

This is a preview of "ISO 9906:2012". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2012-05-01

Rotodynamic pumps — Hydraulic performance acceptance tests — Grades 1, 2 and 3

Pompes rotodynamiques — Essais de fonctionnement hydraulique pour la réception — Niveaux 1, 2 et 3



Reference number
ISO 9906:2012(E)

© ISO 2012

This is a preview of "ISO 9906:2012". [Click here to purchase the full version from the ANSI store.](#)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2012

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

This is a preview of "ISO 9906:2012". [Click here to purchase the full version from the ANSI store.](#)

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols and subscripts	1
3.1 Terms and definitions	1
3.2 Terms relating to quantities	3
3.3 Symbols and subscripts	9
4 Pump measurements and acceptance criteria	10
4.1 General	10
4.2 Guarantees	11
4.3 Measurement uncertainty	11
4.4 Performance test acceptance grades and tolerances	15
4.5 Default test acceptance grades for pump application	21
5 Test procedures	22
5.1 General	22
5.2 Date of testing	22
5.3 Test programme	22
5.4 Testing equipment	22
5.5 Records and report	22
5.6 Test arrangements	23
5.7 Test conditions	23
5.8 NPSH tests	23
6 Analysis	26
6.1 Translation of the test results to the guarantee conditions	26
6.2 Obtaining specified characteristics	27
Annex A (normative) Test arrangements	28
Annex B (informative) NPSH test arrangements	37
Annex C (informative) Calibration intervals	40
Annex D (informative) Measurement equipment	41
Annex E (informative) Tests performed on the entire equipment set — String test	46
Annex F (informative) Reporting of test results	48
Annex G (informative) Special test methods	52
Annex H (informative) Witnessed pump test	53
Annex I (informative) Conversion to SI units	54
Annex J (informative) Measurement uncertainty for NPSH test	56
Bibliography	57

This is a preview of "ISO 9906:2012". [Click here to purchase the full version from the ANSI store.](#)

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 9906 was prepared by Technical Committee ISO/TC 115, *Pumps*, Subcommittee SC 2, *Methods of measurement and testing*.

This second edition cancels and replaces the first edition (ISO 9906:1999), which has been technically revised.

This is a preview of "ISO 9906:2012". [Click here to purchase the full version from the ANSI store.](#)

Introduction

The tests in this International Standard are intended to ascertain the performance of the pump and to compare this with the manufacturer's guarantee.

The nominated guarantee for any quantity is deemed to have been met if, where tested according to this International Standard, the measured performance falls within the tolerance specified for the particular quantity (see 4.4).