

Australian Standard<sup>®</sup>

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**Yachting harnesses and lines—  
Conventional lines**

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This Australian Standard was prepared by Committee CS/51, Yachtsmen's Safety Harnesses and Lines. It was approved on behalf of the Council of Standards Australia on 3 October 1991 and published on 17 January 1992.

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The following interests are represented on Committee CS/51:

Australian Boating Industry Association  
Australian Chamber of Manufactures  
Australian Yachting Federation  
Confederation of Australian Industry  
Cordage Institute of Australia  
Department of Sport, Recreation and Racing, N.S.W.  
Marine and Ports Division, Department of Transport, Queensland  
Police Department, N.S.W.  
Retail Traders Association of Australia  
Tasmanian State Water Safety Committee

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## PREFACE

This Standard was prepared by the Standards Australia Committee on Yachtsmen's Safety Harnesses and Lines to supersede AS 2227—1986, *Yachtsmen's safety harnesses and lines*. This edition was prepared following a request that the application of the Standard to harnesses and lines which are incorporated in wet-weather jackets or buoyancy aids be clarified. One of the major points to be made about such products is that they have to be used as complete units, to reflect the manner in which they are tested.

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## STANDARDS AUSTRALIA

## Australian Standard

## Yachting harnesses and lines—Conventional lines

**1 SCOPE** This Standard specifies requirements for harnesses and lines for use by yachtsmen, including children. It includes general design requirements, constructional requirements, test methods and requirements for individual components, together with a dynamic load test for the finished article. The conventional lines covered by this Standard are those that require manual declipping at the boat anchorage point.

This Standard applies to harnesses and lines for use by yachtsmen engaged in both offshore (including ocean racing) and inshore (including trailerable yacht) activities.

NOTE: Harnesses with remote-release lines are covered by AS 3989.

**2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard

AS

1504 Fibre rope—Three-strand, hawser laid

1753 Webbing for restraining devices for occupants of motor vehicles

1891 Industrial safety belts and harnesses

3989 Yachting harnesses and lines—Remote-release lines

BS

3146 Specification for investment castings in metal

**3 DEFINITIONS** For the purpose of this Standard, the definitions below apply.

**3.1 Adjusting buckle**—a buckle used primarily for the adjustment of harness fitment.

**3.2 Securing buckle**—a buckle used primarily for securing of the harness strapping.

NOTE: Securing and adjusting buckles may be combined.

**3.3 Keeper**—a device used to prevent a harness strap from slipping through a buckle.

**3.4 Child harness**—a harness suitable for use by a person of body mass between 12 kg and 50 kg having a chest measurement between 53 cm and 80 cm.

#### 4 DESIGN REQUIREMENTS

**4.1 General** The harness shall consist of an arrangement of webbing straps and shall be designed to locate the line at chest level. The harness shall be adjustable to permit it to be worn outside light clothing or bulky sea clothing.

The harness may be incorporated in jackets or buoyancy aids. If incorporated in such garments, the garment may form part of the locating mechanism. The combined harness and garment shall comply with the requirements in this Standard and the garment shall also comply with the requirements of any Standard relevant to it.

#### 4.2 Harness

**4.2.1 Webbing straps** The main load-bearing straps of the harness shall be not less than 40 mm in width. Brace straps shall be not less than 20 mm in width. Straps which are intended to bear directly on the body of the wearer and are used to locate the harness (or harness-containing garment) such as crotch straps shall be not less than 25 mm in width when wet and shall be designed to resist roping and chafing when in use.

**4.2.2 Slackening** The harness should be designed so that it will not slacken during wearing as a result of body movements or as a result of accidental contact with other objects. Where the securing buckle and adjusting buckle are one and the same, this non-slackening may be achieved by provision of a non-load-bearing keeper which should be permanently attached to the main belt. Other suitable means of preventing the harness from slackening are acceptable.

NOTE: A suitable test method to determine whether or not a harness will slacken during normal wear has not been found.

**4.3 Lines** Either one or two lines may be used. For a child harness, the line shall be permanently attached to the harness. For an adult harness, the line shall be readily detachable from the harness by the wearer by means of a hook attached to either the harness or the line. This hook shall not release when it is twisted to any angle relative to its attachment point on the harness or line.