# **PIPETEC TECHNICAL MANUAL**

## INSTALLATION INSTRUCTIONS FOR PIPETEC MS / PPSU PRESS FITTINGS

The aluminium composite pipe is cut to the desired length using pipe cutters. The calibrator then ensures that the pipe end is completely round and deburred after cutting. At the same time the pipe interior is chamfered to allow the fitting to be inserted into the pipe without damaging the O-ring. Finally, the three openings (inspection windows) at the end of the stainless steel sleeve, which indicate the correct position of the pipe in the fitting, guarantee a correct pressing operation.

#### ► NOTE

Perfect functioning of the pipe connection can only be ensured by using fittings with the DVGW-certified Pipetec aluminium multilayer composite pipe. Please note how important it is to ensure correct that are sealed too tightly (especially when using hemp) can lead to



#### **CUTTING THE PIPE TO LENGTH**

The pipe must be cut to the desired length using a suitable tool. The cross-sectional area of the cut must be perpendicular to the pipe. Diagonal cuts must be avoided.

Handsaws, jigsaws and blunt tools are not suitable for cutting to length.



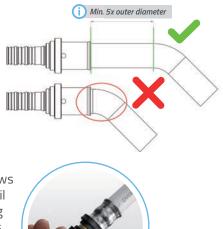
#### **CALIBRATING AND DEBURRING THE PIPE**

The pipe end must be calibrated and deburred after trimming. To do this, the calibrator must first be inserted into the pipe up to the stop. Deburring is then completed by turning the calibrator. Turning removes material from the interior of the pipe, creating a chamfer on the end of the pipe. This chamfer makes it easier to insert the fitting and protects the O-rings from damage.



#### **ASSEMBLY OF FITTINGS**

Use appropriate force to insert the fitting into the end of the pipe axially up to the stop. The three inspection windows on the stainless steel pressing sleeve indicate the correct insertion depth. Please do not use additional lubricant.





#### PRESSING

Using an appropriate pressing tool and pressing jaws that match the dimensions of the fitting, press until the pressing jaws are fully closed and the pressing process is complete. Then check the connection. It is essential to carry out a pressure and leak test (see page 94).





#### ASSEMBLY INSTRUCTIONS FOR PIPETEC SCREW FITTINGS

Neither pressing tools nor pressing jaws are required for assembling compression fittings. Leak-tightness is achieved simply by tightening the union nut. The clamping ring is crimped onto the pipe using the cone on the inside of the union nut.

#### ► NOTE

Perfect functioning of the pipe connection can only be ensured by using fittings with the DVGW-certified Pipetec aluminium multilayer composite pipe. Please note how important it is to ensure correct and expert calibration and deburring using a suitable tool. Always protect fittings with insulation or suitable adhesive tape to protect them from direct contact with concrete, screed, construction foam, mortar, etc. Make sure installation is stress-free! Brass threads that are sealed too tightly (especially when using hemp) can lead to tension in the brass. This can lead to stress corrosion cracking due to assembly.



#### **CUTTING THE PIPE TO LENGTH**

The pipe must be cut to the desired length using a suitable tool. The cross-sectional area of the cut must be perpendicular to the pipe. Diagonal cuts must be avoided.

Handsaws, jigsaws and blunt tools are not suitable for cutting to length.



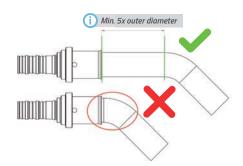
#### **CALIBRATING AND DEBURRING THE PIPE**

The pipe end must be calibrated and deburred after trimming. To do this, the calibrator must first be inserted into the pipe up to the stop. Deburring is then completed by turning the calibrator. Turning removes material from the interior of the pipe, creating a chamfer on the end of the pipe. This chamfer makes it easier to insert the fitting and protects the O-rings from damage.



#### **ASSEMBLY OF FITTINGS**

Union nut and clamping ring must be positioned on the pipe as per the illustration. The nipple of the basic body is then fully inserted into the pipe. Clamping ring and union nut are pushed into the basic fitting body up to the stop. The union nut can then be tightened by hand.





#### **TIGHTENING THE CONNECTION**

The union nut must be tightened using a suitable tool until the corresponding resistance is reached. Then check the connection. It is essential to carry out a pressure and leak test (see page 94).

The recommended tightening torques for our screw fittings are:

Size 16 pipe	>	10 Nm
Size 20 pipe	>	20 Nm
Size 26 pipe	>	25 Nm
Size 32 pipe	>	45 Nm

# TECHNICAL MANUAL

## ASSEMBLY INSTRUCTIONS FOR PIPETEC PUSH FITTINGS

The aluminium composite pipe is cut to the desired length using pipe cutters. Calibration is required to ensure that the pipe end is completely round and deburred after cutting. At the same time, calibration creates a chamfer. This allows the fitting to be inserted into the pipe without damaging the sealing ring.

#### ► NOTE

Perfect functioning of the pipe connection can only be ensured by using fittings with the DVGW-certified Pipetec aluminium multilayer composite pipe. Please note how important it is to ensure correct and expert calibration and deburring using a suitable tool. The connection is permanent! Before attaching the fitting, please ensure that the pipe is the required length and no attachment clips or similar have to be placed over the pipe. Always protect fittings with insulation or suitable adhesive tape to protect them from direct contact with concrete, screed, construction foam, mortar, etc. Make sure installation is stress-free! Brass threads that are sealed too tightly (especially when using hemp) can lead to tension in the brass. This can lead to stress corrosion cracking due to assembly.



#### **CUTTING THE PIPE TO LENGTH**

The pipe must be cut to the desired length using a suitable tool. The cross-sectional area of the cut must be perpendicular to the pipe. Diagonal cuts must be avoided.

Handsaws, jigsaws and blunt tools are not suitable for cutting to length.



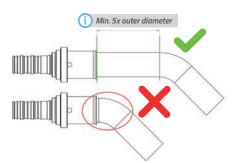
#### **CALIBRATING AND DEBURRING THE PIPE**

The pipe end must be calibrated and deburred after trimming. To do this, the calibrator must first be inserted into the pipe up to the stop. Deburring is then completed by turning the calibrator. Turning removes material from the interior of the pipe, creating a cone that makes it easier to insert fittings and also protects the wedge seal from damage. **PLEASE NOTE: Please use only our grey K1626 calibrator for calibration!** 



#### **ASSEMBLY OF FITTINGS**

Use appropriate force to insert the fitting into the end of the pipe axially up to the stop. The two integrated inspection windows indicate the correct insertion depth. Both inspection windows must be filled by the white pipe. The fittings are prepared for immediate assembly in the factory, please do not use additional lubricant.





# **FINAL TESTING**

Check that the pipe is firmly in place. It must not be possible to pull the pipe out. It is essential to carry out a pressure and leak test (see page 94).

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