

YOUR WATER SOLUTIONS PROVIDER SOUTHERN AFRICA









SHARE OF renewable energy



SUSTAINABILITY function established



NUMBER OF employees

YOUR LONG-TERM PARTNER

AVK Valves south Africa is ready to captain industry for the decades to come.
Anchored by unwavering customer support, AVK is ready to be your dedicated partner for your future success and growth.



AVK Group stands as one of the world's foremost valve manufacturers. Our Water Division specializes in valves and accessories for water distribution, wastewater treatment, and fire protection. Meanwhile, our Industrial Division focuses on water treatment valves for industrial applications. With our specialised subsidiaries, we offer a comprehensive product range suited for high temperatures and high-pressure applications.

You can be assured that AVK Valves Southern Africa operates at a high level of efficiency and effectiveness strengthened by our ISO 9001:2015 & ISO45001:2018 Certifications, and our products can be manufactured to meet different International and Local specification requirements (ISO, BS EN, DIN, API, SANS, etc.)

AVK is ranked among the top 10 in the global industrial valve rankings.

The AVK Valves Southern Africa range

AVK Valves Southern Africa, a valve manufacturing company, has been a leader in the South African valve industry for 30 years. We specialise in manufacturing custom-designed valves at the highest levels of quality, reliability, and value. Here's a summary of our offerings:

Reliability and purity are paramount in water supply. AVK products are celebrated for their superior quality, driven by our market-leading expertise in rubber compounds. With our own vulcanisation and coating facilities, combined with worldwide approvals for drinking water, we ensure maximum safety and durability.

With 30 years in the valve industry, AVK Valves Southern Africa now offers solutions for various applications. Our extensive range includes gate valves, butterfly valves, control valves, check valves, needle valves, air valves, service

connection valves, and hydrants. Additionally, we provide flange adaptors, couplings, fittings, tapping saddles, repair clamps, surface boxes, and valve accessories.

Global leadership and Commitement

Our global reach extends across various regions, but our core focus remains local.

Our customers benefit from dedicated local sales organizations, including AVK's own sales companies and competent distributors.

By understanding our customers unique requirements, we provide tailor-made solutions that align with local specifications.

CORE BUSINESS

PART OF VITAL IFRASTRUCTURES

AVK, a global leader, has been providing gate valves to the water supply sector since its establishment in 1996. Our extensive product range includes gate valves, butterfly valves, check valves, air valves and more.

AVK remains a trusted supplier to the Water Treatment, Water supply and Wastewater Treatment industries offering a wide range of valves adhering to all major standards and providing customised solutions.

AVK VALVES SOUTHERN AFRICA

- Provision of uncontaminated drinking water and prevention of water wastage in the distribution network.
- Efficient treatment and management of wastewater from both households and industries.
- Reliable fire equipment and water supply, ensuring firefighters can respond quickly and effectively in emergencies.







AVK GATE VALVES RENOWNED FOR SUPERIOR QUALITY



The wedge is the heart of a gate valve and the quality of the wedge rubber is crucial for the valve function and durability. AVK wedges are fully vulcanised with AVK's rubber compound offering outstanding characteristics.

The double bonding vulcanisation process ensures maximum adhesion of the rubber and prevents creeping corrosion.

Fixed wedge nut prevents corrosion

AVK's wedge nut design with a fixed, integral wedge nut outperforms the traditional loose wedge nut design as it prevents vibration and thus also corrosion and malfunction. It is made of low-lead brass according to the stringent EU standards.

Wedge shoes for smooth operation

The fixed wedge nut and the vulcanised wedge shoes secure a smooth operation of the valve and low operating torques. The wedge shoes protect the rubber against wear which otherwise would arise from friction during operation.

State-of-the-art rubber technology

AVK GUMMI A/S develops and manufactures the rubber compound for wedges and gaskets using highly advanced technologies.

Data is collected throughout the entire manufacturing process which secures traceability of every single ingredient, compound and final component. AVK performs a number of tests to ensure that the compression set values, the adhesion and the tensile strength of the rubber meet the predefined requirements.





Safe operationThe large stem hole prevents stagnant

water and accumulation of impurities.
The large rubber volume in the sealing
area combined with the excellent
compression set provide optimum
sealing.



Tight assembly of valve body and bonnet

An EPDM bonnet gasket is fixed in a recess in the bonnet to prevent blow-out. The stainless steel bonnet bolts are encircled by the bonnet gasket, embedded in the casting to ensure that no threads are exposed to the surroundings, and finally sealed with hot melt to prevent corrosion.

Strong PE end connection

The DVGW approved class 1 connection is stronger than the PE pipe itself, and the full and straight bore ensures minimum pressure loss and makes underpressure drilling possible.

A piece of standard PE pipe is pressed directly onto the grooved valve end. The grooves combined with a sleeve around the valve/pipe connection ensure that the PE pipe material is firmly secured and that the connection remains tight and tensile during the entire service life of the pipeline. The connection is sealed with a shrink hose to provide corrosion protection.

Pressure test

Every single valve is pressure tested according to EN 1074-1 and 2 /EN 12266 before leaving the factory.





Feature summary

- Fixed, integral wedge nut prevents corrosion caused by vibration
- Wedge and body guide rails ensure stable operation
- AVK's wedge rubber has an excellent ability to regain its shape
- AVK's wedge rubber features an excellent bonding, minimum formation of biofilm and a high resistance to water treatment chemicals
- Wedge shoes protect the rubber against
 wear
- Large stem hole in the wedge prevents stagnant water
- Rolled threads increase the stem's strength
- Anti-blowout stem design
- Wedge stop protects seals and coating
- Triple safety stem sealing
- Thrust collar provides fixation of the stem and low free running torques
- Bonnet gasket is fixed in recess and encircles bonnet bolts to prevent blow-out
- Countersunk bonnet bolts sealed with hot melt to protect against corrosion
- Full bore ensures low head loss and enables use of pipe cleaning devices
- Low operating torques ensure easy operation
- Fusion bonded epoxy coating in compliance with DIN 3476 part 1 and EN 14901, GSK approved, optionally internal enamel

GATE VALVES



Series 01/80

Socket end gate valve Stainless steel stem SANS664 coating PN16

Options:

- Clockwise to open or clockwise to close
- DN50-400
- Drinking Water



Series 02/20

Flanged gate valve Face-to-face EN558/3 SANS664 coating Ductile Iron PN10/16

Options

- Clockwise to open or clockwise to close
- DN50-400
- Drinking Water



Series 06/30

Flanged gate valve Face-to-face EN558/14-F4 SANS664 coating PN10/16

Options:

- Clockwise to open or clockwise to close
- DN50-400
- Drinking Water



Series 21/34

Flanged gate valve OS&Y EN1092 flange PN10/16 Clockwise to close DN50-400 Drinking Water, Waste water and Sewerage



Series 21/60

Flanged gate valve BS 5163/EN558-3 Ductile Iron PN25

Options:

- Clockwise to open or clockwise to close
- DN50-400
- Drinking Water, Waste water



Series 43/60

Flanged gate valve Face-to-face to SANS/ SABS664 EPDM rubber Ductile iron

Options:

- Flange drilling to PN16
 Tab. D or BS10 D,Sans 1123
- Clockwise to open or clockwise to close
- DN50-600



Series 32/80

Spigot ends gate valve For SABS 664 pipes on grooved ends Ductile iron PN16

Options:

- Clockwise to open or clockwise to close
- DN50-200



Series 32/82

Spigot ends gate valve For SABS 664 pipes Ductile iron PN16

Options:

- Clockwise to open or clockwise to close
- DN50-300

Series 37/50

Flanged gate valve Metal seated BS5163 Ductile iron PN16 Clockwise to close DN50-300



Series 6133

Flanged gate valve Metal seated Face-to-face to SANS664 Bare shaft PN10-64

Options:

- Rising or non-rising stem
- Clockwise to close or clockwise to open
- Drinking Water and Raw Water



GATE VALVE ACCESSORIES





Series Series 04/22 Stem cap For gate valves, service connection valves and extension spindles



Series 08/A Handwheel For low-torque gate valves With bolt and washer



Series Series 04/04 Extension spindle Telescopic For gate valves Key adapter #23-32



Series 80/32 Synthetic surface box Type 4057 For service connection Valves



Series 80/41 Synthetic surface box Type PURBRA For underground hydrants



AVK DOUBLE ECCENTRIC BUTTERFLY VALVES THE SAFE CHOICE



AVK offers double eccentric butterfly valves in DN200-2800 designed with durability in focus. The tilted and firmly secured disc, the optimised seal design and the corrosion protected shaft end zones are features that exceed the market standards.

Longer service life due to tilted disc

The tension on the disc is released after a few degrees of opening which minimises wear of the disc seal. Furthermore, the design minimises the compression of the sealing which ensures low operating torques.

Safe disc and shaft connection

The disc and shaft are connected by means of a key and a keyway. The key is secured with two set screws to prevent fluttering caused by flow velocity and necessary play in the key and keyway connection. In the large dimensions the disc is secured with two stainless steel drive dowels, with key and keyway as back-up.

Two seat designs

The integral seat design has a machined and epoxy coated ductile iron seat integrated in the body. The stainless steel seat design has a replaceable seat ring of stainless steel sealed with an O-ring to avoid leakages under the seat ring.

Disc seal optimised for high performance

The disc seal is shaped to secure fixation in correct position providing a very reliable function. The excellent rubber quality makes it possible to reduce the amount of rubber which ensures low closing torques. The EPDM sealing is approved by DVGW, KIWA and WRAS.









Shaft design features

The shaft sealing is replaceable under pressure to enable easy maintenance. Sealings of EPDM secure tightness from inside and out, and NBR sealings protect against impurities and fluids from outside.

The butterfly valves are fitted with a locking device which makes it possible to lock the disc in open/closed position if gearbox replacement becomes necessary.

The low friction PTFE bearings ensure low operating torques and the protected shaft ends secure durability since there are no uncoated ductile iron surfaces exposed to the media.

Bi-directional and slim

The valves are bi-directional even though valves from DN700 and up are marked with an arrow indicating the preferred flow direction. The weight is minimised to make handling easier, and to put less strain on the environment.

Product approvals

The butterfly valves are approved by:

- SPAN
- DVGW
- KIWA
- WRAS

For larger dimensions all components are approved.

Actuation of your choice

AVK can offer any type of actuation. Our standard options are IP67 gearboxes with handwheel for above ground installation, IP68 gearboxes for buried service, and ISO-input gearboxes for mounting of electrical actuators. Furthermore, we offer extension stems, adaptors and handwheels.





Up to DN600 the shaft ends are protected with stainless steel plates with gaskets. After mounting and successful pressure test, an extra layer of epoxy coating seals the steel plates. In larger dimensions the shaft ends are fully encapsulated in the disc and fixed to the disc with dowels.

BUTTERFLY VALVES



Series 75/62
Concentric butterfly valve Flanged
Fixed liner
PN10/16
Bare shaft
DN50-600
Water, waste water,

cooling water, sea water



Series 75/64
Centric butterfly valve
Wafer type w centering
lugs
Fixed liner
PN10/16
DN50-350
Water, waste water,
cooling water, sea water



Series 75/61
Concentric butterlfy valve
Wafer type
Fixed liner
PN10/16
DN050 Up to DN1200
Water, waste water,
cooling water, sea water



Series 6137 Boving Double Eccentric Butterfly Valve Soft seal in EPDM

Soft seal in EPDM S.G. Iron body and disc Bare shaft

Options:

- Locking Device
- Coating above 400μ
 FBE
- Coating to DN500
- Seat and Clamp Ring
- 316 SS A4 bolts
- Drinking, Waste and cooling water



Series 820

- Body Construction
 B1 Wafer DN 32-600
 B3 Lug DN 32-400
 B4 U-section DN 450-900
- Face to face dimension according to ISO 5752/20, EN 558-1/20
- Top flange according to EN ISO 5211
- Max, working pressure
 16 bar (DN32-150)
 10 bar (DN200-300)
 6 bar (DN350-900)
- Flange connection
 PN10, PN16, ANSI ci. 150
 AS 2129 table D + E and others



Series 6145

Gunric triple eccentric butterfly valve Metal seated PN10-PN100

Options:

- WCB or ductile iron body
- DN150-3000
- Drinking water



Series 6144/02-001

ASTM A216 WCB AVK Butterfly Valve, Wafer Rubberlined BFV, gearbox operated EPDM rubber PN25 DN50 - DN150 Lever Operated DN200-DN600: Gearbox Operated

A butterfly valve is a shut-off valve with a relatively simple way of operating. A quarter turn takes the valve from fully open to fully closed position and vice versa. AVK offers one of the widest ranges of butterfly valves in the market reflecting our customers' requirements.

This includes centric, double excentric, triple excentric with vulcanized liner, loose liner, as well as Metal-to-Metal. We offer a wide variety of material configurations for each of these types as well as any type of actuation.

 $\textbf{Types} \ \textbf{Centric loose liner}, \ \textbf{Centric vulcanized}, \ \textbf{Double eccentric}, \ \textbf{Triple eccentric}$

Sizes DN 25 - DN 3000, 1" - 40"

Pressure PN6 - PN100, Class 150# - 600#

Material Carbon Steel, Stainless Steel, Bronze, Duplex, Ductile iron

Seat Metal-to-Metal, Soft Seat, Laminated

Connection Wafer, Lug, Flanged, Mono-Flanged

Operating Manual, Pneumatic, Electric, Hydraulic

Design EN593, API 609, ISO 5211, EN 15848-1, FDA EC 1935/2004, ISO 10497, API 607, standard DIN 3780, MSS SP-143, BS 6755 part 2, BS 6364, ASME B16.34, ASME B16.10, EN 12516, EN 1092, ASME 16.5, ASME B16.47, ISO 5752

AVK SWING CHECK VALVE UNIQUE DESIGN



AVK swing check valves are available in DN 50-1000 and feature full bore and low head loss, as well as easy access to maintenance and a great durability. The swing check valves can be installed in both horizontal and vertical positions.



Unique design
By unscrewing a few bolts the
bonnet assembly including hinge
and disc can be removed from the
body. The hinge is tightened around
the shaft with bolts to eliminate
play and thus ensure durability.

Feature summary

- Full bore ensures low head loss when fully open
- Full bore prevents pressure loss allowing maximum utilization of pump capacity
- Bonnet/disc design gives easy access to maintenance
- Fully rubber coated disc prevents corrosion and ensures drip-tightclosure and long life
- Light-weight disc requires a minimum of force to open and close the valve
- The disc is mounted in a nylon bushing, which allows it to move slightly both horizontally and vertically to close completely tight also in case of minor impurities in the seat
- Hinge tightened around the shaft with bolts to eliminate play and thus ensure durability
- Ductile iron epoxy coated to DIN 30677-2
- Available with or without lever and weight
- Other options available complete with limit switch





Resilient seated disc with Stainless Steel hinge.

The valve is ideal for installation in the horizontal position and used where there is an insignificant risk of water hammer. This design features a distinctly low head loss and is used in installations, where the dry matter percentage is max. 10%. Optimum sealing at not less than 0.5 bar pressure. The valve is suitable for underground installation.

Swing check valve with external lever and weight plus limit switch.

Cam operated IP66 limit switch. Mechanical roller plunger with the ability to easily set the cam at any given position. Maintenance free and vibration resistant cage clamp terminals. key and keyway as back-up.

To achieve the optimum performance from any swing check valve, a velocity of 1.5 to 2m/s is required to fully open the valve, and to reduce turbulence a straight piece of pipe five (5) times

Swing check valve with external lever and weight.

For installations with an insignificant risk of water hammer, but where the minimising of head loss is important. The lever is also useful as an indicator of the valve disc position. The valve is suitable for horizontal and vertical installations.

Large diameter metal seated check valve.

This valve is ideal for potable water and sewerage applications and suitable for temperatures up to 70° C.

The body, bonnet, hinge and metal seated disc are all constructed with high grade Ductile Iron to EN 1563, EN-GJS-500-7. The seat is aluminium bronze.



A guard covering the lever and weight eliminates the risk of injuries. Optionally with proximity switches for remote monitoring.

CHECK VALVES



Series 53/30
Ball check valve
MJ/thread
NBR lined ball
PN10/16
DN32-50
Drinking and Sewerage



Series 41/60 Swing check valve Face-to-face to EN558-48 SANS664 coating Ductile iron DN50-300 Drinking Water



Series 41/61 Swing check valve Face-to-face to EN558-48 SANS664 coating Ductile iron DN50-300 Drinking Water



Series 53/35 Ball check valve Flanged NBR liner PN10/16 DN50-300



Series 6135 Non-return recoil valve Multi-door Metal seated PN25 DN600 Drinking Water



Series 6143
IPV Check valve
IPV Wafer check valve
C623
single door
WCB body and CF8M disc
class 300
fits ASA300 flanges



Series 642 ECV Split door swing check valve, wafer type, fixed liner, SS440x/316 disc, shaft and spring, PN10/16 connections, 16 bar, 100 µm orange RAL 2000 PUR (WW ref ECV)

Check valves prevent back flow of media in a pipeline system. It is a one way valve, which will close in case of back flow to protect the piping, other valves or pumps.

There are various types of check valves available for different applications. AVK offers a wide range of swing, ball, piston, tilting disc valves and nozzle and non-slam check valves

Types Swing, Ball, Piston, Tilting disc, Nozzle

Sizes DN 15 - DN 1200, 1/2" - 24"

Pressure PN10 - PN16, Class 150# - 2500#

Material Carbon Steel, Stainless Steel, Bronze, Duplex, Ductile iron, PE

Seat Metal-to-Metal, Soft Seat

Connection Wafer, Flanged, Threaded

Design API 600, BS 1868, API 594, API 6D, ISO 10434, API 602, ASME B16.34, standard ASME B16.10, EN 12516, EN 1092, EN 558, DIN 3202, EN 12627

AVK CONTROL VALVES DIAPHRAGM OPERATED



Water is a scarce resource that we need to protect. We need to secure water for the next generations and a growing population. Control valves can help reduce water losses and contribute to efficient water supply management by maintaining a certain pressure, flow or level, regardless of changes in the supply network.

The safe choice with 10-year warranty

AVK diaphragm operated control valves are designed according to EN 1074-5 and to provide network stability, accurate regulation, easy maintenance and long durability.

AVK control valves are available in DN50-600, with reduced and with full bore. Control valves with reduced bore are appropriate for most applications, as the smaller bore often offers more accurate regulation. Control valves with full bore are recommended, if high Kv values are needed, e.g. in front of hydrants.

High quality WRAS approved materials

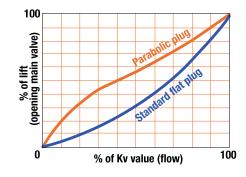
The body and bonnet are made of ductile iron with fusion bonded GSK approved epoxy coating.

The diaphragm is manufactured by AVK GUMMI and made of drinking water approved EPDM rubber with polyamide reinforcement.

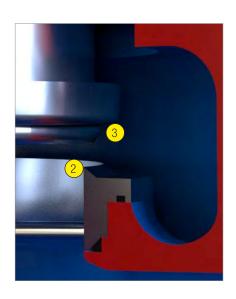
All non-coated internals are of stainless steel AISI 316 as standard and all materials are WRAS approved.

Design features of the valve

- Large diaphragm design (1) secures fast reaction to changes in pressure. Its asymmetric axial position gives less stress near closed position.
- Lifted seat design (2) prevents damage inside the valve body caused by cavitation.
- Parabolic plug design (3) provides precise regulation and stability at low flow.
 Furthermore, it reduces noise and vibration.
 See below characteristics, illustrating the performance compared to a standard flat plug design.







PATENTED PILOT SYSTEM WITH UNIQUE FEATURES



Pressure reducing valve



Pressure sustaining/relief valve

Modular pilot system

The modular design with interchangeable parts offers great flexibility as the pilot system is easily altered to fit other or multiple applications without replacing the valve. The pilot system consists of three main components:

- The distribution block (1) connects the pilot system to the main valve. As a unique feature, it offers adjustment of regulation speed for full control, easily adjusted using standard tooling, and giving full control e.g. in situations, where water hammer may occur.
- The filter (2) features high capacity and easy maintenance. When using the optional flush valve it also offers easy access to cleaning, while the valve is in operation.
- The hydraulic control block (3) can be set up for different applications. It features easy hand adjustment of the balanced pilot valve which is capable of very precise settings.

Compact design

The external pipework takes up less space and is less vulnerable to damage during installation compared to many other control valves.

It is designed using components with standard threads offering easy sourcing of replacements as well as easy fitting using standard tools. All metal parts are of stainless steel AISI 316 as standard





CONTROL VALVES - PILOT OPERATED AND NEEDLE VALVES



Series 869

Control valve Reduced bore Stainless steel/ductile iron trim PN10/16

Options:

- Pressure reducing, pressure sustaining, constant flow, altitude level, or float level
- DN65-600
- Drinking Water



Series 872

Needle valve DN 80-1600 PN 10/16/25/40 Stainless steel DN80-150 Ductile iron from DN200

Options:

- Various actuators and accessories
- Up to PN100 and DN2000
- Drinking Water



Series 6139 - Baker

Baker control valve PN25-40 Numerous control options, contact AVK for more information DN50-500 Drinking Water



Series 6139/007-003

Baker control valve Bi-level control valve PN40 Differential Float DN50-500 Drinking Water

Equilibrium right angled ductile iron ball float valve lever arm operated. Hot dipped galvanized.

Coating: Internal and external blue fusion bonded epoxy 250 microns.



Series 854

Ball float valve Lever and float of PP DN50-300 PN16 Ductile iron

Options:

- Lever and float of stainless steel
- Drinking Water -Reservoir Filling

AVK Series Control Valve help reduce water loss by maintaining certain pressure, flow or level control in your networks. This is a major contribution to efficient water supply management regardless of changes in the supply nework.

The Baker Control Valve is a localy manufactured product with the following key technical advantages:

- Pressure reducing, pressure sustaining, constant flow, altitude level, or float level.
- Large flow passage with resultant greater capcity.
- Greater cavitation resistance 4:1allowable pressure drop.
- "Quad" Seal which provides a bubble tight closure and long life with reduced maintenance.



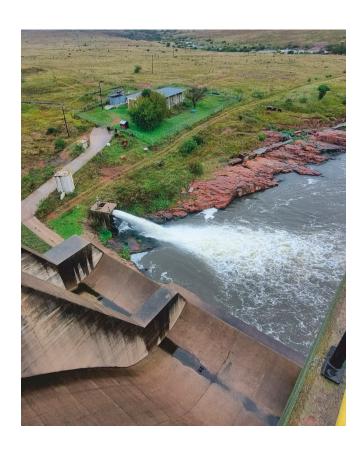
FIXED CONE SLEEVE AND EQUILIBRIUM VALVES

SLEEVE VALVES

Sleeve Valves are used as discharge regulation devices on dam outlets, pump stations, hydropower schemes and as scour valves on large pipelines where the emptying of the pipelines has to be controlled. Operation can be manual gearbox, electric actuator or hydraulic actuator. Custom design to suit applications and installation details.



Series 6140
Fixed cone sleeve valve
Flat faced flanges
PN10/16
Electrical or manual
actuation
DN300-1100
Drinking and Raw Water





PENSTOCK, AIR VALVE AND Y STRAINER



Series 772 Wall-mounted penstock Closed frame Non-rising stem

Non-rising stem Bi-directional DN200-1200

Drinking and Waste Water
Options: Weir & Channel Mounted



Series 851

Double orifice air valve with VNR valve Ductile iron EPDM rubber, WRAS approved Drinking Water



Series 910

Y-strainer Stainless steel screen PN16-25 DN50-600 Drinking and Waste Water

WALL MOUNT PENSTOCK

The ORBINOX model MU is a 4-sided sealing slide gate. The gates are suitable for different types of applications with a highly versatile flow control for waste water treatment plants, irrigation, hydraulic works and hydro-electric power plants.

From sizes 6" x 6" (150mm x 150mm) to 48" x 48" (1200mm x 1200mm), the MU model has a unique seal design that can achieve minimal equal seating and unseating (bidirectional) leakage rates. Sizes 52" x 52" (1300mm x 1300mm) up to 80" x 80" (2000mm x 2000mm) are available in both unidirectional (only suitable for seating water heads) and bi-directional configurations.

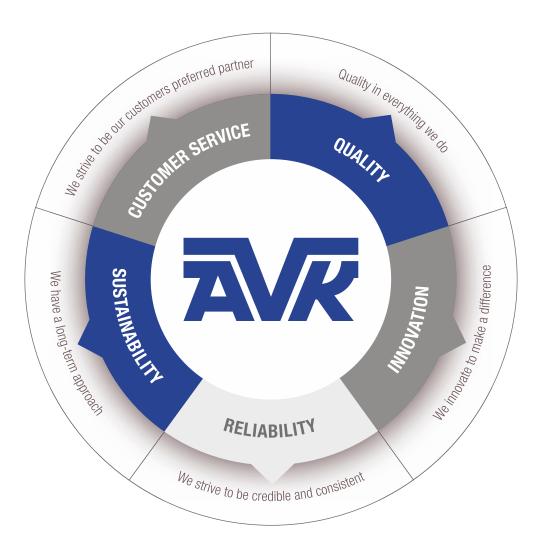
The leakage rate is 50% or better of the maximum allowable recommended by AWWA (C561-04) under normal conditions. Orbinox also designs and manufactures the MU Slide Gate in larger sizes,

for more demanding service conditions and maintains a leakage rate below the allowable standard from AWWA. For more information please contact an Orbinox representative.

All Orbinox actuators can be yoke or pedestal mounted.



OUR VALUES





QUALITY IN EVERY STEP



At AVK Valves Southern Africa, we implement stringent quality control measures throughout each stage of the manufacturing process.

Our products undergo type testing during the design phase to ensure they meet established criteria for strength, operation, and endurance. During assembly, we conduct dimensional and visual inspections, followed by a series of production tests in accordance with standard requirements.

Stock and distribution

AVK Valves Southern Africa's logistics center excels in managing stock and distribution efficiently. We have an extensive range of products in stock to meet our customers' requirements for both projects and day to day business.



Own Rubber Factory

AVK GUMMI, our own rubber factory, has been producing high-performance rubber components for demanding applications for more than 40 years. The manufacturing system includes precise control over each rubber compound, full traceability, SPC control, FMEA, and an exceptionally clean production environment.

Inhouse R & D

In our Development Department in Denmark, we continuously gather ideas and suggestions for new products while updating existing ones. We utilize Finite Element Analysis (FEA) to optimize the strength and geometry of our components, and Computational Fluid Dynamics (CFO) analyses to validate different product designs before creating physical prototypes. This approach allows us to predict outcomes in scenarios where full-scale physical tests are not feasible. We design and manufacture our own test and production equipment. In our flow lab, we conduct comprehensive prototype and life cycle tests before releasing products for production. Additionally, new product types are typically field-tested in collaboration with end users before their final launch.

ISO Certification - Third party Certification

AVK Valves Southern Africa operates efficiently, adhering to ISO 9001 :2015 and ISO 45001 :2018 certifications. AVK Valves Southern Africa products meet international and local specifications when required.

EXPECT US TO COMPLY TO INDUSTRY STANDARDS



Third party certification

Authorities such as DVGW (Germany), KIWA (Netherlands) and UL & FM (the US) offer certification of finished valves, and these are also recognized and accepted by other countries that do not have their own certification schemes.

By obtaining and maintaining the most widely accepted certification, we show our customers that AVK valves always meet the highest quality and safety standards.

Expect... AVK

In our business there are five cornerstones that must be in place in order to meet customer expectations: Quality, reliability, innovation, sustainability and customer service.

But we need to go further than that. We go further to exceed our customers' needs and expectations.

"Expect... AVK" means that our customers should rightfully expect us to exceed market standards. "Expect... AVK" means that we relentlessly strive for increased customer benefits!

To ensure that we keep pushing the boundaries of what the market can expect, we have formulated promises that we will strive to deliver in all our markets:

EXPECT A LONG-TERM PARTNERSHIP

EXPECT QUALITY IN EVERY STEP

EXPECT LASTING INNOVATIONS

EXPECT TOTAL SAVINGS

EXPECT SOLUTIONS, NOT JUST PRODUCTS

EXPECT GLOBAL LEADERSHIP AND LOCAL COMMITMENT

EXPECT PROMPT RESPONSE

EXPECT IT TO BE EFFECTIVE AND EASY

See more on www.avkvalves.co.za































OUR TRAINING FACILITIES AT THE ACADEMY

AVK Holding established The Academy in September 2016. The Academy is an in-house training facility with a 40-seater seating capacity.

The institute showcases an impressive flow lab which demonstrates the flow of water through a series of valves allowing attendees to gain a comprehensive understanding of water related processes.

Get equipped through our Product Courses

Since its establishment, three product courses have been launched; The Valves Fundamentals Course, which provides a sound introduction to acquire an essential knowledge of valves, in theory and practice, and The advanced Valves Course which provides greater insight into principles and practices that address the theories of fluid pressure, fluid flow and field applications.

The Technical Training Course will further the understanding of a range issues related to industry practical problems and will broaden the horizon of design and consulting engineers, plant operators, engineering students, maintenance personnel and persons dealing with valves.

The course is registered through ECSA qualifies for 2 CPD points for professionals. (SAIMech-E -1350-01-23).

Valves function as mechanical devices to control the flow and pressure within a system or process.

They are essential components that convey different mediums in different environments. It is of paramount importance that the correct valve is specified for the right application and making the right decision makes a world of difference.

The Academy, a training institute, makes a difference in the world of valves by offering accredited courses, compiled by a team of engineers with a wealth of experience.





TECHNICAL APPENDIX CORROSION PROTECTION

First all cast components are blast cleaned according to ISO 12944-4, SA 2½.

The valve and hydrant bodies and bonnets and other components are fusion bonded epoxy coating in compliance with DIN 3476 part 1 and EN 14901 and GSK guidelines. The high quality epoxy coating is GSK approved and applied manually or using a fluidized bed epoxy coating system. After the valve components have been blast cleaned, the clean and preheated components are submerged in epoxy powder. The powder melts when in contact with the preheated components and cures when the components enter the cooling tunnel shortly after the coating process.

Test procedure

- Coating thickness:
 The coating layer thickness shall be no less than 250 μ.
- Pore-free coating: The coating must be completely free of penetrating pores to avoid subsequent corrosion of the casting underneath. A 3 kv holiday detector with a brush electrode is used to electrically reveal and locate any pores in the coating.
- Impact resistance:
 The impact resistance test is carried out right after the coating process by means

of a stainless steel cylinder dropped on the coating surface through a one meter long tube corresponding to an impact energy of 5 Nm.

After each impact the component is electrically tested, and no electrical breakthrough shall occur.

· Cross linkage:

One drop of methyl isobutyl ketone is put on a horizontal epoxy resin coated surface of the test piece at room temperature. After 30 seconds the test area is wiped with a clean white cloth. It is checked that the test surface has not become neither matt nor smeared, and that the cloth remains clean. The test is carried out 24 hours after the coating process.

Adhesion:

The adhesion of the powder coating on one of each type of component is tested four times a year per coating plant according to GSK guidelines using the punch separation method according to DIN 24624. The coating thickness over a dispersed area of the test item shall be within the range 250 μ to 400 μ .

The test pieces are immersed for seven days in deionised water at 90°C, and then dried in an oven for 3 hours. A conditioning phase of 3 to 5 days in normal atmosphere is then allowed to elapse. No blisters may arise during the period immersed in the water bath.

The surface of the test piece is degreased and then roughened with abrasive paper. The roughened surface is cleaned from dust with oil-free compressed air and recleaned. The adhesion on both the core and the moulding sand sides is tested with a minimum pulling force of >12 N/mm².

· Cathodic disbonding:

Cathodic disbonding tests are carried out on one of each type of component at least twice a year. No bubbles in the coating may develop during the test for cathodic disbonding. For this test, the coating thickness over a dispersed area of the test item shall be within the range $250~\mu$ to $400~\mu$.

Approvals:

The coating is approved for use in drinking water systems, meeting all specified toxicological conditions, by the following institutes:

- Hygiene Institute, Germany
- Hydrocheck, Belgium
- CARSO L.S.E.H.L., France

Extra top coating:

All our hydrants and post indicators have an additional layer of UV-resistant polyester coating. The polyester coating will protect the colour of the products from fading, even though the products are installed in places with a strong UV-light exposure.





THE AVK GROUP GLOBAL PRESENCE

The AVK Group is a privately owned industrial group currently comprising +100 companies worldwide. We develop and produce valves, hydrants and accessories for water and gas distribution, sewage treatment and fire protection.

AVK has built up strong brands supplying products and solutions for various industrial sectors and within advanced manufacturing.

Our products are designed to meet international standards and are sold worldwide.

When dealing with the AVK Group expect quality, reliability, functionality and long lifetime in service.

AVK is global in scale when it comes to manufacturing and design.

We serve our customers locally, offering full-line partnership and a single entry point to a world of quality solutions.





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