

Pneumatic fluid power — Connections — Ports and stud ends

ICS 23.100.40

National foreword

This British Standard reproduces verbatim ISO 16030:2001, including amendment 1:2005, and implements it as the UK national standard.

The start and finish of text introduced or altered by ISO amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to ISO text carry the number of the ISO amendment. For example, text altered by ISO amendment 1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee MCE/18, Fluid power systems and components, to Subcommittee MCE/18/-/4, Connectors and associated components, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to v, a blank page, pages 1 to 13 and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

This British Standard, having been prepared under the direction of the Engineering Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 1 March 2002

© BSI 25 January 2006

ISBN 0 580 39043 8

Amendments issued since publication

Amd. No.	Date	Comments
15714	25 January 2006	See national foreword

INTERNATIONAL STANDARD

**ISO
16030**

First edition
2001-12-15

Pneumatic fluid power — Connections — Ports and stud ends

Transmissions pneumatiques — Raccordements — Orifices et éléments mâles



Reference number
ISO 16030:2001(E)

AVA Documents
Document Sharing Hub

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	2
5.1 Rated pressure range.....	2
5.2 Rated temperature range	2
5.3 Performance verification.....	2
5.4 Sealing devices	2
6 Test methods	2
6.1 General.....	2
6.2 Burst pressure test.....	3
6.3 Leakage test	3
6.4 Cyclic endurance (impulse) test	4
6.5 Overtorque capability test	4
6.6 Long-term creep test	5
7 Designation	5
8 Identification statement (reference to this International Standard)	6
Annex A (informative) Examples of sealing methods	10
Annex B (informative) Distances between centrelines of ISO 16030 ports.....	11
Bibliography	13

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 3.

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 International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 16030 was prepared by Technical Committee ISO/TC 131, *Fluid power systems*.

Annexes A and B of this International Standard are for information only.

Introduction

In pneumatic fluid power systems, power is transmitted and controlled through air under pressure within a circuit.

Components are connected through their threaded ports by means of connectors to tubes and pipes or to hose fittings and hoses. Ports are an integral part of fluid power components, such as valves, cylinders and filters.

In the past, various thread and port systems (for example ISO 7-1 and ISO 1179:1981) have been used in pneumatic fluid power systems. See the scope of this International Standard for further information on the relationship between those standards and this International Standard. Where ISO 7-1 tapered external threads are intended to connect to pneumatic components with internal threads, the ports in those components should conform to ISO 1179:1981.