



AVK Australia Holding Pty Ltd

PRODUCT APPRAISAL REPORT 1714 Issue 2

AVK Spring Hydrant Valves

AS 3952:2002 Water supply – Spring hydrant valve for waterworks purposes

Issue 1 Published: 3 August 2017

Issue 2 Published: 31 July 2022

Document History

The following information indicates the changes made to this document.

| Date | Version |
|---------------|-----------------------|
| 5 July 2017 | Peer Review |
| 3 August 2017 | Publication |
| 28 July 2022 | Issue 2 Client Review |
| 31 July 2022 | Issue 2 Publication |

Peer Reviewers

| Name/Title | Organisation | Date |
|--|--------------|--------------|
| Product Appraisal Technical Advisory Group | WSAA | 26 July 2017 |
| WSAA Expert Panel | WSAA | 26 July 2017 |
| Peter Pittard, WSAA Consultant | WSAA | 4 July 2017 |
| Carl Radford, Product Appraisal Manager | WSAA | 5 July 2017 |
| Peter Pittard, WSAA Consultant | WSAA | 29 July 2022 |
| Carl Radford, Product Appraisal Manager | WSAA | 29 July 2022 |

Overview of WSAA

The Water Services Association of Australia (WSAA) is the peak industry body representing the urban water industry. Our members provide water and sewerage services to over 20 million customers in Australia and New Zealand and many of Australia's largest industrial and commercial enterprises.

Based around our vision of 'customer driven, enriching life', WSAA facilitates collaboration, knowledge sharing, networking and cooperation within the urban water industry. We are proud of the collegiate attitude of our members which has led to industry-wide approaches to national water issues.

WSAA can demonstrate success in the standardisation of industry performance monitoring and benchmarking, as well as many research outcomes of national significance. The WSAA Executive retains strong links with policy makers and legislative bodies and their influencers, to monitor emerging issues of importance to the urban water industry.

WSAA was formed in 1995 as a non-profit organisation to foster the exchange of information between industry, government and the community, and to promote sustainable water resource management.

The urban water industry is committed to anchoring its services to customers' values, and to enrich communities where water services have broad economic, environmental and social values. In line with this our main activities focus on four areas:

1. influencing national and state policies on the provision of urban water services and sustainable water resource management
2. promoting debate on environmentally sustainable development and management of water resources and the community health requirements of public water supplies
3. improving industry performance and establishing benchmarks and industry leading practices for water service processes; and
4. fostering the exchange of information on education, training, research, water and wastewater management and treatment and other matters of common interest.

Copyright

This document is copyrighted. Apart from any use as permitted under the Copyright Act 1968, no part of this document may be reproduced or transmitted in any form or by any means, electronically or mechanical, for any purpose, without the express written permission of Water Services Association of Australia Limited.

© Copyright 2022 by WATER SERVICES ASSOCIATION of Australia Limited **All rights reserved.**

CONTENTS

| | |
|---|----|
| 1 EXECUTIVE SUMMARY | 5 |
| 1.1 Recommendations | 5 |
| 2 THE APPLICANT | 5 |
| 2.1 The Manufacturer | 5 |
| 3 THE PRODUCT | 6 |
| 4 SCOPE OF THE APPRAISAL | 6 |
| 5 APPRAISAL CRITERIA | 6 |
| 5.1 Quality Assurance Requirements | 6 |
| 5.2 Performance Requirements | 6 |
| 6 COMPLIANCE WITH APPRAISAL CRITERIA | 7 |
| 6.1 Compliance with Quality Assurance Requirements | 7 |
| 6.2 Compliance with Performance Requirements | 7 |
| 6.2.1 Type Testing | 7 |
| 6.2.2 Contact with drinking water | 7 |
| 6.2.3 Components Material List | 7 |
| 6.2.4 Flanges | 7 |
| 6.2.5 Coatings | 7 |
| 6.2.6 Resilient seat | 8 |
| 7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION | 8 |
| 8 PRODUCT MARKING | 8 |
| 9 PACKAGING AND TRANSPORTATION | 8 |
| 10 PRODUCT WARRANTY | 9 |
| 11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD TESTING REPORT | 9 |
| 12 OUTCOMES OF EXPERT PANEL REVIEW | 9 |
| 13 FUTURE WORKS | 9 |
| 14 DISCLAIMER | 9 |
| 14.1 Issue of Report | 9 |
| 14.2 Limits on Reliance on Information and Recommendations | 9 |
| 14.2.1 Disclaimer of liability | 9 |
| 14.2.2 Intellectual Property and other rights | 10 |
| 14.2.3 Need for independent assessment | 10 |
| 14.3 No Updating | 10 |
| 14.4 No Warranty | 11 |
| APPENDIX A – PRODUCT LITERATURE | 12 |
| APPENDIX B – QUALITY CERTIFICATIONS | 16 |
| APPENDIX C – SUPPLIER CONTACTS | 21 |

1 EXECUTIVE SUMMARY

AVK Australia Holding Pty Ltd is part of the AVK Global Group, an international manufacturer of valves and fittings for the water, gas, sewerage and fire protection industries.

This appraisal is for the AVK range of DN 80 ductile iron spring hydrant valves manufactured in accordance with AS 3952:2002 *Water supply - Spring hydrant valve for waterworks purposes*.

This Issue 2 is a replacement for the previous version of the appraisal which had reached its 5-year expiry date.

The spring hydrant valves are available with DN80, DN100 or DN80-100 slotted flanged outlets to AS 4087 Fig B5. The valves have a pressure classification of PN16.

A swab version is also available with removable internal components to allow direct full-bore access to the pipeline for insertion and removal of swabs for scouring purposes.

The spring hydrant valves are intended for use with drinking and non-drinking water supply and are operated by an attachment of a standpipe.

AVK Australia holds an ISO 9001:2015 Quality Management System Licence.

The ductile spring hydrants are covered by ISO Type 5 StandardsMark product certification to AS/NZS 2280:2020.

The spring hydrants included in this report are deemed to meet the requirements of WSA PS – 267 *Hydrants (Spring) for Pressure Applications – Drinking Water and Non-Drinking Water Supply* and are considered as 'fit for purpose'.

1.1 Recommendations

It is recommended that WSAA members, subject to any specific requirements of the member, accept or authorise AVK spring hydrant valves, as detailed in this report, for use in water supply pressure pipelines, provided they are designed and installed in accordance with applicable WSAA Codes and the manufacturer's requirements.

2 THE APPLICANT

The Applicant is AVK Australia Holding Pty Ltd.

2.1 The Manufacturer

AVK Australia Holding Australia Pty Ltd is privately owned and part of the AVK Group which is comprised of more than 100 companies operating in more than 35 countries. AVK is a leading international manufacturer of valves and pipeline accessories.

AVK Australia incorporates AVK Valves, AVK Wang, AVK Currumbin, AVK Flow Control and AVK Complete Tapping Service. The company utilises its local manufacturing footprint as well as the AVK Global production supply chain to service pipeline infrastructure, water treatment, sewage processing, fire protection, irrigation, dams, reservoirs, mining operations and gas distribution.

AVK has been manufacturing in Australia for over 20 years and specialises in a range of valves, hydrant, couplings, repair clamps, tapping saddles, pipe fittings and other fittings and specialty products.

AVK assembles and tests the range of AVK spring hydrant valves at its Wingfield facility in Adelaide, South Australia.

The hydrant components are sourced from various suppliers based in China, Australia and Vietnam. AVK has requested that the identity of their suppliers remain "commercial in confidence" however has provided copies of ISO 9001 Quality Management System licences together with typical material test reports to validate compliance.

3 THE PRODUCT

This appraisal is for the AVK Series 30 range of DN 80 ductile iron spring hydrant valves manufactured in accordance with AS 3952:2002 *Water supply - Spring hydrant valve for waterworks purposes*.

The spring hydrant valves are available with DN80, DN100 or DN80-100 slotted flanged outlets to AS 4087 Fig B5. The valves have a pressure classification of PN16.

A swab version is also available with removable internal components to allow direct full-bore access to the pipeline for insertion and removal of swabs for scouring purposes.

The spring hydrant valves are intended for use with drinking and non-drinking water supply and are operated by the attachment of a standpipe.

The body thickness of the seal is 6.5mm, which meets the requirements of WSA PS 267.

Polymeric coating of the spring hydrant valve bodies and yokes is performed in-house by AVK using Akzo Nobel Resicoat R4 Fusion Bonded Epoxy. The coatings are applied by the fluidised-bed method in accordance with AS/NZS 4158:2003 *Thermal-bonded polymeric coatings on valves and fittings for water industry purposes*.

For non-drinking water applications AVK spring hydrant valves are available with lilac coated lugs.

Technical Data Sheets for the AVK spring hydrant valves are included in Appendix A.

4 SCOPE OF THE APPRAISAL

The scope of this appraisal covers DN 80 spring hydrant valves, including a swab version, with DN 80, DN 100 or DN 80-100 slotted flanged outlets, as described in Section 3 and included in the ISO Type 5 StandardsMark product certification schedule, included in Appendix B.

5 APPRAISAL CRITERIA

5.1 Quality Assurance Requirements

The WSAA Product Appraisal Technical Advisory Group accepts spring hydrant valves manufactured in compliance with AS 3952:2002 *Water supply - Spring hydrant valve for waterworks purposes* and duly certified by means of an ISO Type 5 product certification scheme undertaken by a JAS-ANZ accredited Conformity Assessment Body (CAB) or by an international accreditation system recognised by JAS-ANZ.

The manufacturer is generally expected to have a production management and control system that has been duly accredited in accordance with AS/NZS ISO 9001 as a prerequisite to undergoing a product certification audit.

The ISO Type 5 Product Certification Scheme shall meet the criteria described in WSA TN-08.

5.2 Performance Requirements

AVK spring hydrant valves have been appraised for compliance with AS 3952:2002 *Water supply - Spring hydrant valve for waterworks purposes*.

Appraisal criteria are also determined by the WSAA Product Appraisal Technical Advisory Group and regularly reviewed to ensure that the criteria reflect the requirements of WSAA members.

The following Product Specification is relevant to this application:

WSA PS- 267 *Hydrants (Spring) for Pressure Applications – Drinking Water and Non-Drinking Water Supply*

A copy of the Product Specification is available at the following link:

<https://www.wsaa.asn.au/shop/product/53481>

6 COMPLIANCE WITH APPRAISAL CRITERIA

6.1 Compliance with Quality Assurance Requirements

AVK has submitted the following Quality certificates:

- ISO 9001:2015 Certificate of Registration No. QEC 13894 issued to AVK Australia Holding Pty Ltd by SAI-Global
- AS 3952:2002 ISO Type 5 StandardsMark Product Certification Licence No. SMK 20156 issued to AVK Australia Holding Pty Ltd by SAI-Global.

Copies of the Quality Assurance and Product Certification licences have been included in Appendix B and are also available from WSAA

6.2 Compliance with Performance Requirements

6.2.1 Type Testing

Type tests consisting of a body design pressure test, flow test, seat hydrostatic test and seat infiltration test have been satisfactorily completed by the Australian Irrigation and Hydraulics Technology Centre at the University of SA.

6.2.2 Contact with drinking water

A test report undertaken by AWQC on 20th November 2019 for the Gulf EPDM 5718S material is held on file by WSAA to demonstrate compliance with AS/NZS 4020:2018.

A test report undertaken by NSF International on 22nd February 2018 for Akzo Nobel Resicoat R4 is held on file by WSAA to demonstrate conformance with AS/NZS 4020:2005.

6.2.3 Components Material List

AVK has submitted copies of material test reports to demonstrate compliance of the component materials as detailed in Table 1.

TABLE 1 AVK SPRING HYDRANT VALVE COMPONENTS MATERIAL LIST

| Component | Material | Standard | Minimum Grade | AVK |
|-----------------------------------|------------------|-----------|-----------------|--------------|
| Body and yoke | Ductile iron | AS 1831 | 400-12 | 450-10 |
| Dome | Copper Alloy | AS 1565 | C48600 | C48600 |
| Helical spring | Stainless Steel | ASTM A276 | 304 | 304 |
| Valve guide (for swab version) | Ductile Iron | AS 1831 | - | 450-10 |
| Resilient seat | Synthetic Rubber | AS 1646 | EPDM 67-73 IRHD | EPDM 70 IRHD |
| Fasteners | Stainless Steel | ASTM A276 | 316 | 316 |

6.2.4 Flanges

The spring hydrant valves are available with DN 80 flange, DN 100 flange or a DN 100 flange with slotted holes to enable fitment to either a DN 80 or DN 100 mating flange. The flanges comply with Figure B5 (PN16) of AS/NZS 4087:2011 *Metallic flanges for waterworks purposes*.

6.2.5 Coatings

Internal and external surfaces of the body and yoke are coated with a polymeric coating in accordance with AS NZS 4158-2003 *Thermal-bonded polymeric coatings on valves and fittings*.

The coating is Akzo Nobel Resicoat R4 Fusion Bonded Epoxy which has ISO Type 5 Product Certification. A copy of the licence is held on file by WSAA.

Coatings are applied in-house at the AVK Wingfield facility using the fluidised-bed method.

Application procedures are also audited by SAI-Global in conjunction with AS 3952 StandardsMark certification.

6.2.6 Resilient seat

WSA PS 267 requires that the spring hydrant resilient seat has a minimum body thickness of 6mm. AVK has provided a drawing of the AVK seal to confirm that the thickness of the seal is 6.5mm.

7 FITTING INSTRUCTIONS, TRAINING AND INSTALLATION

Spring hydrant valves are standard water industry products.

AVK swab type spring hydrant valves have removable internal components to allow direct full-bore access to the pipeline for insertion and removal of swabs for scouring purposes.

8 PRODUCT MARKING

The AVK spring hydrant valves have the following markings conforming to AS 3952-2002:

- Manufacturer's name or mark: AVK
- Nominal flange size: DN 80 or DN 100
- Year of manufacture: e.g., 2022
- Class of valve: PN 16
- Australian Standard: AS 3952

AVK spring hydrant valves also have a durable label permanently affixed to the body that has additional markings including the StandardsMark logo, barcode, mass and other details. See Figure 1.

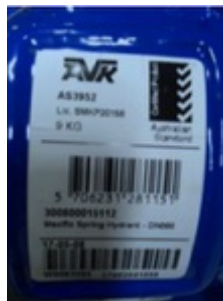


FIGURE 1 ADDITIONAL MARKING

9 PACKAGING AND TRANSPORTATION

Valves are palletised, separated with corrugated cardboard and shrink wrapped to prevent product movement and damage to coatings in transit.



FIGURE 2 DETAILS OF PACKAGING

10 PRODUCT WARRANTY

The products are covered by the normal commercial and legal requirements of the *Competition and Consumer Act 2010 (Cth)*, which covers manufacture to the relevant standard. Details of AVK's warranty is included in their terms and conditions of sale.

11 WATER AGENCY EXPERIENCE WITH THE PRODUCT OR FIELD TESTING REPORT

Spring hydrants are considered standard products. AVK hydrants have been widely approved by Australian water agencies for many years.

12 OUTCOMES OF EXPERT PANEL REVIEW

No issues have been raised.

13 FUTURE WORKS

There are no outstanding future works items.

14 DISCLAIMER

This Product Appraisal Report (Report) is issued by the Water Services Association of Australia Limited on the understanding that:

This Report applies to the product(s) as submitted. Any changes to the product(s) either minor or major shall void this Report.

To maintain the recommendations of this Report any such changes shall be detailed and notified to the Product Appraisal Manager for consideration and review of the Report and appropriate action. Appraisals and their recommendations will be the subject of continuous review dependent upon the satisfactory performance of products.

WSAA reserves the right to undertake random audits of product manufacture and installation. Where products fail to maintain appraised performance requirements the appraisal and its recommendations may be modified and reissued. Appraisal reports will be reviewed and reissued at regular intervals not exceeding five (5) years.

The following information explains a number of very important limits on your ability to rely on the information in this Report. Please read it carefully and take it into account when considering the contents of this Report.

Any enquiries regarding this report should be directed to the Program Manager, Carl Radford, Phone: 03 8605 7601 email carl.radford@wsaa.asn.au.

14.1 Issue of Report

This Report has been published and/or prepared by the Water Services Association of Australia Limited and nominated Project Manager and peer group of technical specialists (the Publishers).

The Report has been prepared for use within Australia only by technical specialists that have expertise in the function of products such as those appraised in the Report (the Recipients).

By accepting this Report, the Recipient acknowledges and represents to the Publisher(s) and each person involved in the preparation of the Report that the Recipient has understood and accepted the terms of this Disclaimer.

14.2 Limits on Reliance on Information and Recommendations

14.2.1 Disclaimer of liability

Neither the Publisher(s) nor any person involved in the preparation of the Report accept(s) any liability for any loss or damage suffered by any person however caused (including

negligence or the omission by any person to do anything) relating in any way to the Report or the product appraisal criteria underlying it. This includes (without limitation) any liability for any recommendation or information in the Report or any errors or omissions.

14.2.2 Intellectual Property and other rights

The Water Services Association of Australia Limited does not undertake any assessment of whether the importation, manufacture, sale or use of the Product the subject of this Report infringes the intellectual property rights or proprietary rights of any person. Recipients of the report should undertake their own assessment of whether (as relevant) the importation, manufacture, sale or use of the relevant Products infringe the intellectual property rights or other proprietary rights of any person. If the Product infringes intellectual property rights or other proprietary rights there is potential for the supply of the Products to be interrupted.

From time to time the Water Services Association of Australia Limited and the other Publishers may receive notice of allegations that the importation, manufacture, sale or use of the Product infringes intellectual property rights or other proprietary rights. The Water Services Association of Australia Limited's policy is to not refer to such allegations in its reports or take any other steps to put Recipients on notice of such allegations, unless and until it is aware that the allegations have been admitted or proved in Court. As such, Recipients acknowledge, agree and accept that the Water Services Association of Australia Limited may have information in its possession about intellectual property rights infringement allegations or other infringement allegations in relation to the Product which are not referred to or disclosed in this Report and which are not otherwise communicated to Recipients.

14.2.3 Need for independent assessment

The information and any recommendation contained (expressly or by implication) in this Report are provided in good faith (and subject to the limitations noted in this Report). However, you should treat the information as indicative only. You should not rely on that information or any such recommendation except to the extent that you reach an agreement to the contrary with the Publisher(s).

This Report does not contain all information that a person might require for the purposes of assessing any product discussed or appraised within it (Product). The product appraisal criteria used in preparing this Report may not address all relevant aspects of the Product.

Recipients should seek independent evidence of any matter which is material to their decisions in connection with an assessment of the Product and consult their own advisers for any technical information required. Any decision to use the Product should take into account the reliability of that independent evidence obtained by the Recipient regarding the Product.

Recipients should also independently verify and assess the appropriateness of any recommendation in the Report, especially given that any recommendation will not take into account a Recipient's particular needs or circumstances.

WSAA has not evaluated the extent of the product liability and professional indemnity insurance that the provider of the product maintains. Recipients should ensure that they evaluate the allocation of liability for product defects and any professional advice obtained in relation to the product or its specification including the requirements for product liability and professional indemnity insurance.

14.3 No Updating

Neither the Publisher(s) nor any person involved in the preparation of this Report [has] [have] any obligation to notify you of any change in the information contained in this Report or of any new information concerning the Publisher(s) or the Product or any other matter.

14.4 No Warranty

The Publisher(s) do[es] not, in any way, warrant that steps have been taken to verify or audit the accuracy or completeness of the information in this Report, or the accuracy, completeness or reasonableness of any recommendation in this Report.

APPENDIX A – PRODUCT LITERATURE



AVK SPRING HYDRANT PN16

30/00

To AS 3952 reduced weight and environmentally friendly
DN80 & DN100
Flange and drilling to AS 4087 Fig. B5, DN80 or DN100

Use:

- For fire protection services, water and neutral liquid applications
- Valve designed for use up to 70°C
- Where applicable; for AS 4020 compliance, max temp = 40°C
Note: Always observe pipe material recommended operating temperatures
- Insulation essential for installations subject to temperatures of 0°C and lower

Tests:

- Hydraulic test to AS 3952:
 - Seat: 1.1 x PN
 - Body: 1.5 x PN

Options:

- SWAB type - refer to series 30/10
- Purple yoke for recycled water systems



Quality
ISO 9001
SAI GLOBAL



Health & Safety
AS 4801
SAI GLOBAL



Environment
ISO 14001
SAI GLOBAL

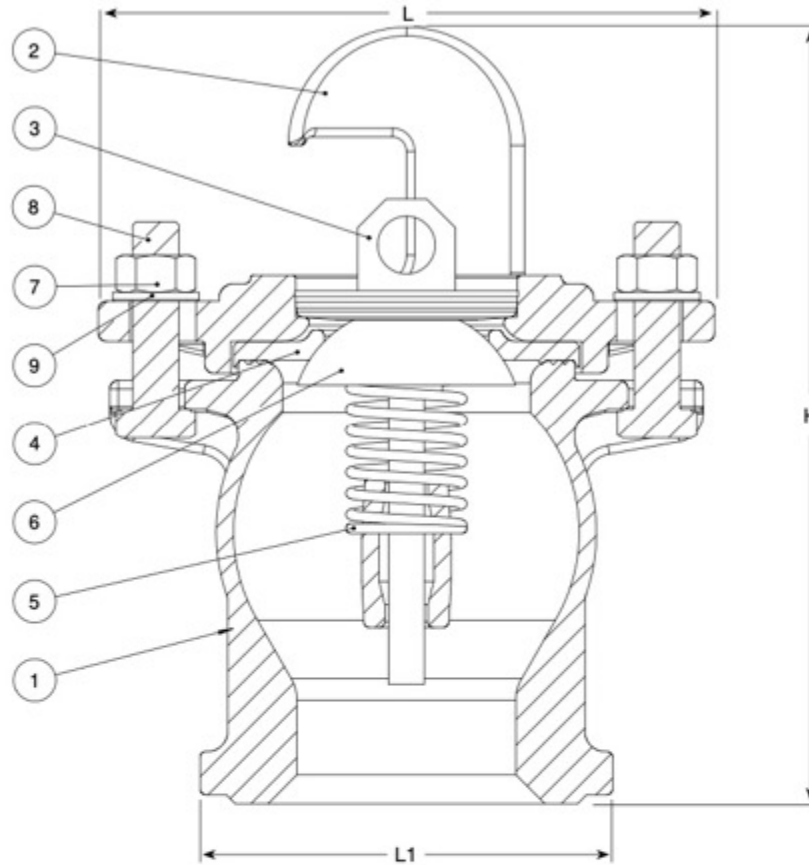


Australian
Standard
AS3952-2002
Lic. SAI/020156
SAI Global

Expect... **AVR**

AVK SPRING HYDRANT PN16

30/00



Component list

| | | | |
|--------------------|--------------------------------------|-----------|----------------------------------|
| 1. Body | Ductile Iron to AS 1831 Grade 450-10 | 6. Dome | Brass to AS 1568 |
| 2. Yoke | Ductile Iron to AS 1831 Grade 450-10 | 7. Nut | Stainless Steel ASTM 276 Gr. 316 |
| 3. Protective plug | Polyethylene - PE - HD | 8. Bolt | Stainless Steel ASTM 276 Gr. 316 |
| 4. Seat | EPDM to AS 1646 | 9. Washer | Stainless Steel ASTM 276 Gr. 316 |
| 5. Spring | Stainless Steel ASTM 276 Gr. 304 | | |

Components can be substituted with equivalent or higher class materials.

Reference nos. and dimensions

| AVK ref. nos. | Inlet Flange DN | H | L | L1 | Weight kg |
|--------------------|-----------------|-----|-----|-----|-----------|
| Blue Yoke | | | | | |
| 30-080-0015112 | 80 | 268 | 214 | 154 | 9.2 |
| 30-080-0025112 | 100 | 268 | 214 | 166 | 10.3 |
| Purple Yoke | | | | | |
| 30-080-0015145 | 80 | 268 | 214 | 154 | 9.2 |
| 30-080-0025145 | 100 | 268 | 214 | 166 | 10.3 |

The designs, materials and specifications shown are subject to change without notice due to the continuous development of our product program.



AVK SPRING HYDRANT SWAB TYPE PN16 **30/10**

To AS 3952, SWAB Type
DN80 & DN100
Flange and drilling to AS 4087 Fig. B5, DN80 or DN100

- Use:**
- For fire protection services, water and neutral liquid applications - **SWAB design to allow for direct full bore access to the pipeline for insertion/removal of swabs**
 - Valve designed for use up to 70°C
 - Where applicable; for AS 4020 compliance, max temp = 40°C
Note: Always observe pipe material recommended operating temperatures
 - Insulation essential for installations subject to temperatures of 0°C and lower
- Tests:**
- Hydraulic test to AS 3952:
 - Seat: 1.1 x PN
 - Body: 1.5 x PN

- Options:**
- Non-SWAB type - refer to series 30/00
 - Purple yoke for recycled water systems



Quality
ISO 9001
SAI GLOBAL



Health & Safety
AS 4801
SAI GLOBAL



Environment
ISO 14001
SAI GLOBAL



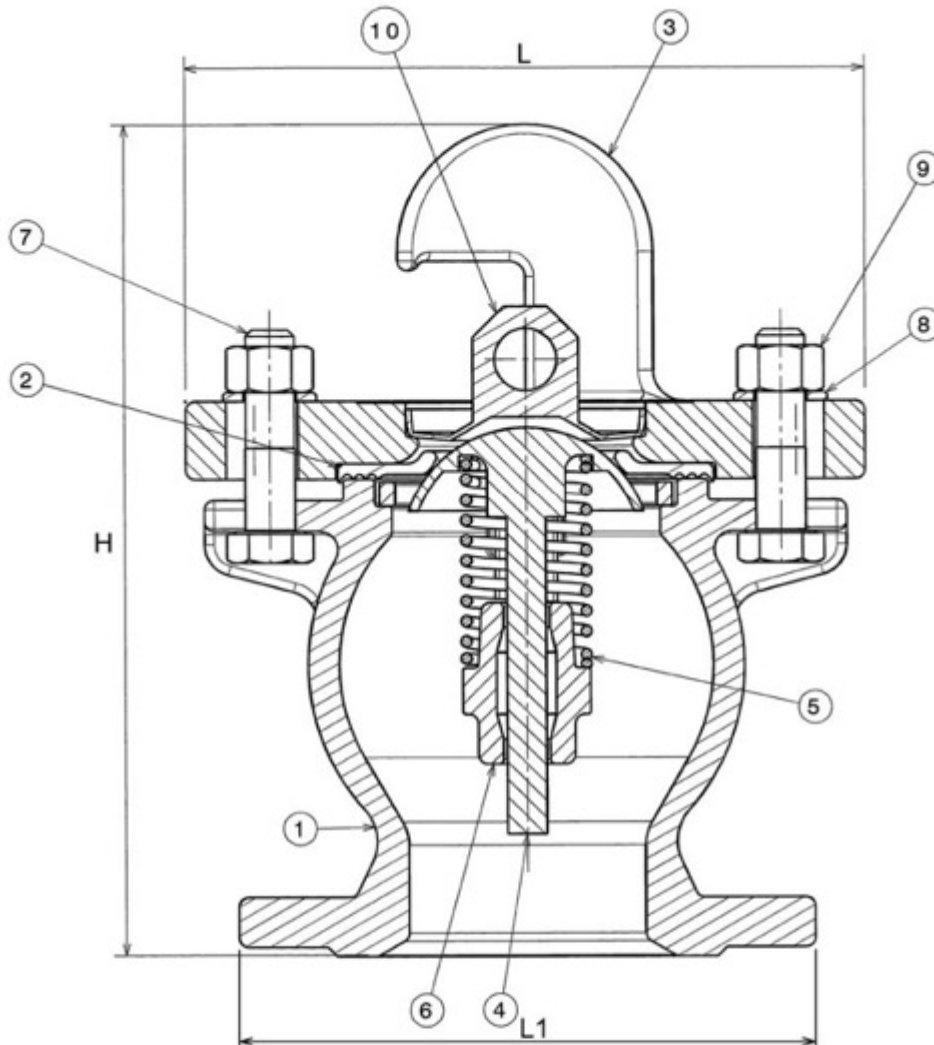
Australian
Standard
AS3952-2002
Lic. SAIKIP20156
SAI Global



Expect... **AVK**

AVK SPRING HYDRANT SWAB TYPE PN16

30/10



Component list

| | | | |
|---------------|--------------------------------------|----------------|----------------------------------|
| 1. Body | Ductile Iron to AS 1831 Grade 450-10 | 6. Valve guide | |
| 2. Valve seat | EPDM to AS 1646 | 7. Bolt | Stainless Steel ASTM 276 Gr. 316 |
| 3. Yoke | Ductile Iron to AS 1831 Grade 450-10 | 8. Washer | Stainless Steel ASTM 276 Gr. 316 |
| 4. Dome | Brass to AS 1568 | 9. Nut | Stainless Steel ASTM 276 Gr. 316 |
| 5. Spring | Stainless Steel ASTM 276 Gr. 304 | 10. Plug | Polyethylene - PE - HD |

Components can be substituted with equivalent or higher class materials.

Reference nos. and dimensions

| AVK ref. nos. | Inlet Flange DN | H | L | L1 | Weight kg |
|---------------------------|-----------------|-----|-----|-----|-----------|
| SWAB - Blue Yoke | | | | | |
| 30-080-1015112 | 80 | 268 | 218 | 185 | 12.45 |
| 30-080-1025112 | 100 | 268 | 218 | 215 | 14.25 |
| SWAB - Purple Yoke | | | | | |
| 30-080-1015145 | 80 | 268 | 218 | 185 | 12.45 |
| 30-080-1025145 | 100 | 268 | 218 | 215 | 14.25 |

The designs, materials and specifications shown are subject to change without notice due to the continuous development of our product program.

APPENDIX B – QUALITY CERTIFICATIONS

Copies of the following quality certificates are available from WSAA.

**TABLE B1
AVK AUSTRALIA HOLDING PTY LTD – MANAGEMENT SYSTEMS**

| 559A Grand Junction Road, Wingfield, SA | |
|---|------------------|
| Quality Systems Standard | ISO 9001:2015 |
| Certification Licence No. | QEC13894 |
| Certifying Agency | SAI-Global |
| First Date of Certification | 30 April 2001 |
| Current Date of Certification | 10 February 2021 |
| Expiry Date of Certification | 14 February 2024 |

**TABLE A2
AVK AUSTRALIA PTY LTD – PRODUCT CERTIFICATION**

| 559A Grand Junction Road, Wingfield, SA. | |
|--|-------------------|
| Product Standard/Spec. | AS 3952 -2002 |
| Certificate No. | SMKP20156 |
| Issuing Certification Body | SAI-Global |
| First Date of Certification | 30 September 2003 |
| Current Date of Certification | 11 April 2022 |
| Expiry Date of Certification | 29 September 2023 |



CERTIFICATE OF REGISTRATION

This is to certify that:

AVK Australia Holding Pty Ltd

ABN 11 081 236 777

AVK Valves Pty Ltd

ABN 25 615 247 544

AVK Flow Control Pty Ltd

ABN 80 153 707 398

AVK CTS Pty Ltd

Trading as Complete Tapping Service

ABN 59 621 126 207

AVK Wang Pty Ltd

ABN 29 605 784 343

AVK Currumbin Pty Ltd

ABN 24 615 602 250

559A Grand Junction Road Wingfield SA 5013 AUSTRALIA

(Refer to Attachment to Certificate of Registration dated 12 February 2021 for additional certified sites)

operates a

QUALITY MANAGEMENT SYSTEM

which complies with the requirements of

ISO 9001:2015

for the following scope

The manufacture, marketing and sale of valves and associated products including stainless steel pipe couplings, tapping saddles and flange off take clamps and the provision of under pressure tapping, line stopping and valve insertion services.

Certificate No: QEC13894

Issued: 12 February 2021

Expires: 14 February 2024

Originally Certified: 30 April 2001

Current Certification: 10 February 2021

Frank Camasta
Global Head of Technical Services
SAI Global Assurance



Registered by:
SAI Global Certification Services Pty Ltd (ACN 108 716 669) 680 George Street Sydney NSW 2000 Australia with SAI Global Pty Limited 680 George Street Sydney NSW 2000 Australia ("SAI Global") and subject to the SAI Global Terms and Conditions for Certification. While all due care and skill was exercised in carrying out this assessment, SAI Global accepts responsibility only for proven negligence. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. To verify that this certificate is current please refer to SAI Global On-Line Certification register at <http://register.saiglobal.com/>





STANDARDSMARK LICENCE

SAI Global hereby grants:

AVK Australia Holding Pty Ltd

ABN 11 081 236 777

559A Grand Junction Road, Wingfield, SA 5013, Australia

StandardsMark Licence

Manufactured to:

AS 3952-2002 - Water supply - Spring hydrant valve for waterworks purposes

"the StandardsMark Licensee" the right to use the STANDARDSMARK as shown below only in respect of the goods described and detailed in the Schedule which are produced by the Licensee or on behalf of the Licensee* and which comply with the appropriate Standard referred to above as from time to time amended. The Licence is granted subject to the rules governing the use of the STANDARDSMARK and the Terms and Conditions for certification and licence. The Licensee covenants to comply with all the Rules and Terms and Conditions.

Licence No: SMKP20156

Issued : 2 June 2022

Expires : 29 September 2023

Originally Certified : 30 September 2003

Current Certification : 11 April 2022

Calin Moldovean
President, Business Assurance
SAI Global Assurance



* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to www.saiglobal.com, for the list of product models.



SCHEDULE TO STANDARDSMARK LICENCE

SAI Global hereby grants:

AVK Australia Holding Pty Ltd

559A Grand Junction Road, Wingfield, SA 5013, Australia

StandardsMark Licence

Manufactured to:

AS 3952-2002 - Water supply - Spring hydrant valve for waterworks purposes

Model identification of the goods on which the STANDARDSMARK may be used:

| Model Identification | Model Name | Brand Name | Product Description | Product Type | Nominal Size (DN) | Pressure Classification | Maximum Operating Temperature (°C) | End Connection Designation | Material Designation | Coating/Lining Designation | Date Endorsed |
|----------------------|----------------------------|------------|--|----------------|-------------------|-------------------------|------------------------------------|----------------------------|----------------------|----------------------------|---------------|
| 2030/00 | Series 2030 Spring Hydrant | Sureflow | DN80 Spring Hydrant Valve | Spring Hydrant | DN 80 | 16 | 40°C | Flange | Ductile Cast Iron | Polymeric to AS 4158 | 4 Jun 2019 |
| 2030/10 | Series 2030 Swab Hydrant | Sureflow | DN80 Spring Hydrant Valve | Spring Hydrant | DN 80 | 16 | 40°C | Flange | Ductile Cast Iron | Polymeric to AS 4158 | 5 Apr 2022 |
| 30/00 | Series 30 Maxiflo Hydrant | AVK | DN80 Spring Hydrant Valve | Spring Hydrant | DN 80 | 16 | 40°C | Flange | Ductile Cast Iron | Polymeric to AS 4158 | 4 Jun 2019 |
| 30/10 | Series 30 Swab Hydrant | AVK | DN80 Spring Hydrant Valve | Spring Hydrant | DN 80 | 16 | 40°C | Flange | Ductile Cast Iron | Polymeric to AS 4158 | 4 Jun 2019 |
| CA0412/3-001 | | AVK | DN80 X 80 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN80 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CA0412/3-002 | | AVK | DN80 X 100 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CA0412/3-003 | | AVK | DN80 X 80 FLANGE LIGHTWEIGHT SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN80 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CA0412/3-004 | | AVK | DN80 X 100 LIGHTWEIGHT FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |

Licence No: SMKP20156

Issued Date: 12 April 2022

This schedule supersedes all previously issued schedules



* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to the Schedule for the list of product models.

SCHEDULE TO STANDARDSMARK LICENCE

| Model Identification | Model Name | Brand Name | Product Description | Product Type | Nominal Size (DN) | Pressure Classification | Maximum Operating Temperature (°C) | End Connection Designation | Material Designation | Coating/Lining Designation | Date Endorsed |
|----------------------|------------|------------|--|----------------|-------------------|-------------------------|------------------------------------|----------------------------|----------------------|----------------------------|---------------|
| CA0412/3-005 | | AVK | DN80 X 100 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 SLOTTED FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CA0412/3-006 | | AVK | DN80 X 100 LIGHTWEIGHT FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 SLOTTED FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-001 | | SUREF LOW | DN80 X 80 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN80 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-002 | | SUREF LOW | DN80 X 100 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-003 | | SUREF LOW | DN80 X 80 FLANGE LIGHTWEIGHT SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN80 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-004 | | SUREF LOW | DN80 X 100 LIGHTWEIGHT FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-005 | | SUREF LOW | DN80 X 100 FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 SLOTTED FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |
| CS0412/3-006 | | SUREF LOW | DN80 X 100 LIGHTWEIGHT FLANGE SPRING HYDRANT | SPRING HYDRANT | 80 | PN16 | 60 °C | DN100 SLOTTED FLANGE | DUCTILE IRON | POLYMERIC | 3 May 2018 |

End of Record

Licence No: SMKP20156

Issued Date: 12 April 2022

This schedule supersedes all previously issued schedules



* For details of manufacture, refer to the licensee

The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 050 644 642) and is issued under licence by SAI Global Certification Services Pty Limited (ACN 108 716 669) ("SAI Global") 680 George Street, Sydney NSW 2000, GPO Box 5420 Sydney NSW 2001. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to the Schedule for the list of product models.

APPENDIX C – SUPPLIER CONTACTS

AVK AUSTRALIA HOLDING PTY LTD

559A Grand Junction Road, Wingfield, SA

Tel: (08) 8368 0900

Email: enquiries@avkau.com.au

Website: www.avkcivil.com.au/en-au



Melbourne Office

Level 8, Suite 8.02
401 Docklands Drive
Docklands VIC 3008

Sydney Office

Level 9 420 George Street
Sydney NSW 2000
GPO Box 915
Sydney NSW 2001

P +61 (0) 3 8605 7666
email: info@wsaa.asn.au

www.wsaa.asn.au