



CERTIFICATION MARK

This certifies that

AVK VALVES (ANHUI) CO. LTD

has had the undermentioned product examined, tested and found, when correctly installed, to comply with the requirements of the United Kingdom Water Supply (Water Fittings) Regulations and Scottish Water Byelaws.

AVK SERIES 756 BUTTERFLY VALVES (DN200, DN250, DN300, DN350, DN400, DN450, DN500, DN600, DN700, DN800, DN900, DN1000 & DN1200)

The certificate by itself is not evidence of a valid WRAS Approval. Confirmation of the current status of an approval must be obtained from the WRAS Directory (www.wras.co.uk/directory)

The product so mentioned will be valid until the end of:

February 2022

1702367

Certificate No.

Handwritten signature of J. Funnell in black ink.

Secretary

Handwritten signature of K. Leebey in black ink.

Chairman, Product Assessment Group



16th August 2017

AVK Valves (Anhui) Co. Ltd
No. 20 Hengjiang Street,
Hexian Chaohu City,
Anhui Province,
PRC

Water Regulations Advisory Scheme Ltd.
Unit 13, Willow Road,
Pen y Fan Industrial Estate,
Crumlin,
Gwent,
NP11 4EG

Approval Number: 1702367

Dear Sir/Madam

1. Production samples of the products described in Approval Information ("Products") have been subjected to relevant mechanical and water quality tests contained in the "Regulators' Specifications" for the purposes of your application for WRAS Approval.
2. After considering the test reports and examining the Product/s, The Water Regulations Advisory Scheme Ltd. ("WRAS Ltd" / "WRAS") finds that their use, when correctly installed (see paragraph 3) complies with the requirements of The Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014, The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 and all other applicable WRAS requirements from time to time.

The non-metallic materials of construction, in contact with the water, are suitable for contact with wholesome water intended for domestic purposes having met the requirements of BS 6920-1: 2000 and/or 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water.

WRAS Approvals are granted subject to and in accordance with the Standard Terms and Conditions of WRAS Fittings Approval as amended from time to time ("**Standard Terms of Approval**"). You have confirmed your acceptance of the Standard Terms of Approval by submitting your application for WRAS Approval. A copy of the current Standard Terms of Approval are attached to this letter as Appendix B and are also available from the WRAS website: www.wras.co.uk.

Terms defined in the Standard Terms of Approval shall have the same meaning in this letter unless the context otherwise requires.

3. Installation Requirements & Notes (IRNs) are set out in Appendix A. WRAS Product Approvals may include one or more IRNs, which must be followed by the installer to ensure that the product is installed correctly to comply with The Regulations and Byelaws. Since the incorrect installation of products could result in contravention of the Regulations or Byelaws requirements, **the attention of your customers should be drawn to any IRNs.**
4. Please note that the use of the Products described in any particular area of supply is at the discretion of the Water Undertaker in that area.
5. Approval Holders may quote in their sales literature that **WRAS finds that the use of these products, when correctly installed, will not contravene the requirements of** The Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014, The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009.
6. The "WRAS Approved Product" logos are certification marks registered under the Trade Marks Acts 1994 ("**Certification Marks**"). Approval Holders may use the Certification Marks in accordance with the Standard Terms of Approval.
7. Please verify the details of your Product as set out in the approval information and advise us of any discrepancies by no later than **16th September 2017**

Yours Faithfully

A handwritten signature in black ink, appearing to read 'Jason Furnival', written in a cursive style.

Jason Furnival
Secretary, Product Approval Group

APPROVAL INFORMATION

Validity dates:	This approval is valid for fittings (as listed below in model) manufactured AND installed between February 2017 & February 2022
Section Number:	2020
Section title:	VALVES - BUTTERFLY.
Installation requirement notes:	R001 (IRN's are set out in Appendix A)
Product description:	AVK series 756 range of butterfly valves with blue epoxy coated ductile iron bodies and discs, and EPDM rubber 'o'-rings, gaskets and seals. For above and below ground use. Maximum working pressure 16.0 bar. Maximum operating temperature 50°C.
Size:	DN200, DN250, DN300, DN350, DN400, DN450, DN500, DN600, DN700, DN800, DN900, DN1000 & DN1200
Identification Marking:	AVK, size, PN rating, direction of flow arrow and product information on body.
Manufacturer:	AVK Valves (Anhui) Co. Ltd
Model:	AVK Series 756

APPENDIX A

INSTALLATION REQUIREMENTS & NOTES

You are advised to draw customers' attention to the installation requirements and notes set out below which must be followed to ensure that the fittings described above are installed in accordance with the requirements of the Regulations and Byelaws:

IRN R001

See text of entry for Installation Requirements or Notes.

APPENDIX B - Standard Terms of Approval

STANDARD TERMS & CONDITIONS OF WRAS PRODUCT APPROVAL

The Water Regulations Advisory Scheme (WRAS) administers the WRAS Product Approval and Material Approval Scheme on behalf of the UK Water Supply Industry.

WRAS Approval of products is granted subject to the following standard conditions, which holders of approvals accept on signing the WRAS Approval application form (Form F2).

1. Introduction

1.1. The WRAS Approval Scheme and the WRAS Product and Materials Directory are owned and operated by the Water Regulations Advisory Scheme Ltd ("WRAS Ltd" or "WRAS").

1.2. WRAS Approvals are granted by the WRAS Product Assessment Group ("PAG"). Members of the PAG are suitably experienced representatives of the UK Water Supply Industry appointed by the WRAS Technical Committee.

1.3. In these Standard Terms of Approval, the following definitions shall apply:

"Agent" means any third party agent nominated by the Applicant for the purposes of the Application and whose details are set out in section 4 of the Application Form;

"Applicant" means any person, company or other organisation / entity that applies for WRAS Approval in respect of a Product;

"Application" means an application for WRAS Approval;

"Application Form" means the F2 application form to be used when applying for WRAS Approval and which can be found on the WRAS website www.wras.co.uk;

"Approval" / **"WRAS Approval"** means approval granted by WRAS on behalf of UK Water Suppliers once WRAS is satisfied that the Product complies with the requirements of the Water Supply (Water Fittings) Regulations 1999 and BS 6920 and any other applicable requirements from time to time;

"Approval Holder" means the holder of an existing WRAS Approval, which includes holders of both Primary Approvals and Secondary Approvals;

"Approval Period" has the meaning set out in clause 3.5;

"Approved Product" means any water fitting, plumbing product, material or component which is the subject of an existing WRAS Approval;

"Approval Letter" means the letter from WRAS to the Applicant confirming the grant of WRAS Approval in respect of a Product;

"Approval Scheme Installation Requirements and Notes" means any installation requirements and notes issued by WRAS as part of a WRAS Approval;

"Certification Mark" has the meaning set out in clause 20.1;

"Committee" means the WRAS Technical Committee;

"Directory" means the WRAS Product & Material Directory;

"Event Outside Our Control" means any act or event beyond WRAS's reasonable control, including without limitation strikes, lock-outs or other industrial action by third parties, civil commotion, riot, invasion, terrorist attack or threat of terrorist attack, war (whether declared or not) or threat or preparation for war, fire, explosion, storm, flood, earthquake, subsidence, epidemic or other natural disaster, or failure of public or private telecommunications networks [or impossibility of the use of railways, shipping, aircraft, motor transport or other means of public or private transport];

"Factor" a factor is generally an organisation that did not manufacture the Product, typically being a retailer, reseller or wholesaler;

"Primary Approval" means an Approval granted pursuant to the first Application for a Product and any subsequently renewals of that first Approval;

"Product" means any water fitting, plumbing product, material or component submitted to WRAS for WRAS Approval;

"Sample" samples of the Product to be sent to WRAS for evaluation as part of the Application;

"Scheme" means the Water Regulations Advisory Scheme;

"Secondary Approval" means an Approval granted pursuant to a second Application for a Product; a Secondary Approval relies on the existence of a Primary Approval and is typically used where the Product has been re-branded but maintains the same mechanical specifications as the Product submitted for Primary Approval and therefore does not require any further mechanical or materials testing;

"Standard Terms of Approval" these standard terms and conditions of WRAS Approval as amended from time to time in accordance with clause 24.2;

"Test Facility" means any WRAS suitably accredited test laboratory;

"WRAS Guidance" means the WRAS Product Approval Guidance available on the WRAS website www.wras.co.uk

2. Obligations of the Applicant & Approval Holder

2.1. It is the responsibility of Applicants to ensure that they are familiar with and comply at all times with the requirements of the Scheme as detailed in both these Standard Terms of Approval and in the WRAS Guidance.

2.2. The Applicant recognises, accepts and complies with the roles and responsibilities of Applicants seeking WRAS Approval, as detailed in the "Overview of the roles & responsibilities of those parties involved in the process for gaining WRAS product approval" document which is available on the WRAS website www.wras.co.uk. For the avoidance of doubt, WRAS shall not be responsible for the acts or omissions of any test laboratory or any other third party involved in the WRAS Approval process.

2.3. The Applicant warrants the accuracy and completeness of all information contained in the Application and any other information now or subsequently provided to by the Applicant or its Agents to WRAS and/or the Test Facility in pursuance of the Application and confirms that none of this information is or may be construed as misleading in any way. WRAS accepts no liability for any losses or any other damage arising from incomplete or incorrect information provided by the Applicant.

2.4. The Applicant / Approval Holder undertakes to WRAS as follows:

2.4.1. to co-operate fully with WRAS and its employees and agents in relation to the Application process and any subsequent audit that WRAS may consider necessary and to provide WRAS with all such relevant information (including samples and evidence of the purchase of products and materials such as goods receipts) as may be required by WRAS from time to time;

2.4.2. to notify WRAS of any changes to contact details (including current email addresses), company details or business changes that relate to the Approved Product;

2.4.3. to notify WRAS immediately of any changes relating to the Application / Approved Product, its manufacture, intended use or method of installation which could affect the compliance of the Product or its Approval by WRAS;

2.4.4. to ensure that no changes or modifications to the Application / Approved Product, markings, assembly or range of products/fittings, including changes, substitutions or modification to the materials of construction, components or sub assemblies ("Modifications") are made without the Applicant / Approval Holder first notifying WRAS. Modifications include but shall not be limited to design changes, changes in materials and/or suppliers of materials, changes to the site of manufacture and changes to marking;

2.4.5. to provide WRAS with full details of any proposed Modifications and if required, supply Samples for testing and reassessment. Failure to comply with this condition will immediately invalidate a previously granted Approval. WRAS also reserves the right to withdraw an Approval with immediate effect where WRAS considers that the Modification may affect the validity of an existing Approval for any reason;

2.4.6. to ensure that all products bearing the Certification Mark conform exactly with the Sample in respect of which WRAS Approval has been granted ("Approved Sample") and so that each product/unit manufactured by or on behalf of the Approval Holder which is to be attributed with WRAS Approval is capable of satisfying all of the same tests and other criteria applied to the Approved Sample;

2.4.7. to adhere to these Standard Terms of Approval in relation to all Approved Products.

2.5. The Approval Holder accepts that the Approval granted may be subject to audit by WRAS Ltd, either as part of routine or investigative auditing activity and the Approval Holder shall co-operate fully with WRAS for this purpose. The Approval Holder shall reimburse WRAS for all reasonable costs incurred in connection with the audit.

2.6. It is the Approval Holder's responsibility to draw the attention of purchasers and installers to any installation requirements or notes that apply to their Approved Products, assemblies or range of products as a condition of Approval and to advise them that failure to install in accordance with these requirements will invalidate their approval and could result in contravention of the Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014 and Water Supply (Water Fittings) Regulation (Northern Ireland) 2009.

3. WRAS Product Approvals

- 3.1.** These Standard Terms of Approval form the agreement between WRAS and the Applicant / Approval Holder in respect of Applications and Approvals.
- 3.2.** WRAS Approvals are only granted to those Products, assemblies or ranges of Products which satisfy the Regulators' Specification and requirements of the Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014 and Water Supply (Water Fittings) Regulation (Northern Ireland) 2009 and any other applicable requirements of WRAS from time to time. WRAS Approvals are granted at the sole discretion of the UK Water Suppliers acting through their representatives on the Committee and its sub-group, PAG. No liability is accepted by WRAS Ltd, the Committee or PAG to any party which may arise as a result of a refusal to grant an Approval or revocation of an existing Approval.
- 3.3.** WRAS Approval indicates that provided the Product is installed in accordance with the manufacturer's instructions and any Approval Scheme Installation Requirements and Notes, the UK Water Suppliers accept that it is 'of an appropriate quality and standard' in accordance with Regulation/Byelaw 4(1)(a) of the Water Supply (Water Fittings) Regulations 1999, The Water Supply (Water Fittings) (Scotland) Byelaws 2014 and Water Supply (Water Fittings) Regulation (Northern Ireland) 2009.
- 3.4.** WRAS Approval will only be granted to production Samples. A prototype or preproduction Sample may only be submitted for 'approval in principle', and retesting may be required when submitted as a production Sample.
- 3.5.** Unless terminated or extended in accordance with these Standard Terms of Approval, each WRAS Approvals is valid for the five year term stated in the Approval Letter ("Approval Period"). To extend a WRAS Approval beyond the initial five year term, the Approved Product must be re-assessed and where necessary re-tested before expiry of the current five year term. Approval Holders will be advised that the Product is due for re-assessment by email or letter but it remains the sole responsibility of the Approval Holder to maintain a current and valid WRAS Approval
- 3.6.** Only Products which have been tested appropriately, approved and listed by the Scheme are WRAS Approved Products@.
- 3.7.** Only those Products described and listed under the heading 'model' in the approval documentation and Directory entry, are approved by WRAS and covered by the scope of the Approval.
- 3.8.** The scope of an Approval does not extend to rebranded products unless otherwise agreed by WRAS.
- 3.9.** Approval Holders must ensure that individually Approved Products, components and materials incorporated or used in the construction of their approved product retain their Approval throughout the Approval period of their approved product. Where Modifications are required WRAS must be informed and the Modifications approved in accordance with clause 2.4.4 and 2.4.5 above).
- 3.10.** Where an Approved Product has its Approval renewed up to nine months before the current approval expires, the renewed Approval can run for five years from the date of expiry of the current one, provided that this does not conflict with the guidelines for processing Applications published in the WRAS Guidance documents.
- 3.11.** An Approval is only valid if the Approved Product is manufactured and installed during the Approval Period.

4. Applications

- 4.1.** All applications for WRAS Approval must be submitted using the appropriate official WRAS Application form (the 'F2' form is available from the WRAS website www.wras.co.uk/approval.asp).
- 4.2.** All Applications for WRAS Approval must be supported by schematic diagrams, or acceptable alternatives, which in addition to illustrating the arrangement of the Product clearly show the water supply connections, any discharge points, including overflows and waste discharges and the water pathway through the Product. Installation guides and manuals, where applicable, and photographs of the Product(s) and markings suitable for inclusion in the on-line Directory (preferably in a digital format) are also required.
- 4.3.** Applicants must complete a schedule of materials (see section 10 of the Application Form). All component parts of a product, including solder, thread sealant tape, lubricant and grease, which come into contact with water which is required to be wholesome must be listed. Applications must contain all the information required by WRAS before being presented to the PAG. (See WRAS Guidance documentation for further information.)
- 4.4.** The Application Form must include details of any Agents appointed by the Applicant detailing the scope of the Agent's authority. The Applicant undertakes to ratify all acts and omissions of the Agent in connection with the Application / Approval and to indemnify WRAS for any losses incurred as a result of any breach of these Standard Terms of Approval and by the Applicant and/or its Agent(s).
- 4.5.** Application forms will be valid for up to 12 months from date of signature, after which time confirmation will be required that the information provided is up-to-date.

5. Fees

WRAS charges an administration fee ("WRAS Fee") for processing an Application. Details of the WRAS Fee are available from WRAS on request. Where applicants are using a Test Facility to project manage their application, WRAS will collect this fee from the Test Facility. In such cases, this fee is usually included in the charges made by the Test Facility to the Applicant, but it is the Applicant's responsibility to confirm this and to ensure that the WRAS Fee is discharged in full.

6. Termination

- 6.1.** Either party may close an Application at any time upon giving the other party written notice.
- 6.2.** In the event that an Applicant withdraws an Application they shall pay to WRAS Ltd all sums due or committed up to the date of withdrawal.
- 6.3.** WRAS will retain a copy of the F2 Application Form for the entire duration of the Approval Period (including any renewal period granted by WRAS) and for up to 5 years after expiry of the Approval Period.

7. Ownership of documents

- 7.1.** All intellectual property owned by either party or any third independent party shall remain exclusively the property of the owner.
- 7.2.** Subject to any confidential information or other intellectual property belonging to the Applicant, all Application forms are the property of WRAS Ltd.

8. Confidentiality

- 8.1.** Without prior written consent, both WRAS and the Applicant undertake not to divulge to any third party any information which was designated as confidential by the owner at the time it was made available ("Confidential Information").
- 8.2.** It is acknowledged and agreed that WRAS shall be entitled to retain information provided by an Applicant including any test results / analyses of the Confidential Information for up to seven years following expiry of any approvals granted and/or renewed by WRAS provided that the Confidential Information is kept confidential at all times in accordance with this letter.

9. Performance testing

- 9.1.** WRAS will only accept applications which include test reports covering in full the Scheme's acceptance criteria. (See WRAS Guidance documentation for further information.)
- 9.2.** Products must be tested in accordance with the requirements identified in the Test Code Sheet (TCS) matrix published on the WRAS website or as notified by WRAS Ltd.
- 9.3.** Where a product is an assembly of components, all individual constituent components must satisfy the TCS requirements applicable to that component and unless already WRAS Approved will require testing.
- 9.4.** In the case of non-standard products clarification of the testing required should be sought from WRAS in advance.
- 9.5.** The scope of an Approval is restricted to those conditions applied during testing. Consequently should an Applicant wish to obtain Approval for use with a variety of pipe materials at a range of maximum working pressures and temperatures, testing must include these variables. (See WRAS Guidance Documents for further information.)
- 9.6.** Mechanical testing of products must have been completed no more than two years before the report is presented to the PAG.

10. Samples

- 10.1.** A Sample should have been manufactured no more than 12 months before the date of its receipt by the Test Facility (please refer to the WRAS Guidance for further information.)
- 10.2.** In the case of product ranges, or products manufactured or assembled at more than one site representative Samples must be tested (please see WRAS Guidance documentation for further information).
- 10.3.** Where alternative materials are used testing of these variants shall only be undertaken where they could have an impact upon the opacity, endurance or pressure testing appropriate to that product. (Please refer to the WRAS Guidance documentation for further information.)

11. Markings

- 11.1.** It is a condition of WRAS Product Approval that all products be adequately and consistently marked to facilitate identification. (See WRAS Guidance documentation for further information.)

12. Testing Failure

- 12.1.** Should a Product undergoing mechanical performance testing fail to satisfy the requirements of an individual test code sheet then a record of the failure will be reported to WRAS by the Test Facility. Complete retesting of a new Sample will be required unless WRAS accepts that replacement of the failed component or product would not affect the performance of the other tests already carried out on the Sample which failed. (See WRAS Guidance documentation for further information.)
- 12.2.** Should a replacement Sample subsequently fail the same test then it is deemed to be an outright failure and will be reported as such to the PAG. If the replacement fails a different test it is considered to be a first failure and treated as a failure during testing.

13. Modified replacement samples

- 13.1.** If a Product fails to satisfy the requirements of an individual test code sheet and is then modified, the Applicant must provide a declaration detailing the nature and full extent of all modifications. In such cases the status of any earlier testing should be clarified with WRAS.
- 13.2.** Where a modified Product is re-tested it is only deemed to be an outright failure if two failures are recorded for the same test.