

## BALL CHECK VALVES vs SWING CHECK VALVES IN SEWAGE / WASTEWATER APPLICATIONS

SA Water own, operate and maintain the wastewater / sewer network throughout the SA coastal town of Port Pirie and had been having continual issues with their Swing Check Valves continually requiring maintenance due to becoming clogged and inoperable caused by the sort of ragging and high solid load found in wastewater streams.

As they searched for a solution for this problem, they trialed replacing the Swing Check Valves they currently had with the AVK Ball Check Valves with great success. Due to the AVK Ball Check Valves having a full straight bore with little restriction of flow, the pumps were consequently more efficient.

The major benefit of fitting these valves however was that due to the spherical nature of the sealing ball, rags and solids could not accumulate on the ball and as there was no other internal parts that could clog these valves, continual maintenance became a thing of the past. Over the past 3 years SA Water (Port Pirie) have installed in excess of 30 AVK Ball Check Valves in DN100, DN150 and DN200.



In the event of a need to inspect the internals of the valve, the removal of a maximum of only 4 bolts on the lid allows full access to inside of valve and replacement of ball from above.

Retrofitting these valves was simple as they have the same face to face dimension (AS 4794) and flange drilling (AS 4087 Fig. B5) as the existing Swing Check Valves. AVK Ball Check Valves are available in a full range of sizes (10 bar DN50 & DN65) (16 Bar DN80 – DN300) and are recommended for installation for sewage and other non potable applications of a similar nature. These valves are all 100% pressure / leak tested and inspected prior to despatch.

*Source: SA Water (Port Pirie Depot)*



### TECHNICAL GUIDE

#### Functional description of a Ball Check Valve Series 53

