

Australian Standard[®]

**Hose and hose assemblies for
petroleum and petroleum
products—Marine suction and
discharge**

[Title allocated by Defence Cataloguing Authority:
HOSE AND HOSE ASSEMBLIES, METALLIC AND
NON METALLIC (Petroleum and petroleum products,
suction and discharge) NSC 4720]

This Australian Standard was prepared by Committee RU/1, Industrial Hose. It was approved on behalf of the Council of Standards Australia on 22 September 1990 and published on 11 February 1991.

The following interests are represented on Committee RU/1:

Australian Gas Association
Australian Institute of Petroleum
Commercial Services Group (Government Supply) N.S.W.
Confederation of Australian Industry
Department of Minerals and Energy, N.S.W.
Plastics and Rubber Institute
Plastics Industry Association
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This Standard was issued in draft form for comment as DR 87106.

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discharge**

<p>First published as AS 2117 — 1977. Second edition 1980. Third edition 1983. Fourth edition 1991.</p>

PREFACE

This Standard was prepared by the Standards Australia Committee on Industrial Hose under the direction of Committee RU/-, Standards for the Rubber Industry, to supersede AS 2117—1983, *Hose and Hose Assemblies for Petroleum Products—Suction and Discharge*.

The principal changes from the previous edition are as follows:

- (a) Electrical property limits are different.
- (b) Hose and coupling compatibility values have been revised.
- (c) Grading of hose by the nature of its internal surface, according to intended use, has been introduced.

In the preparation of this Standard, account was taken of the following Standards:

ISO

1823—1975 *Rubber hoses for oil suction and discharge*

BS

1435—1975 *Specification for rubber hose assemblies for oil suction and discharge services*

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STANDARDS AUSTRALIA

Australian Standard

**Hose and hose assemblies for petroleum and petroleum products —
Marine suction and discharge**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for hose and hose assemblies for conveying petroleum and petroleum products at product temperatures up to 70°C and in ambient temperatures ranging from –20°C to 65°C. It applies to hoses commonly used for transferring crude oil and liquefied petroleum products (other than LP gas and natural gas) to and from marine tankers and bunkering vessels or for similar duties ashore.

The Standard does not specify requirements for off-shore mooring use as such hoses are subject to more rigorous conditions of use than those specified in this Standard.

NOTES:

- 1 Users of this Standard are advised to consult the 'International Oil Tanker and Safety Guide' issued by the Institute of Petroleum, London, which has been widely adopted by the oil industry in Australia as a guide for handling petroleum products.
- 2 Appendix A contains recommendations and advice on information which should be provided by the purchaser at the time of enquiry or order.

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1180	Methods of test for hose made from elastomeric materials
1180.1	Method 1: Dimensions
1180.5A	Method 5A: Hydrostatic pressure — Burst test
1180.5B	Method 5B: Hydrostatic pressure — Proof test
1180.5D	Method 5D: Hydrostatic pressure — Leakage test
1180.7A	Method 7A: Resistance of lining and cover to liquids
1180.7B	Method 7B: Resistance to liquids — Physical
1180.7J	Method 7J: Resistance to vacuum
1180.11	Method 11: Hose and coupling compatibility — Tensile method
1180.13A	Method 13A: Determination of electrical resistance of hose and hose components
1180.13B	Method 13B: Determination of electrical resistance of hose assembly
1180.13C	Method 13C: Determination of electrical continuity of hose assembly with reinforcing wire(s)
1683	Methods of test for rubber
1683.24	Method 24: Rubber — Vulcanized — Determination of resistance to ozone cracking — Static strain test
2752	Preferred numbers and their use
BS	
1435	Rubber hose assemblies for oil suction and discharge services Part 1: Specification for the assemblies
3492	Specification for road and rail tanker hoses and hose assemblies for petroleum products, including aviation fuels

International Oil Tanker and Safety Guide

1.3 CLASSIFICATION AND DESIGNATION

1.3.1 General Hose shall be classified in terms of the following:

- (a) Its type and its working pressure as set out in Clauses 1.3.2 and 1.3.3.
- (b) The grade of its internal surface according to its intended use as set out in Clause 1.3.4.
- (c) Its electrical property as set out in Clause 1.3.5.

1.3.2 Type The type of hose, according to its description, shall be as follows:

Type	Description
1	Heavy duty hose, suction and discharge, for use in water depth up to 45 m, non-collapsible.
2	Hose, suction and discharge, for dockside and onshore use, non-collapsible.
3	Lightweight hose, discharge only, for dockside and onshore use, non-collapsible under normal use.
4	Lightweight hose, discharge only, for dockside and onshore use, collapsible.