

AVK COMBI-CROSS



**COMPACT
INSTALLATION WITH A
COMBI-CROSS**



AVK COMBI-CROSS

COMPACT AND EFFICIENT

Why use a combi-cross

A combi-cross is a compact and efficient alternative to installing several gate valves in locations with limited space. It provides multiple benefits in both new installations and network upgrades:

- gain easy access to the network, e.g. for pipe cleaning
- minimise the overall size of your installation
- reduce the number of bolted connections and potential leak points
- save installation time
- mount a hydrant where two main lines intersect

Combi-cross in flexible design

Our flexible combi-crosses are recommended for chamber installations where you want custom configurations or different valve sizes on the outlets to eliminate the need for transition fittings. This design also allows for easy on-site reconfiguration.

The flexible combi-cross is available with the centre part in DN100-400 and with or without ball valve service outlets.

Any of the four horizontal outlets can be equipped with:

- flanged valves in DN80-400
- flanges in DN100-200
- blind caps in DN100-400
- PE pipe ends in DN100-200 (limited to combi-cross of same DN)

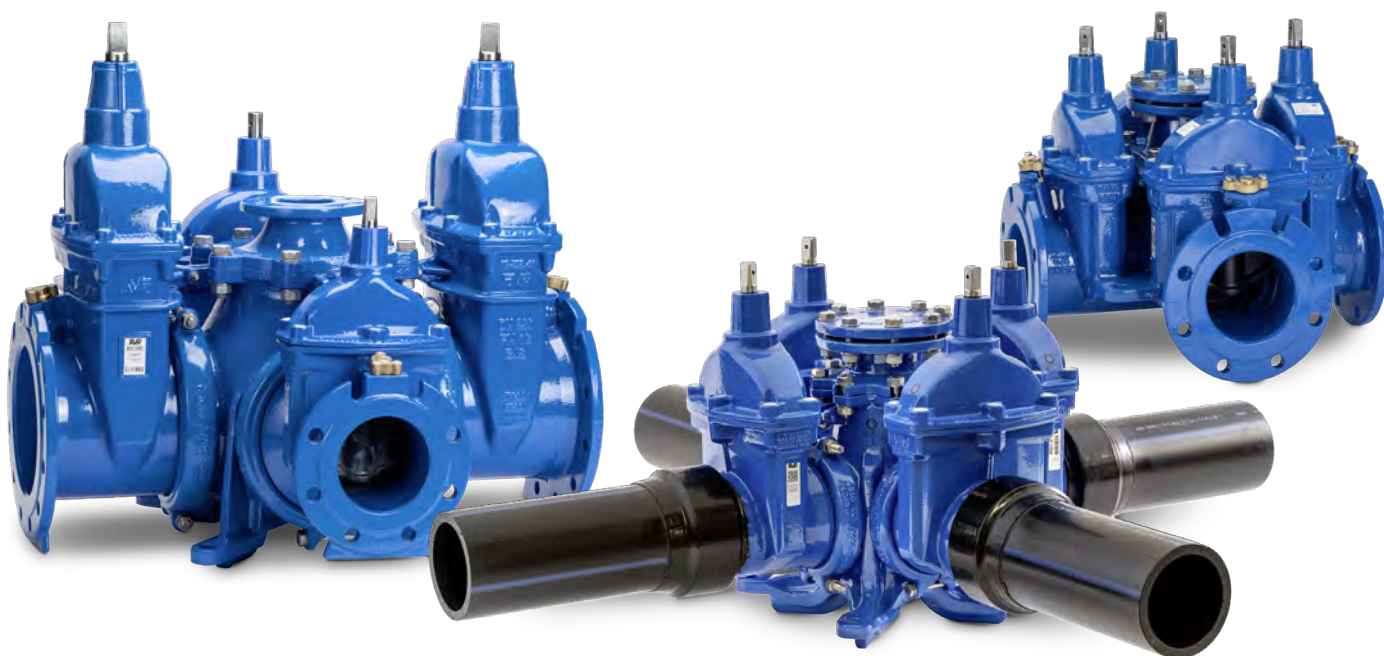
Combi-cross with valves of same DN

Our combi-crosses with valves of the same DN are designed for installations where all three or four pipe connections share the same diameter and where no future change in pipe size is expected.

We offer two configurations:

The combi-cross with fixed flanged valves is suitable for both chamber and buried installations. Available in DN100–300, the unit comes with a DN80 or DN100 flanged centre part and can be supplied with or without ball valve service outlets.

The combi-cross with PE pipe ends is the latest addition to our product range and is ideal for buried applications in PE networks. It combines the benefits of a compact multi-valve unit with easy and safe installation achieved by direct welding into PE pipe systems. It has a DN100 flanged vertical outlet, and the valve outlets with PE pipes are available in DN100, DN150 and DN200, corresponding to the DN of the combi-cross centre part. The valve outlets are based on the flexible combi-cross design and can thus also be used for a flexible combi-cross in DN100-200.



FULL FLEXIBILITY WITH FLEXIBLE COMBI-CROSS

Outlets in different sizes

In many installations, only two of the outlets are required in full DN size, while the remaining outlets connect to pipes of smaller dimensions. The centre part can be fitted with three or four valves of different sizes, without changing the face-to-face dimensions.

Alternatively, it can be equipped with a flange or a blind cap, allowing later installation of a valve on any of the four outlets.

As there is no need for transition or reduction flanges, installing a flexible combi-cross saves both time and cost.

Full bore centre outlet

The full bore centre outlet allows insertion of solid foam pipe cleaning devices, and the DN100 flange can be used for mounting a hydrant or as an inspection access point to the water flow.

The centre outlet lid is mounted with standard bolts and nuts, thus avoiding threads directly in the casting. An O-ring placed in a recess ensures optimal tightness between the centre part and the lid.

Safe anchoring

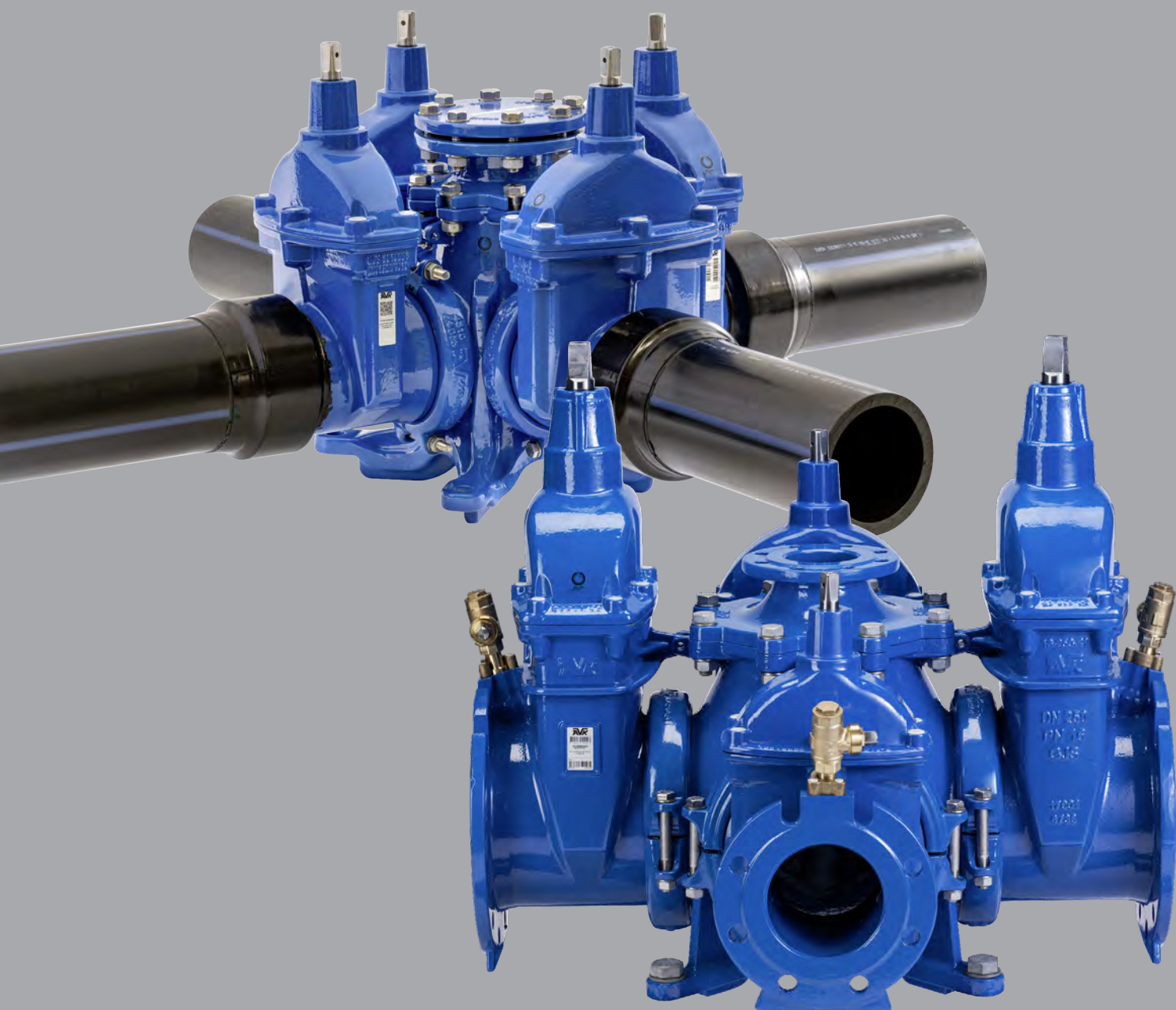
The AVK combi-cross is designed to meet stringent safety requirements. Even when valves are disconnected and removed from the centre part, the anchoring remains unaffected. This ensures maximum safety for personnel working in the concrete chamber, as pressure and pipe movement forces are directed through the fixing lugs and into the standard concrete foundation.

Easy replacement

The valves, flanges and blind caps are connected to the centre part by means of a two-part ductile iron bracket based on a coupling principle similar to the renowned Victaulic design.

A profiled EPDM gasket seals the connection. The design allows vertical replacement of the valves without the use of special tools, and a guide hinge is cast on the valve side to ease installation.





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