



## SERIES 05 SUPPORT BUSH & SUPA PLUS™ BOLT TORQUE INSTALLATION, OPERATION & MAINTENANCE MANUAL



### Instruction for use

Thank you for selecting an AVK product. With correct use, it will give long and reliable service. This manual has been prepared to assist you install, operate and maintain the valve to the maximum efficiency. For ease of reference, it has been divided into sections covering all aspects of use, and it is in the users best interests to read it and ensure that it is fully understood.



### Health and Safety

It is always recommended that wherever work is being carried out on a valve that the valve is fully depressurised prior to carrying it out, and for the convenience draining of the line may be beneficial.

It is essential that the user of the valve is aware of the weight of the components and/or assemblies that must be handled and manipulated during installation and maintenance. It is the users responsibility to ensure that safe working practices are followed at all times.

Whenever AVK products are installed, operated, or maintained, it is essential that the staff that undertake these operations be adequately trained. The hazards of pressurised liquids and gases can be severe, and it is the responsibility of the users to ensure that trained, competent staff undertake these duties. This manual has been designed to assist, but it can never fully replace quality training in the workplace. AVK technical staff will always be available to answer any questions relating to specific problems that may not be covered by this manual.

AVK products are designed and manufactured to be fit for purpose, and to a high and reliable standard. This provides a safe product with minimum risk to health when used correctly for the purpose for which it was designed. However, this assumes that the equipment is used and maintained in accordance with the manual, and the user is advised to study this manual, and to make it available to all staff that may need to refer to it.

AVK cannot be held responsible for any incidents arising from incorrect installation, operation or maintenance. The responsibility for this must rest wholly with the user.

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## Step 1

Cut the PE pipe to square the end and ensure all burrs are removed.



## Step 2

Squeeze the bush by hand to reduce the diameter and insert it approximately 10mm into the pipe.



In some cases the end of the wedge gap may have to be slightly overlapped to enable initial insertion.

Note: The AVK 316 Stainless Steel support bushes are designed to suit PE pipe to PE100 SDR11 only.

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### Step 3

Insert the wedge into the wedge gap being sure it is located in the guide steps.



In some cases the tip of the wedge may dig into the soft PE making insertion difficult, if this occurs bending the very tip of the wedge a small amount with pliers or a shifter will overcome this interference.

### Step 4

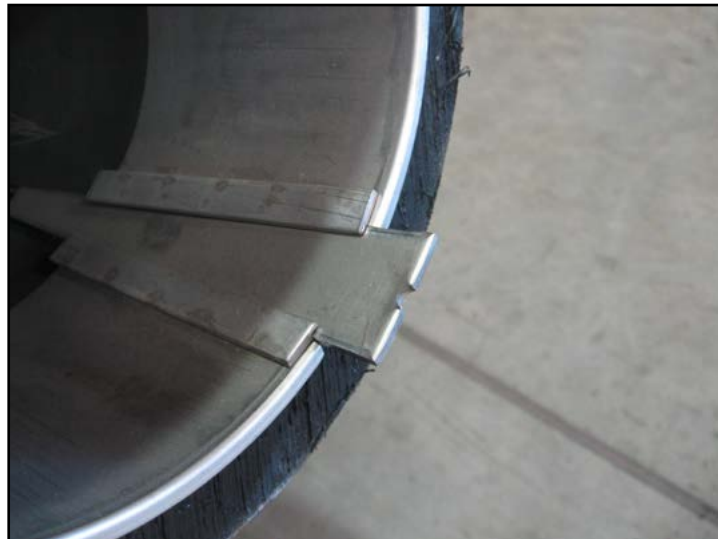
Push the bush all the way in until the bush shoulder is flush against the end of the pipe.



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### Step 5

Tap the wedge into the gap to open up the bush and lock it into place, care must be taken not to tap the wedge in too far as this will cause the bush to over expand and may distort.



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**Step 6**

With a hacksaw cut the wedge level with the end of the bush and ensure all burrs are removed.  
This completes the support bush installation and the pipe end can now be inserted into the  
Supa-Plus™ valve or fitting.



**SUPA PLUS™ VALVE & COUPLING RANGE**

AVK always recommend the series 05 support bush be utilised when using Polyethylene PE100 SDR11 pipe systems and AVK tensile resistant sealing ring (Supa Plus™) valves and fittings.



Gate Valve  
01/71



Straight Coupler  
621



Flange Adaptor  
623



End Cap  
624

**SUPA PLUS™ TIGHTENING TORQUE &  
SEQUENCE CHART**



	Pipe dimension
60 Nm	DN 40 / 50 mm to DN 65 / 75 mm
110 Nm	DN 80 / 90 mm to DN 150 / 180 mm
140 Nm	DN 200 / 200 mm to DN 200 / 225 mm
160 Nm	DN 250 / 250 mm to DN 250 / 280 mm
200 Nm	DN 300 / 315 mm

