

INTERNATIONAL
STANDARD

ISO
4411

Third edition
2019-10

**Hydraulic fluid power — Valves
— Determination of differential
pressure/flow rate characteristics**

*Transmissions hydrauliques — Distributeurs — Détermination des
caractéristiques de pression différentielle/débit*



Reference number
ISO 4411:2019(E)

© ISO 2019



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, 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
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: 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 and units	2
5 Test installations	2
5.1 Selection, calibration and installation of equipment	2
5.2 Test circuit	2
5.3 Pressure-tapping points	4
6 Test procedures	5
6.1 Measurement accuracy	5
6.2 Test fluid	5
6.3 Temperatures	5
6.4 Steady-state conditions	5
6.5 Procedure	6
6.6 Pressure differential calculation	6
6.7 Presentation of the test results	6
6.7.1 General	6
6.7.2 Presentation	6
7 Identification statement (Reference to this document)	7
Annex A (informative) Use of practical units	8
Annex B (informative) Pre-test checklist	9
Bibliography	10