

Australian Standard™

**Fluid power systems and components—  
Cylinders—Identification code for  
mounting dimensions and mounting  
types**

This Australian Standard was prepared by Committee ME-035, Fluid Power Systems and Components. It was approved on behalf of the Council of Standards Australia on 15 April 2003 and published on 5 June 2003.

---

The following are represented on Committee ME-035:

Australian Chamber of Commerce and Industry  
Australian Industry Group  
Australian Institute of Petroleum  
Bureau of Steel Manufacturers of Australia  
Department of Mineral Resources, NSW  
Institution of Engineers Australia

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Australia web site at [www.standards.com.au](http://www.standards.com.au) and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Australian Standard*, has a full listing of revisions and amendments published each month.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at [mail@standards.com.au](mailto:mail@standards.com.au), or write to the Chief Executive, Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001.

---

*This Standard was issued in draft form for comment as DR 03062.*

Australian Standard™

**Fluid power systems and components—  
Cylinders—Identification code for  
mounting dimensions and mounting  
types**

Originated as AS 2821—1985.  
Second edition 2003.

**COPYRIGHT**

© Standards Australia International

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia International Ltd  
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5269 1

## PREFACE

This Standard was prepared by the Standards Australia Committee ME-035, Fluid Power Systems and Components to supersede AS 2821—1985 which has been technically revised.

The objective of this Standard is to provide designers, manufacturers and operators of fluid power systems with a convention for the identification of fluid power cylinder dimensions.

This Standard is identical with and has been reproduced from ISO 6099:2001, *Fluid power systems and components—Cylinders—Identification code for mounting dimensions and mounting types*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text, 'this International Standard' should read this 'Australian Standard'.

Reference to ISO 5598, *Fluid power systems and components—Vocabulary* should be replaced by reference to AS 4061, *Fluid power systems and components—Vocabulary*.

## CONTENTS

Page

Introduction .....	iv
<b>1</b> <b>Scope</b> .....	<b>1</b>
<b>2</b> <b>Normative reference</b> .....	<b>1</b>
<b>3</b> <b>Terms and definitions</b> .....	<b>1</b>
<b>4</b> <b>Reference point</b> .....	<b>2</b>
<b>4.1</b> <b>General</b> .....	<b>2</b>
<b>4.2</b> <b>Plain rod end</b> .....	<b>2</b>
<b>4.3</b> <b>Pin rod end</b> .....	<b>2</b>
<b>4.4</b> <b>Female threaded rod end</b> .....	<b>2</b>
<b>4.5</b> <b>Male threaded rod end</b> .....	<b>3</b>
<b>4.6</b> <b>Wrench flat piston rod end</b> .....	<b>3</b>
<b>4.7</b> <b>Flanged piston rod end — Alternative reference points</b> .....	<b>3</b>
<b>5</b> <b>Letter code for identifying cylinder mounting, envelope and accessory dimensions</b> .....	<b>4</b>
<b>5.1</b> <b>General</b> .....	<b>4</b>
<b>5.2</b> <b>Letter <i>Z</i></b> .....	<b>4</b>
<b>5.3</b> <b>Letter <i>U</i></b> .....	<b>4</b>
<b>5.4</b> <b>Letters <i>W, X, Y, Z</i></b> .....	<b>4</b>
<b>5.5</b> <b>Signs</b> .....	<b>4</b>
<b>5.6</b> <b>Dimensioning</b> .....	<b>4</b>
<b>6</b> <b>Identification code for accessory types</b> .....	<b>7</b>
<b>6.1</b> <b>General</b> .....	<b>7</b>
<b>6.2</b> <b>Accessory types</b> .....	<b>7</b>
<b>7</b> <b>Letter codes of accessories according to accessory type</b> .....	<b>8</b>
<b>8</b> <b>Identification code for mounting types</b> .....	<b>12</b>
<b>8.1</b> <b>General</b> .....	<b>12</b>
<b>8.2</b> <b>Mounting types</b> .....	<b>13</b>
<b>9</b> <b>Letter codes of mounting and envelope dimensions according to cylinder mounting type</b> .....	<b>15</b>
<b>10</b> <b>Letter code listing</b> .....	<b>36</b>
<b>11</b> <b>Identification statement (Reference to this International Standard)</b> .....	<b>37</b>

## INTRODUCTION

In fluid power systems, power is transmitted and controlled through a fluid (liquid or gas) under pressure within an enclosed circuit. Systems and their components are generally designed and marketed for a specific fluid pressure.

One such component is the fluid power cylinder. This is a device which converts power into linear mechanical force and motion. It consists of a movable element, i.e. a piston and piston rod, operating within a cylindrical bore.

Although this International Standard provides a code and means of dimensioning for cylinder mounting, it is not intended that all dimensions be standardized. The code specified in this International Standard is not to be considered as complete for the development of future interchangeability standards. It establishes uniform descriptions for dimensions and achieves a conformity of language.

The code can be used for analogous dimensions when this involves neither confusion nor misunderstanding.

## AUSTRALIAN STANDARD

# Fluid power systems and components—Cylinders—Identification code for mounting dimensions and mounting types

## 1 Scope

This International Standard establishes a convention for the identification of mounting dimensions and types used in the mounting of fluid power cylinders. It specifies a code for identifying cylinder mounting, envelope, accessory and connector dimensions, and for cylinder mounting and accessory types.

This International Standard does not represent a standard list of all fluid power cylinder mounting and accessory types.

## 2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 5598, *Fluid power systems and components — Vocabulary*.

## 3 Terms and definitions

For the purpose of this International Standard, the terms and definitions given in ISO 5598 apply.