5.1 Filter elements	2
5.2 Spin-on filters	3
6 General layout of filter marking symbols	3
7 Marking of filtration characteristics	4
7.1 General	4
7.2 Characteristics determined by multi-pass testing	4
7.3 Characteristics determined by collapse/burst pressure testing	5
7.4 Characteristics determined by evaluation of differential pressure versus flow	6
7.5 Characteristics determined by fatigue pressure testing of spin-on filters	7
8 Marking to show installation procedures for spin-on filters	8
9 Identification statement (reference to this International Standard)	8
Annex A (informative) Examples of marking of filtration characteristics on hydraulic filters	9

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 27407 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 6, *Contamination control*.

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a fluid under pressure in a closed circuit. Filters demonstrating unique characteristics are used to protect the system by removing insoluble contaminants. Marking these characteristics on filters can help users identify and compare filters, making it easier to select one appropriate for an application.

This document is a preview generated by EVS

This document is a preview generated by EVS

Hydraulic fluid power — Marking of performance characteristics on hydraulic filters

1 Scope

This International Standard specifies a means of marking filters to communicate filter performance characteristics of interest to users. This marking can be used with either the standards referenced in this International Standard or with any standard that has been harmonized with any referenced standard. This International Standard applies to the marking of information only on the filter; the customer can request that the same information be specified on the product drawing or as part of the product packaging.

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 1219-1, *Fluid power systems and components — Graphic symbols and circuit diagrams — Part 1: Graphic symbols for conventional use and data-processing applications*

ISO 2941, *Hydraulic fluid power — Filter elements — Verification of collapse/burst pressure rating*

ISO 3968, *Hydraulic fluid power — Filters — Evaluation of differential pressure versus flow characteristics*

ISO 5598, *Fluid power systems and products — Vocabulary*

ISO 16889, *Hydraulic fluid power — Filters — Multi-pass method for evaluating filtration performance of a filter element*

ANSI/(NFPA)T3.10.17-1995 (R2004), *Finite life hydraulic filter pressure/life rating — Method for verifying the fatigue life rating and the burst pressure rating of the pressure containing envelope of a spin-on hydraulic filter*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5598 apply.