



HYDRANTS SOLUTIONS

Expect... **AVK**
الشركة السعودية لصناعة الصمامات المحدودة
SAUDI VALVES MANUFACTURING CO. LTD.



EXPECT SUPREME PRODUCTS

AVK is one of the leading manufacturers of valves for the water, gas and sewage industries as well as fire protection worldwide. Our product programme comprises a large range of valves, hydrants, pipe fittings and accessories, each complying with the highest standards of safety and durability. Today, AVK is the only manufacturer offering gate valves that meet most of the common national and international standards such as ISO, CEN, DIN, NF, BS, AWWA, JAWA, SABS, AS and GOST. Our global position ensures that we are able to give you, your partners and your customers the quality products you require.

WHEN IT COMES TO QUALITY AT AVK, NOTHING IS LEFT TO CHANGE

AVK's products are characterized by a high, consistent quality, competitive prices and a durability in line with market requirements. This calls for strict quality control of the production process from beginning to end leading to AVK being certified according to ISO 9001.

PRODUCT DEVELOPMENT

Market proximity is an important part of AVK's strategy; close contact with the end-user ensures close monitoring of the market as well as constant adaptation and development of the product programme to meet with market requirements. This takes place in our development department in Denmark, an advanced technology centre, where ideas and suggestions from different countries are gathered and existing products are continually adapted and tested. In co-operation with the end user, the products are field tested before the final market launch, thus achieving the best result in each individual market.

PRODUCTION

Production takes place in Saudi Arabia, Denmark, the UK, Netherlands, France, Poland, USA, Australia, Germany, Spain, Switzerland, Malaysia, Japan, China, India and Canada. AVK products are also produced under license in several other countries. Stock control and distribution to end users are handled through a wide network of sales companies, agents and dealers in more than 85 countries. This network services the end-user, allowing AVK to monitor market changes and keep abreast of customer requirements.

AVK FOCUSES ON THE ENVIRONMENT

The products of AVK form part of infrastructures, which play an important role for the local environment all over the world. This, for example, applies to the supply of pure drinking water and the draining of wastewater to treatment plants. As a natural consequence of this, AVK focuses on the environment in all of its internal processes.



FIRE PROTECTION

Fire protection installations are essential in societies aiming to protect people, the environment and buildings from uncontrollable fires. Firefighters must act quickly and efficiently which calls for a reliable water supply and fire equipment.

AVK offers a wide range of hydrants, valves, indicator posts and accessories for fire protection installations. AVK hydrants are designed to comply with individual market demands and needs focusing on reliable, fast and effective operations.

A comprehensive range of fire hydrants and gate valves are produced according to a number of national standards. The complete firefighting package complies with international standards and consists of hydrants, NRS post indicator valves, handwheel operated OS&Y gate valves, post and wall indicators, all UL listed and FM approved.



DRY BARREL HYDRANTS

Dry barrel fire hydrants are primarily designed for areas with frost, where the water main is located below the ground frost zone. AVK dry barrel fire hydrants meet or exceed AWWA C-502 and are UL/ULC listed and FM approved. They are designed for high performance, easy repair and minimum end-user costs for labour and inventory.

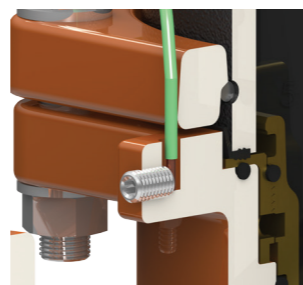
High Performance and Easy Repair

AVK dry barrel hydrants are designed with a breakable flange and a stem rod coupling which prevent leaking and enable easy repair at traffic knock down. The hydrant's main valve has a ductile iron core which is fully encapsulated with EPDM rubber. The nozzle section can be rotated 360 degrees. The upper section of the hydrant is repairable under pressure.

AVK's dry barrel hydrant has two drain outlets located just above the water main level. The main valve disc is designed with the purpose of flushing the drain channels for soil and other impurities during opening as these impurities could damage of the main valve disc. After turning the operation key 2 to 3 times, the drain will stop flushing and the barrel will be fill with water which will flow directly into the hoses and pumper or other appropriate connection.

Furthermore, the barrel will drain the water through the drain holes in the base when the hydrant is closed after service. Therefore, it is important to make sure that the base is surrounded by gravel allowing the hydrant to drain and flush without washing off the soil. Otherwise, this could result in undermining of the pavement.

- AVK dry barrel hydrants meet or exceed AWWA C502.
- UL listed and FM approved.
- High pressure rating — 250 PSI.
- High strength ductile iron nozzle section, barrel section, and base.
- 5 1/4" valve opening for high flow rate.
- Available with bronze caps.
- Hydrant top repairable under pressure.
- 360 degree nozzle section rotation.
- Replaceable nozzles secured with external stainless steel lock screw.
- Traffic flange designed for easy repair.
- Stainless steel traffic coupling designed for longer operational life (resists elongation) and high corrosion resistance.
- Main valve and seat ring can be changed without dismantling hydrant.
- Ductile iron body with fusion bonded epoxy coatings inside and outside with top layer of UV resistance fusion bonded polyester coating.
- Hydrant drain ports easily plugged, if required — may be plugged internally or externally.
- Extensions available in lengths from 6" to 60"
- Stainless steel 304 upper and Epoxy Coated Steel ASTM A108 lower as standard stems.
- Upper and Lower stems available with Stainless Steel 304, Stainless Steel 316 and Aluminum Bronze as alternative upon request.



AVK ANODE GROUNDING LUG

New anode grounding lug for corrosion prevention in corrosive soil environments

EXPECT TOTAL SAVINGS

AVK FULLY ENCAPSULATED ONE-PIECE MAIN VALVE

- Patented AVK design — one piece replaces up to 13 pieces
- Ductile iron core fully encapsulated in EPDM rubber
- No exposed metal — completely corrosion resistant
- Easy maintenance
- Cost-effective, labour saving — reduced inventory
- UL listed and FM approved



EXTENSION KIT FOR DRY BARREL

ADDITIONAL PROTECTION

The AVK TamperGuard lock is a simple and effective means of securing your hydrant against tampering, vandalism and water theft.



EVERY HYDRANT IS TRACEABLE

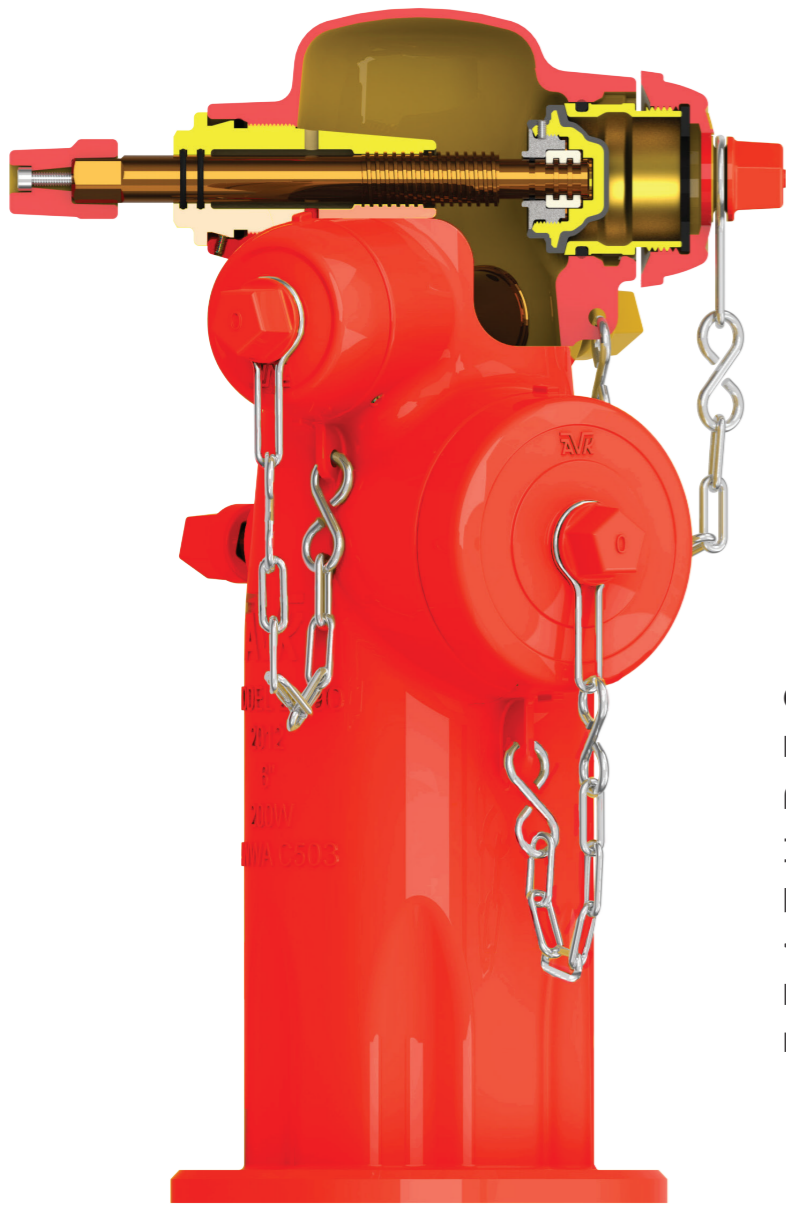
Every AVK hydrant has a unique serial number engraved on the operating nut. This provides us with complete traceability to the date the hydrant was built, and to every operation performed throughout our manufacturing process. AVK takes quality seriously in order to produce a long-lasting hydrant and provide total savings to you.



MONITOR ELBOW
(SERIES 2700 MODERN)
3" and 4" flanges available

WET BARREL HYDRANTS

Wet barrel fire hydrants are primarily designed for non-frost areas. AVK's wet barrel hydrant is designed to be easy to maintain, enabling one person to perform routine repairs and maintenance. The hydrant is rated for a working pressure of 200 psi, is UL listed and FM approved, and meets or exceeds the requirements of AWWA C503.



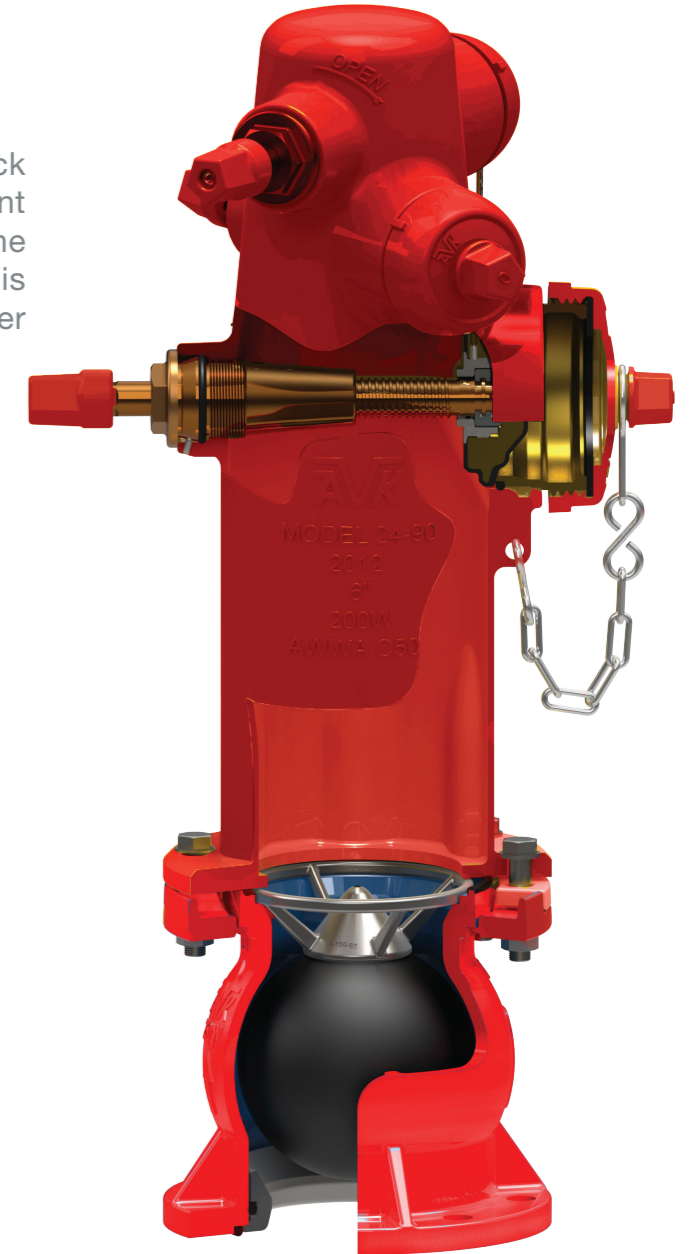
For Non-Frost Areas

AVK's wet barrel hydrant is designed with the shut-off device directly at the outflow nozzle for hose or pumper connection. This means that the hydrant is constantly filled with water and therefore under pressure. The hydrant is mounted directly on the water main, giving full water pressure instantaneously when needed. Only after 1/8 turn on the stem the water starts to flow, and after 12 turns the full flow capacity can be utilized. The hydrant is not to be used in temperatures below 0° C due to the risk of frost erosion. For service and maintenance purposes, we recommend installing an isolating gate valve on the upstream side.

- F E A T U R E S**
- AVK wet barrel hydrants meet or exceed AWWA C503
 - UL listed and FM approved
 - Standard pressure rating — 200 PSI
 - AWWA 350 PSI rating available upon request
 - High flow and low head loss
 - Each stem is sealed with dual o-rings
 - Easily replaceable nozzle and valve assemblies
 - Valve discs are encapsulated in NBR rubber for long life
 - Replaceable cast iron "dummy nuts" for extra stem protection
 - Available with bronze caps and dummy nuts
 - Ductile iron body with fusion bonded epoxy coatings inside and outside with top layer of UV resistance fusion bonded polyester coating

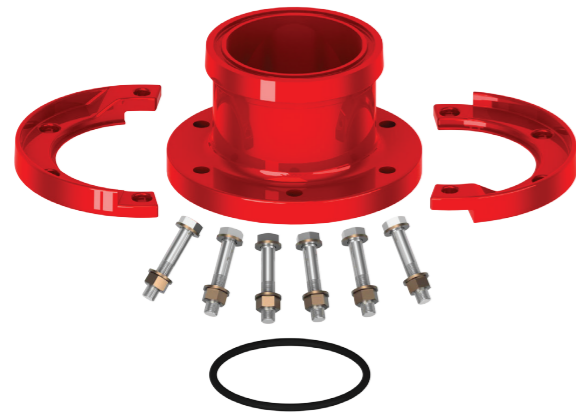
WET BARREL HYDRANT BI-DIRECTIONAL CHECK VALVE

The AVK FlowGuard II™, bi-directional check valve, is designed with safety in mind. In the event of a traffic accident, the ball will rise to seal off the flow from the main line. A small stream of water is allowed to flow, reducing possible water hammer and indicating the hydrant has been damaged.



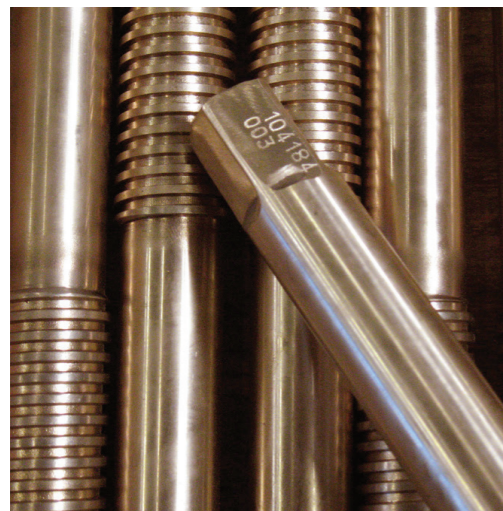
- F E A T U R E S**
- With the hydrant in the closed position, the ball settles in the reverse direction, preventing back-flow or cross-contamination
 - Low head loss
 - The check valve break flange is easily replaceable
 - 6" ANSI flange inlet with 8 holes (available with 6" AWWA flange inlet with 6 holes).
 - Adaptable to any manufacturer's hydrant.
 - Ductile iron body and bonnet, rated for 250 psi.
 - EPDM encapsulated ductile iron ball.
 - Stainless steel lower seat ring.
 - Stainless steel upper retainer cage.
 - All o-ring seals.
 - Fusion bonded epoxy coating.

EXPECT MAINTAINABILITY



EASE OF MAINTENANCE

- Traffic flange designed for easy repair
- Nozzles and sealing discs can be changed quickly with commonly available tools



EVERY HYDRANT IS TRACEABLE

Every AVK hydrant has a unique serial number engraved on the pumper stem. This provides us with complete traceability to the date the hydrant was built, and to every operation performed throughout our manufacturing process. AVK takes quality seriously in order to produce a long-lasting hydrant and provide total savings to you.



BRONZE
HYDRANT



STAINLESS STEEL
HYDRANT



HYDRANT WITH
CAST IRON CAPS & DUMMY NUTS



HYDRANT WITH
BRONZE CAPS & DUMMY NUTS



MONITOR TYPE HYDRANT
WITH CAST IRON CAPS &
DUMMY NUTS



MONITOR TYPE HYDRANT
WITH BRONZE CAPS &
DUMMY NUTS

MONITOR FIRE HYDRANTS

Monitor hydrants are primarily used for installation in chemical and petrochemical industrial plants as well as refineries, tank farms, airports and other plants with large quantities of inflammable liquids posing fire hazards.



FAST AND EFFECTIVE FIRE EXTINGUISHING

The AVK monitor hydrant is based on the same design and components as our standard dry and wet barrel fire hydrants. Therefore, they have all the same features and benefits as well as approvals, plus (3" or 4") for dry barrel and (4") for wet barrel flanged for connecting a monitor, enabling immediate fire extinguishing directly from the hydrant without adding any hoses.

The monitor hydrants are, like the dry and wet hydrant, available in many different configurations for inlet and outlet connections, dimensions, materials, colours etc.



DRY BARREL FIRE HYDRANT SERIES 120

AVK dry barrel fire hydrants are designed for high performance and easy repair. They are fitted with an automatic drainage system that effectively protects against frost damage by emptying the barrel as soon as the main valve is closed.



- S • Designed to EN 1074-6
- E • Meets AWWA C502 test requirements
- R • Designed for frost areas
- U • Drain outlet at base
- T • Ductile iron construction
- A • High pressure, 16 bar rated working pressure
- E • Nozzle section rotates 360 degrees
- F • Weather shield protects the top-nut & seals.
- Seamless steel rods.
- Outlet nozzles of Aluminum and available in Copper Alloy.
- Stem rod coupling of ductile iron epoxy coated
- Available with Tamper Guard
- Disc of ductile iron with rubber gasket covering the seating area
- Ductile iron body with fusion bonded epoxy coatings inside and outside with top layer of UV resistance fusion bonded polyester

UNDERGROUND SQUAT FIRE HYDRANT

The Series 29-388 “squat” fire hydrant is suitable for use with water and neutral liquids to a maximum temperature of 70°C. Replacing the popular S29/288, this new version has a greater flow rate. It also has an added benefit in that the efficient new design uses considerably less material which makes it lighter, which in turn reduces manufacturing and transportation costs therefore significantly reducing the environmental impact.



The Series 29/388 complies with the requirements of BS 750:2012 and BS EN1074-2:2004 and EN14339:2005, underground hydrants. Also to BS EN1074-6 for potable (drinking) water. Fully WRAS approved and Kitemarked as standard. With an auto-frost valve as standard it saves 6ltr/min when in use and eliminates the need to fit a solid plug for testing.

FEATURES & BENEFITS

- Kitemarked to BS 750:2012 Type 2 Fire Service and Water Utility's directive
- Ductile iron construction: Low weight design, more durable, carbon content recorded less per unit than its predecessor. Safer and easier to install and operate. Cost effective.
- Exceeds BS flow requirements: Kv = 92 minimum 2000 l/min. Kv = 96.3 actual 2092 l/min.
- Internal holiday free coating and external fusion bonded epoxy coating in line with WIS 04-52-01 Class B.
- Fully maintainable: Allows long term maintenance. Cost effective. Stainless steel A2 fastenings hex head bolts. No special tools required.
- Stem seals replaceable when hydrant closed and under pressure.
- Corrosion resistant construction compliant with BS EN1074-6 for disinfection products.
- Universal drilled inlet flange: BS EN1092:1997, BS 10 Table D/E. Fixed, draining stopper: Fully vulcanized, no stagnation, corrosion resistant, less thread wear due to silt grit entrapment.
- 2 year product warranty as standard.
- WRAS approved product

OPTIONS

- PN25 version.
- Loose stopper: Fully vulcanized, no stagnation, corrosion resistant, less thread wear due to silt grit entrapment.
- Outlet options: Stainless steel (standard) or gunmetal to BS 750 round thread. Instantaneous (Morris). Belfast. London "V" thread. Internal screwed Norwegian. Bayonet (Dublin).
- S29/389 version for application in corrosive atmospheres or exposed locations. With all the benefits of the S29/388 the S29/389 has a stainless steel stem 1.4404 (316) and all exposed fasteners are in A4 stainless steel.
- Security device (as pictured below).

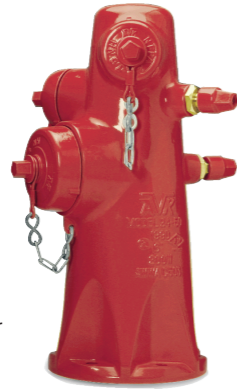


FIRE HYDRANTS PRODUCTS RANGE



SERIES 24/10

Fire Hydrant – Wet Barrel with monitor flange
Designed to AWWA C503
UL listed, FM approved
6" Inlet to AWWA (6 holes)
RWP 200 psi
All internals and nozzles are made of Bronze
2 x 2 1/2" NST hose nozzle
- 1 x 4" / 4 1/2" NST, 4" BS336 or 5" storz pumper nozzle
Bronze caps and dummy nuts optionally



SERIES 24/96

Fire Hydrant – Wet Barrel
Designed to AWWA C503
UL listed, FM approved
6" Inlet to ANSI (8 holes)
RWP 200 psi
All internals and nozzles are made of Bronze
2 x 2 1/2" NST hose nozzle
1 x 4" / 4 1/2" NST, 4" BS336 or 5" storz pumper nozzle
Bronze caps and dummy nuts optionally



SERIES 27/00

Fire Hydrant – Dry Barrel
Designed to AWWA C502
UL listed, FM approved
6" Inlet to ANSI
Duckfoot or straight shoe inlet types
High pressure rated 250 psi
360° Adjustable
Breakable traffic system
Bronze outlets
2 x 2 1/2" NST hose nozzle
1 x 4" / 4 1/2" NST, 4" BS336 or 5" storz pumper nozzle
Drain outlets at the base
Available with different bury depths
Available with different stem materials
Available with 2 1/2" instantaneous coupling to BS336
Available with 2 1/2" globe valve with instantaneous coupling to BS336



SERIES 120/55

Fire Hydrant – Dry Barrel
Designed to EN1074-6
4" and 6" duck-foot inlet with loose flange for easy installation
Inlet to PN16
360° Adjustable
Breakable traffic system
Anodized Aluminum outlets
Available with bronze outlets
2 x 2 1/2" NST hose nozzle
1 x 4" / 4 1/2" NST pumper nozzle
Drain outlet at the base
Available with different bury depths
Available with 2 1/2" instantaneous coupling to BS336
Available with 2 1/2" globe valve with instantaneous coupling to BS336

SERIES 29/388

Underground Fire Hydrant
Designed to EN14339:2005/BS750:2012
WRAS approved
DN80 inlet flange universal drilled to EN1092-2 PN10/16 & BS10 table D/E
PN16 (available with PN25 version)
2 1/2" London round thread outlet to BS 750
Available with different outlets
Stainless steel or Gunmetal to BS 750 round thread
Instantaneous (Morris)
Belfast
London V thread
Internal screwed Bayonet

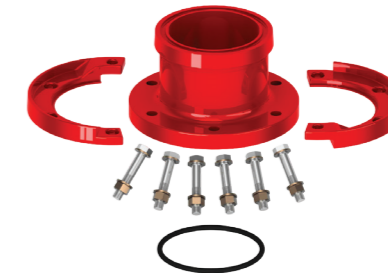


FIRE HYDRANTS ACCESSORIES



SERIES 24/88

Breakable ball check valve for wet barrel fire hydrant
RWP 250 psi
Ductile iron ball fully encapsulated with EPDM rubber
Flange drilling to ANSI B16.42 Class 150 FF



SERIES 24/8X

Breakable flange kit for Wet barrel fire hydrant
Flange drilling to ANSI B16.42 Class 150 FF



SERIES 24/8X

Traffic repair Kit for wet barrel fire hydrants



SERIES 27/00-004

Traffic repair Kit for dry barrel fire hydrants



SERIES 27/70

Extension kit for dry barrel fire hydrants
Available with different lengths



SERIES 27/00-005

Tool kit for dry barrel and wet barrel fire hydrants

ASSOCIATED FIRE PROTECTION PRODUCTS RANGE



SERIES 34/00

Post Indicator telescopic to suit DN50-400 post indicator gate valves
Designed to UL789 & FM1110
UL listed (DN100-400)
FM approved (DN100-350)
Telescopic post indicator available with 3 basic lengths
Lower barrel available of cast steel bitumen
Coated and optional of PVC



SERIES 34/80

Wall Post Indicator
Designed to UL789 & FM1110
UL listed (DN100-400)
FM approved (DN100-350) To suit DN50-DN400 post indicator gate valve
Available with stem lengths 250, 750 & 1250mm
Prepared for supervisory switch



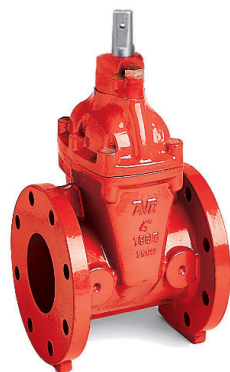
SERIES 45/XX

Gate Valve resilient seated for Post Indicator with flanged ends
Designed to AWWA C509
UL listed, FM approved
Face to face according to ASME B16.10
DN50-DN400
RWP 250 psi
Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel
AISI 316 stem



SERIES 45/XX-M

Gate Valve resilient seated OS&Y with flanged ends
Prepared for actuator
Designed to AWWA C509
Face to face according to ASME B16.10
DN50-DN400
RWP 250psi
Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel
AISI 316 stem



SERIES 45/XX

Gate Valve resilient seated with flanged ends
Designed to AWWA C509
UL listed, FM approved
Face to face according to ASME B16.10
DN50-DN400
RWP 250 psi
Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel AISI 316 stem



SERIES 45/XX

Gate Valve resilient seated OS&Y with flanged ends
Designed to AWWA C509
UL listed, FM approved
Face to face according to ASME B16.10
DN50-DN400
RWP 250 psi
Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel AISI 316 stem



SERIES 45/XX

Gate Valve resilient seated with flanged ends
Prepared for actuator
Designed to AWWA C509
Face to face according to ASME B16.10
DN50-DN400
RWP 250 psi
Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel AISI 316 stem



SERIES 55/XX

Gate Valve resilient seated for actuator with flanged ends
Designed to AWWA C515
Face to face according to ASME B16.10
DN450-DN600
RWP 250 psi Flange drilling to ANSI B16.42 Class 150 FF
Available with Aluminium Bronze or Stainless steel
AISI 316 stem

ASSOCIATED FIRE PROTECTION PRODUCTS RANGE



SERIES 55/XX

Gate Valve resilient seated
OS&Y with flanged ends
Designed to AWWA C515
Face to face according to
ASME B16.10
DN450-DN600
RWP 250 psi Flange
drilling to ANSI B16.42 Class
150 FF
Available with Aluminium
Bronze or Stainless steel
AISI 316 stem



SERIES 145/XX

Gate Valve resilient seated
Designed to FM 1120/1130 and UL 262
Face to face: ASME B16.10
Size: 2" – 16" (DN50-400)
RWP: 250 psi
Flange drilling : ANSI B16.42 Class 150
Available with Aluminium bronze/Stain-
less steel AISI 316 stem
Types:
NRS (Non-Rising Stem)
OS&Y (Rising Stem)
UL listed, FM approved



SERIES 815

Gate Valve resilient seated
for actuator with flanged
ends
Designed to AWWA C515
Face to face according to
ASME B16.10
DN450-DN600
RWP 250 psi Flange
drilling to ANSI B16.42
Class 150 FF
Available with Aluminium
Bronze or Stainless steel
AISI 316 stem



SERIES 75/10

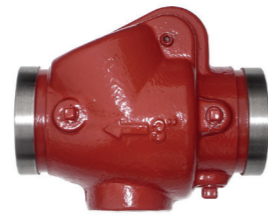
Butterfly valve
Centric with fixed liner
Wafer
DN 50-300
PN 10 or 16
Ductile iron
FM approved

Options:
semi lug



SERIES 5190/00

Flanged Check Valve meeting UL312
Body: Ductile Iron
Sizes: 2" - 8" (DN50 - 200)
Clapper: Stainless Steel
Spring: Stainless Steel
Flanges: Drilling to EN1092-2
PN10/16 (available with ANSI CL 150)
Coating: Fusion Bonded Epoxy
Working Pressure: 350 psi
UL listed



SERIES 5190/0X

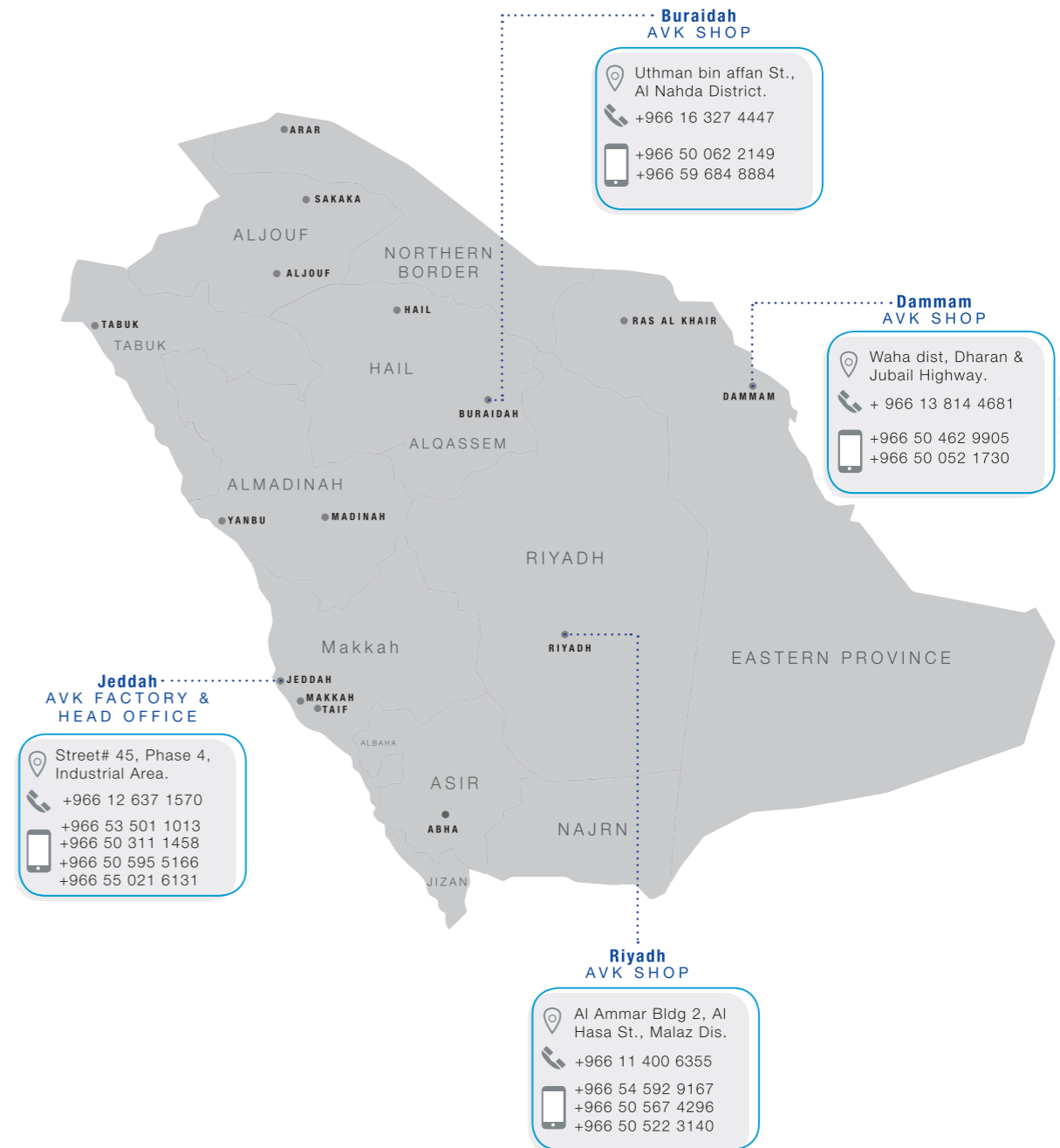
Grooved End Check Valve meeting
UL312 & FM1210
Body: Ductile Iron
Sizes: 2" - 8" (DN50 - 200)
Clapper: Stainless Steel
Spring: Stainless Steel
Coating: Fusion Bonded Epoxy
Working Pressure: 350 psi
UL listed, FM approved



SERIES 75/41

Butterfly valve
Centric with fixed liner
Double flanged short
DN 50-300
PN 10 or 16
Ductile iron
FM approved

WE ARE SERVING YOU IN ALL KINGDOM REGIONS



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We highly recommend that any person using this data for practical purposes should have specialist training and expertise in the application of these products and knowledge of their installation and operating conditions. If any assistance is required, please consult with a member of AVK team.

Expect... **AVK**