







PE BALL VALVES



# **AVK CERTUS RANGE**

The AVK CERTUS Series 85/30 is an extensive range of PE ball valves up to OD180mm, which have been extensively and independently type tested against worldwide leading standards such as EN1555-4, GIS/V7-2 and EN12201-4.

The extensive consists out up to OD180 pressure rating SDR11 or SD.

The valves at valve can be The selected for both GAS used in GAS to MOP 10 at PN 16.

# RELIABLE VALVE ACCESS SYSTEM

The AVK CERTUS ball valves have undergone additional testing over and above that required in the specifications. This ensures that the valve is suitable for distribution systems and environments anywhere in the world.

The extensive AVK CERTUS ball valve range consists out of multiple sizes starting as of OD20 up to OD180mm. Depending on the requested pressure rating the valves are available with SDR11 or SDR17.6 spigot ends.

The valves are UNIVERSAL, meaning the same valve can be used for multiple application areas. The selected materials are tested and approved for both GAS and WATER applications. When used in GAS applications the valves are rated up to MOP 10 and in case of WATER applications PN 16.

As with all valves, best practice techniques should be used during installation and operation. To aid this process a series of recommended accessories is available, this includes a reliable installation and access system and retrofit extension spindles.

The valve access system consists of a support base, down pipe, surface box adaptor and surface box. The support base creates stability for the valve and avoids twisting of the pipe, but it also absorbs high loads and centres the down pipe installed on top of the valve ensuring valve operation at all times. The adaptor and surface box complete the valve access system. Besides giving access to the lower buried valve the surface box can bear media identification for easy recognition and, if required, customer specific logos.

AVK's wide range of **surface boxes** granting access to lower burried valves at all times.

Ideal transition between surface box and down pipe by use of a **surface box adaptor**.

Flexible height adjustment with cut to length **down pipe**.

Robust **support base** avoids twisting of the pipe and offers stability.



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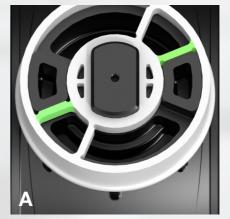


The floating ball principle and special shaped

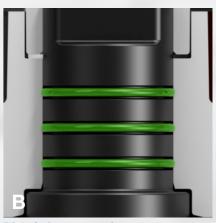
ball seats are designed to ensure sealing at

all times and be less affected by dirt or debris.

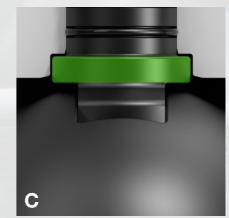




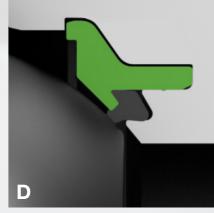
If the valve is over torqued, the topcap is designed to fail before the valve seals, thus preventing a leak to atmosphere. The safety topcap can be replaced easily under live conditions.



Triple 0-ring construction around the stem guaranteeing sealing safety at all times.



The intentionally over-designed stem is extremely strong and of the anti blow-out



The **seat retainer** design ensures the ball seat is kept in place at all times. This optimal design prevents the ball seat from being dislodged, which guarantees a good functionality throughout the years.

will minimise flow resistance.

no additional pressure drop and greater flow through the valve for the same pressure. The clearway bore allows for pigging of pipes.

The **spigot ends are machined** on the inside

as well as on the outside, guaranteeing a

welding of electro fusion couplers and the

uniform wall thickness, allowing for optimal

smooth inner surface prevents deposits and

## **QUALITY IN EVERY STEP**

### **Construction & material selection**

The AVK CERTUS ball valves are made out of PE100 and can be welded to all PE100 and PE80 pipes.

The main internal construction of the AVK CERTUS is based on a sophisticated seat arrangement for realiable sealing performance. By means of a seat retainer, the ball seat is firmly kept in place. The seat compression is accurately set during the welding. The spigots are butt welded to the body. Butt welding is chosen because of the long term practically proven reliability. For the welding, the leading DVS2207-1 guidelines are strictly followed. The skimming and welding steps are

performed by fully automated welding stations, guaranteeing ultimate consistency of the ball valves.

For the sealing high quality and durable NBR rubber is used. The ball is made out of an engineering plastic that has very good scratch resistance and is carefully machined for lowest operating torque. Next to this, the chemical resistance to a very wide range of media is covered. The grease has been selected after numerous tests to achieve the maximum ease of operating. This universal grease has a very low wearing off from the lubricated surfaces, ensuring the long term performance of the valve.

### **Approvals & testing**

AVK CERTUS valves are fully type tested at an external worldwide reputable laboratory. The valves meet all the requirements of the EN1555-4, ISO4437-4, GIS/V7-2 and EN12201-4.

During type testing, the valves are not only submitted to various long and short term leaktightness checks, but also to rigorous pulling, bending and thermal cycling tests. The operating mechanism and topcap can withstand high prescribed torques at extreme temperatures.

AVK Syntec is equipped with advanced test equipment, ensuring the highest quality of valves. Each valve is tested for operating torque and leaktightness at low and high pressure. Besides, per batch, valves undergo hydrostatic strength testing (at elevated temperatures) to confirm long term performance.

### **AVK ASSIST INSTALL & TRACE**

AVK Assist mobile app is a complete installation tracker and asset management system using a QR code platform to enable full traceability of your assets. Together with AVK Assist customer portal it allows complete control of all aspects of the asset management system.

### Get full traceability of your assets

Each installed valve has a unique GPS pin location, and when combined with a photo of the installation, it provides a complete, accurate and auditable record of every valve you have installed





### On the customer portal you can

- · search on locations to see if any assets are recorded
- get a quick overview of whether assets are from AVK, FUSION or other suppliers
- see valve location on a map and a list of installation details
- view the quality of assets, via photographs
- export data collected using a common file format to integrate into existing mapping (GIS) systems
- · create their own users
- add installers
- get access to further information

### Confidential installation data of ALL assets

The use of AVK Insight is not limited to AVK valves and can be used to track and manage all assets.

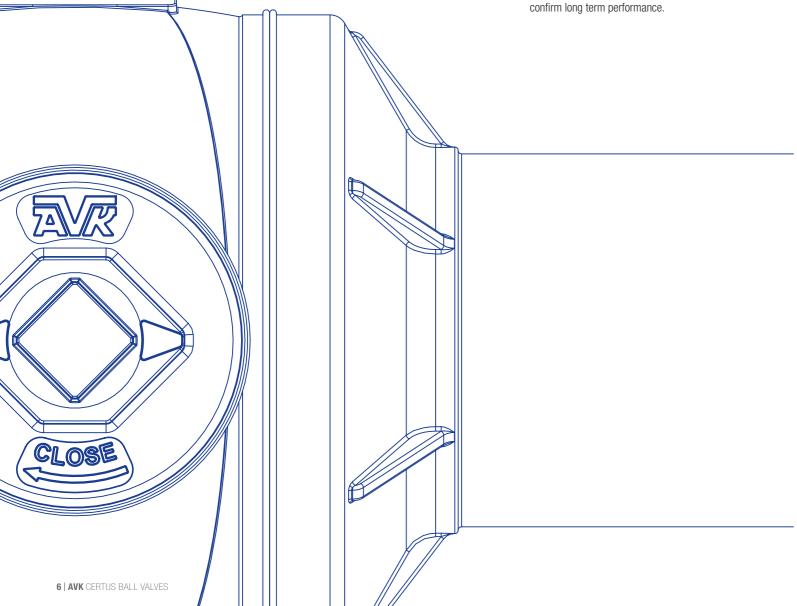
Installation data is confidential to the customer and can be exported in formats that allow integration with existing mapping systems.

### Get free account

To access AVK Insight and the dedicated web portal, an account needs to be created by our technical team.

Please contact your local AVK supplier to set up your free AVK Insight account.





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