

# Installation instruction

## For Plasson Electrofusion Fittings



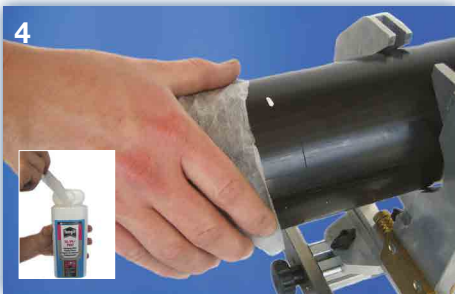
1. Check the PE pipe for damage, scratches and ovality. Ensure pipe ends are cut square and burrs are removed. Remove dirt.



2. Measure the insertion depth of the fitting. Add 20mm and mark this length on the pipe end, using a white marker.



3. Peel the pipe up to the mark in order to remove the oxidation layer. Use a rotational peeling tool. Do not use sandpaper, metal files, etc.



4. Clean pipe ends with authorized cleaner to remove any dirt, and allow to dry. Only use a wipe once. Do not touch the prepared surfaces.



5. Remove fitting from the plastic bag. Slide fitting into pipe until it reaches the center stops of the fitting. Check the depth of the marking. If the fitting cannot be correctly inserted on the pipe due to ovality, the pipe will need to be re-rounded. Secure the pipe with pipe clamps.



6. Connect the control box and switch it on. In case of using a generator, first start the generator, then connect and switch on the control box.



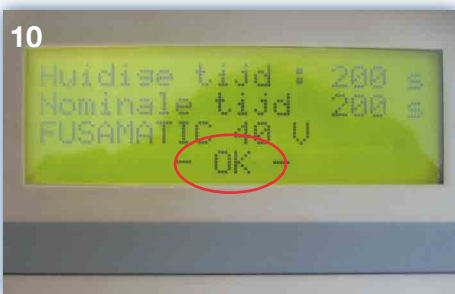
7. Connect the red fusion cable to the red pin and the black cable to the other pin by pulling the black sleeves of the welding plug backwards. Place the welding plug on the pins and release the sleeve.



8. Check the jointing time on the fitting with the jointing time shown on the display. **If they do not match, do not start the welding process.**



9. Press Start (green button). The control box will ask if the pipe has been peeled. If yes, press the Start button again, the control box will start welding.



10. Check if the control box completes the welding time.



11. Plasson fittings have melt indicators. These will rise to indicate that fusion has taken place. They do not indicate the weld quality.



12. Leave the joint in the clamps to cool. Do not pressurize the system before cooling time X3 has passed.

# Points of attention

## making a weld of quality

### Important: Cut square and pipe insertion

Cutting the pipe square and insertion pipe depth are extremely important. Failure to cut the pipe square or insert the pipe to the stops may leave the heating wire uncovered. This can lead to short circuit, overheating, uncontrolled melting and even sudden ignition. In addition, we would like to point out that airflow in the pipe can lead to dangerous situations if the installation of the pipe and fittings is not done correctly. You should therefore block pipe ends to stop wind from blowing through the pipe during the welding process.

### Fixation and cooling down

The pipe must remain in the correct position during welding and cooling, use pipe clamps and ensure proper alignment of the parts. Remove the clamping device only after cooling time has elapsed. Be careful, remember that the cooling time is a critical part of the welding process, and is often overlooked or misunderstood. Any handling, stresses or movement of the pipe/fitting during the welding or cooling time may result in a reduced joint performance. Do not pressurize the system before cooling time mentioned on the barcode label x 3 has passed.

### Marking

Use a white marker to mark the length that needs to be peeled. Measure the insertion depth of the fitting, add 20mm and mark this length on the pipe. This 20mm is necessary to determine afterwards whether the surface has been completely peeled off.



### Peel well

In order to achieve a good weld the outer oxidized surface of the pipe must first be removed. Mechanical rotational peeling tools are strongly preferred, as they achieve a consistent pipe surface preparation. Definitely use no sandpaper, metal files, etc.

### Minimum SDR pipe quality

- Electrofusion fittings up and till 75mm must be welded with a minimum wall thickness according to SDR11.
- Electrofusion fittings from 90mm and up can be welded with PE pipe according to SDR17 and SDR11.

Diameter fitting	PE pipe SDR17	PE pipe SDR11
20mm up and till 75mm	X	V
90mm up and till 400mm	V	V

### Cleaning

After peeling the pipe needs to be cleaned with PE cleaner to remove any dirt. Do not forget! We recommend to use closed packaging with special cleaning wipes for PE.



If you have any questions concerning the process of electrofusion, our delivery program or renting/buying machines or equipment, please do not hesitate to contact our sales department.

### Packaging

Fittings are packed in a protective bag. Make sure you keep the fittings packed until welding to protect them from dirt.

### Weather conditions

When it is cold and damp, condensation can form on the material. That can cause a bad weld. In the open air you can only weld at: ambient temperature of 5°C or higher; wind speed lower than wind force 3; no rain, fog or mist. Prevent condensation. Make sure that the welding parts (pipe, fittings and the sensor of the welding machine) have the same temperature as much as possible. Never store fittings in direct sunlight.

### Welding plugs

Place the welding plugs on the fitting by pulling the black sleeve back, placing the plug over the connection pin of the electrofusion fitting and finally releasing it. The spring ensures that the welding plug clamps firmly around the connection pin. Always provide clean welding plugs. If the welding plugs are dirty, you can clean them with a soft brush.

