AS 2419.4:2021

Australian STANDARD®

STANDARDS Australia

Fire hydrant installations

Part 4: Storz fittings for firefighting purposes

AS 2419.4:2021

This Australian Standard® was prepared by FP-009, Fire Hydrant Installations. It was approved on behalf of the Council of Standards Australia on 31 March 2021.

This Standard was published on 9 April 2021.

The following are represented on Committee FP-009:

Association of Accredited Certification Bodies
Association of Hydraulic Services Consultants Australia
Australasian Fire and Emergency Service Authorities Council
Australian Building Codes Board
Australian Fire Safety Practitioners Accreditation Board
Australian Industry Group
Australian Institute of Building Surveyors
Australian Stainless Steel Development Association
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Fire Protection Association Australia
Hydraulic Consultants Association Australasia
Insurance Council of Australia
International Copper Association Australia
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National Fire Industry Association
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This Standard was issued in draft form for comment as DR AS 2419.4:2020.

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ISBN 978 1 76113 288 9

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Part 4: Storz fittings for firefighting purposes

First published as AS 2419.4:2021.

Preface

This Standard was prepared by the Standards Australia Committee FP-009, Fire Hydrant Installations.

The objective of this Standard is to specify minimum requirements for the design, manufacture, performance and testing of Storz (i.e. quarter turn internal lug two-way) pressure and suction fittings suitable for firefighting purposes.

This Standard is part of a series on fire hydrant installation, which comprises the following parts:

(a) AS 2419.1, *Fire hydrant installations, Part 1: System design, installation and commissioning*

(b) AS 2419.2, *Fire hydrant installations, Part 2: Fire hydrant valves*

(c) AS 2419.3, *Fire hydrant installations, Part 3: Fire brigade booster connections*

(d) AS 2419.4, *Fire hydrant installations, Part 4: Storz fittings for firefighting purposes* (this Standard)

This Standard is to be read in conjunction with AS 2419.1.

The terms "normative" and "informative" are used in Standards to define the application of the appendix to which they apply. A "normative" appendix is an integral part of a Standard, whereas an "informative" appendix is only for information and guidance.

Contents

Introduction

Australian fire brigade hose couplings evolved independently in each state and territory according to local needs. The various regional connections are subsequently referenced in the appendices of the AS 2419 suite of standards. To facilitate better interagency cooperation, the Australasian Fire and Emergency Services Authorities Council designated the Storz type connection as one of the common Australia-wide fittings for firefighting hoses, equipment, vehicles and fire hydrant installations.

Carl August Guido Storz first patented a quarter turn internal lug two-way hose coupling in Germany in 1881. German fire brigades adopted Storz after a single fire destroyed 203 homes in 1933. The German Institute for Standardization (DIN) describes 25, 52, 75 and 110 mm Storz fittings. The Netherlands Standardization Institute (NEN) also describes 65 mm Storz fittings. Other diameters of Storz connection are variously described by the National Fire Protection Association (USA) and the Standards Council of Canada.

Storz fittings that do not conform to established Standards are not fully compatible with fire brigade equipment and operations. Cast aluminium fittings which are specifically prohibited for firefighting purposes in Australia by AS 2419.2 and AS 2419.3 have been used in place of forged aluminium fittings and have failed. Non-conforming Storz fittings are a safety risk to firefighters and building occupants, especially if connection failure occurs during firefighting and emergency response operations.

To address poor conformance and facilitate reliability, this Standard consolidates and specifies the requirements for the standard sizes of Storz fittings used for firefighting purposes in Australia.

Australian Standard®

Fire hydrant installations

Part 4: Storz fittings for firefighting purposes

1 Scope and general

1.1 Scope

This Standard applies to Storz fittings intended for firefighting purposes in Australia and specifies the design, manufacture, performance and testing of Storz fittings used for:

(a) connections to valves, hydrant and sprinkler boosters, pipe fittings, and branch pipes etc;

(b) hose couplings;

(c) reducing connection sizes; and

(d) capping connections.

NOTE For guidelines on the information to be supplied at the time of an enquiry or order, see Appendix B.

1.2 Application

This Standard shall be read in conjunction with AS 2419.1.

1.3 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document.

NOTE Documents referenced for informative purposes are listed in the Bibliography.

AS 2419.1, *Fire hydrant installations, Part 1: System design, installation and commissioning*

AS 2419.2, *Fire hydrant installations, Part 2: Fire hydrant valves*

AS 2419.3, *Fire hydrant installations, Part 3: Fire brigade booster connections*

AS 2700, *Colour Standards for General Purposes*

DIN 405, *General purpose knuckle threads*

DIN 5686, *Double loop chains without quality requirements*

DIN 14301, *Aluminium alloy delivery and suction coupling type D; nominal pressure 16*

DIN 14302, *Aluminium alloy delivery coupling type C; nominal pressure 16*

DIN 14303, *Aluminium alloy delivery coupling type B with nominal pressure PN 16*

DIN 14306, *Aluminium alloy solid coupling type D for pressure and suction purposes; nominal pressure 16*

DIN 14307-1, *Aluminium alloy solid coupling type C, with sealing ring for pressure purposes; nominal pressure 16*

DIN 14307-2, *Aluminium alloy solid coupling type C with sealing ring for suction purposes; nominal pressure 16*

DIN 14308-1, *Aluminium alloy solid coupling type B, with sealing ring for pressure purposes; nominal pressure 16*