

Second edition
2023-07

Hydraulic fluid power — Dimensions and requirements of quick-action couplings

*Transmissions hydrauliques — Dimensions et exigences des raccords
rapides*



Reference number
ISO 7241:2023(E)

© ISO 2023



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

This is a preview of ISO 7241:2023. [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 and definitions	1
4 Dimensional requirements	2
5 Performance requirements	6
6 Additional requirements for Series A quick-action couplings for use in agricultural machinery applications	7
6.1 General.....	7
6.2 Connecting and disconnecting.....	8
6.3 Fluid loss.....	8
6.4 Valve performance.....	8
7 Workmanship	8
8 Designation	8
9 Marking	9
10 Identification statement (reference to this document)	9
Bibliography	10

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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 131, *Fluid power systems*, Subcommittee SC 4, *Connectors and similar products and components*.

This second edition cancels and replaces the first edition (ISO 7241:2014), which has been technically revised.

The main changes are as follows:

- nominal size designations 20, 40, 50 have been replaced by 19, 38, 51 in accordance with ISO 4397;
- impulse pressure test type has been added in accordance with ISO 6803;
- a mistake in [Table 7](#) has been corrected (two values were inverted);
- minor graphical updates.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This is a preview of ISO 7241:2023. [Click here to purchase the full version from the ANSI store.](#)

Introduction

In hydraulic fluid power systems, power is transmitted and controlled through a liquid under pressure within an enclosed circuit. Quick-action couplings are used to join or separate fluid conductors quickly and without the use of tools or special devices.

When hydraulic quick-action couplings are used on agricultural machinery, the female half is normally assembled on the tractor and the male half is normally assembled on the tractor attachment.