Australian Standard®

FLUID POWER—PNEUMATIC SYSTEMS AND COMPONENTS

This Australian standard was prepared by Committee ME/35, Fluid Power Systems and Components. It was approved on behalf of the Council of the Standards Association of Australia on 6 February 1985 and published on 10 May 1985.

The following interests are represented on Committee ME/35:

Australian Institute of Petroleum Limited

Australian Mining Industry Council

Australian Pneumatic and Hydraulic Association

Bureau of Steel Manufacturers of Australia

Confederation of Australian Industry

Department of Defence Support

Department of Industrial Relations, N.S.W.

Department of Technical and Further Education, N.S.W.

Federal Chamber of Automotive Industries

Fluid Power Society Australia

Metal Trades Industry Association of Australia

Royal Melbourne Institute of Technology

REPRESENTATIVES OF OTHER SELECTED PNEUMATIC EQUIPMENT MANUFACTURERS ALSO PARTICIPATED IN THE DRAFTING OF THIS STANDARD.

Review of Australian Standards. *To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.*

Full details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This standard was issued in draft form for comment as DR 83288.

Australian Standard®

FLUID POWER—PNEUMATIC SYSTEMS AND COMPONENTS

First published 1985

Incorporating:
Amdt 1—1985

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 3715 9

PREFACE

This standard was prepared by the Association's Committee on Fluid Power Systems and Components. It supersedes AS B203-1964, Pneumatic Systems for Industrial Equipment, and is based on ISO 4414, Pneumatic Fluid Power — Recommendations for the Application of Equipment to Transmission and Control Systems.

The standard is generally in technical agreement with ISO 4414 except in the following areas:

(a) Reference has been made to Australian standards such as AS 1210 and AS 2030 rather than detailing the various statutory requirements in this standard.

(b) The table covering additional information to be given on components has been varied in the information to be provided.

(c) The clause on automatic controls has been deleted.

(d) In many instances throughout the standard, minor amendments have been made where such amendments were considered to be less ambiguous, more practical, and conforming to normal acceptable practices in Australia.

The standard has been rearranged to bring it into conformity with the format adopted for Australian Standards.

CONTENTS

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

for

FLUID POWER—PNEUMATIC SYSTEMS AND COMPONENTS

FOREWORD

This standard specifies requirements for the design, manufacture and application of pneumatic control systems and components. It is a source of fundamental design principles for application by responsible and competent persons or organizations. It has no legal authority in its own right, but it may acquire legal standing in one or more of the following ways:

(a) Adoption by a Statutory Authority.

(b) Reference to compliance with the standard as a contract requirement.

(c) Claim, by a manufacturer and/or manufacturer's agent, of compliance with the standard.

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard specifies requirements for the design, construction, testing, operation, maintenance and installation of pneumatic power transmission and control systems and components.

1.2 APPLICATION. Use of this standard should assist—

(a) a manufacturer in producing acceptable pneumatic systems to his own design or to a customer's specification;

(b) A purchaser in comparing the relative merits of similar pneumatic systems;

(c) authorities in establishing safety requirements and safe practices; and

(d) ease and economy of maintenance.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1101 Graphical Symbols for General Engineering
Part 1—Hydraulic and Pneumatic Systems

AS 1102 Graphic Symbols for Electrotechnology
Part 9— Binary Logic Elements

AS 1210 SAA Unfired Pressure Vessels Code

AS 1349 Bourdon Tube Pressure and Vacuum Gauges

AS 1543 Electrical Equipment of Industrial Machines

AS 1722 Pipe Threads of Whitworth Form
Part 1—Sealing Pipe Threads

AS 1939 Classification of Degrees of Protection Provided by Enclosures for Electrical Equipment

AS 2030 SAA Gas Cylinders Code

AS 3000 SAA Wiring Rules

AS B204 Glossary of Terms for Fluid Power Transmission and Control Systems

1.4 DEFINITIONS. For the purposes of this standard, the definitions given in AS B204 and the following definitions apply:

Shall and should—'shall' is taken to be mandatory; 'should' is advisory.

Statutory Authority—an authority of the State or Territory of the Commonwealth of Australia which has statutory powers to control the design, manufacture, and operation of pneumatic components and systems.

---

* In course of revision.