

Installation Instructions

Rionfuse CF

Polypropylene and PVDF Chemical Waste Systems

⚠ WARNING



**THINK
SAFETY
FIRST**

Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure. Keep this Manual for future reference.

⚠ DANGER



Electricity, electrocution and shock hazards.

STEP 1

Confirming RF-3000LE is Calibrated

Start up your RionFuser RF-3000LE and it will perform a Self Test. If the Cal Due date has passed or is within the life of your project, then STOP, and contact your Orion Representative for instructions on how to get your machine recalibrated.

For additional information reference the RF-3000LE Instruction Manual included in the carrying case.

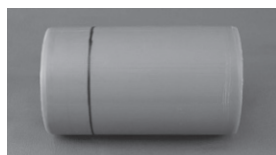
STEP 2

Preparing the Pipe

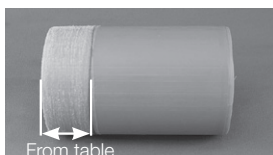
Material preparation is essential to achieving satisfactory fusion results. Deburr all field-cut pipe ends. Following the coupling insertion depth chart, mark the coupling insertion depth from the end of the pipe/fitting to insure that the coupling is properly positioned during the fusion cycle. Then, using 60 grit emery cloth, abrade the marked ends of the pipe and fitting to remove the natural "sheen" of the plastic. After abrading, clean all joint surfaces thoroughly with isopropyl alcohol to remove any dirt, grease and the contaminants left from the sandpaper and any other foreign matter from the surface. We suggest using a spray bottle with 90% or higher isopropyl alcohol to soak a lint resistant cloth to thoroughly wipe the joint surface clean.

COUPLING INSERTION DEPTH MARKING

Pipe Diameter in.	Mark Distance from Pipe End in.
1½	1
2	1
3	1⅝
4	1⅝
6	2
8	2⅝
10	2⅝
12	2⅝



Mark coupling depth



Abrade surface

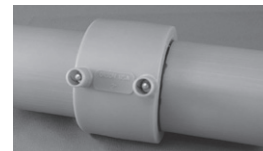
RF_3000LE_EF



STEP 3

Joint Assembly

Insert the prepared ends of the pipe/fitting into both hubs of the Rionfuse CF coupling. Double check the markings to verify proper seating of the pipe.

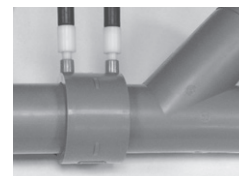


Insert into coupling and verify proper seating

STEP 4

Connecting Lead Cables

The installer must make sure the joint is properly supported during the fusion cycle and afterwards as the joint cools to ambient. For underground installation the joint must be protected from soil falling into the fusion assembly area. If ambient temperature has dropped below 60F in the last 24 hrs, we recommend the use of warming blankets to support, wrap, and protect the pipe during the fusion process. With the Rionfuser unit connected to a dedicated power source and powered ON, connect the lead cables to the coupling.

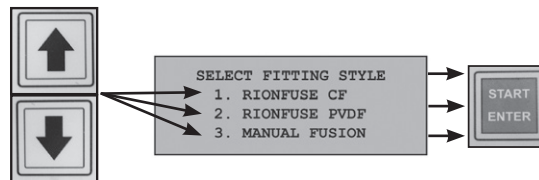


Connect lead cables

STEP 5

Selecting Fitting Style

The unit will now prompt the installer to "SELECT FITTING STYLE". Scroll UP or DOWN to highlight the proper fitting style being fused, then press START to select the fitting style.



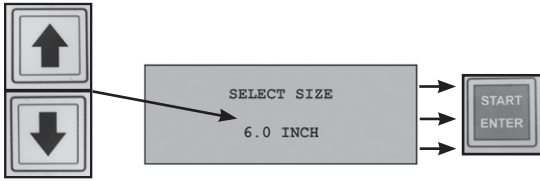
Fitting style selection screen

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STEP 6

Selecting Pipe Size

Next the unit will prompt the installer to select the size of the joint being fused. Scroll UP or DOWN to highlight the correct size, then press START to select size.

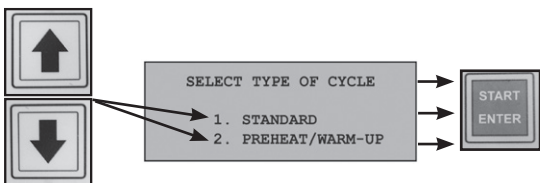


Fitting size selection screen

STEP 7

Selecting Heat Cycle

The unit will ask if a pre-heat cycle is needed for the joint. If fusion will be performed where pipe temperatures are outside the range of 60 - 90 degrees F, please consult Orion Fittings Technical department at (910) 865-7530 before proceeding. All other fusions should be performed using the STANDARD cycle, which is selected by pressing the START button.



Fusion cycle type selection screen

STEP 8

Verifying Welding Parameters

The screen will display "VERIFY WELDING PARAMETERS" and an audible beep will sound to indicate the fusion unit is ready to begin welding. Verify the welding data displayed on the screen matches the joint being fused. If the information is incorrect, press the STOP/BACK button to return to any of the menu options to correct the fusion parameters. Once the parameters have been verified, press START to begin the fusion weld.



Fusion cycle type selection screen

STEP 9

Successful Weld Completion

After pressing START, the Rionfuser will begin the weld. After the welding cycle has completed, another audible beep will sound to indicate that the fusion weld is complete. If the beeping pattern is an equal, consistent beeping, the joint was successful. If the beeping pattern is irregular, it indicates that an error has occurred during the fusion cycle (if an error code is received during fusion, please contact your local Orion rep for troubleshooting information). Once the joint is completed, the lead cables can be removed and the process repeated for the next joint.

If you would like to download data about the fusing you have performed please see our IS-OR-RF-3000LE-DataDownload for instructions.

NOTICE

While performing subsequent fusions, take care not to stress newly-fused joints until fully cooled to ambient, typically about 20 minutes; larger pipe sizes may take longer.

Successful weld completion screen

DISCONNECT
OUTPUT LEADS
WELD COMPLETED
Successfully

POLYPROPYLENE RIONFUSE CF COUPLING

Pipe Size <i>in.</i>	Fusion Time <i>min.</i>	Fusion Current <i>amps</i>
1 - 1/2	2:00	8.25
2	2:00	8.25
3	3:00	14.25
4	3:00	14.25
6	4:30	19.00
8	4:45	19.00
10	7:20	17.00
12	8:00	16:50

PVDF RIONFUSE CF COUPLING

Pipe Size <i>in.</i>	Fusion Time <i>min.</i>	Fusion Current <i>amps</i>
1 - 1/2	2:00	8.25
2	2:00	8.25
3	3:00	14.25
4	3:00	14.25
6	4:45	18.00

MULTIPLE JOINTING RIONFUSE CF

Pipe Size <i>in.</i>	Maximum number of couplings <i>num.</i>
1 - 1/2	4
2	3
3	3
4	2
6	1
8	1
10	1
12	1

Warranty: Our products are carefully inspected for manufacturing defects. However, it is not always possible to detect hidden defects. Our products are warranted only to the extent that we will replace them without charge if they are proved to have manufacturing defects within one year of the date of delivery to the site where they are to be used, or installed, and provided we have been given an opportunity to inspect any product alleged to be defective and the installation or use thereof.

NO WARRANTY IS INCLUDED AGAINST ANY EXPENSE FOR REMOVAL, REINSTALLATION OR OTHER CONSEQUENTIAL DAMAGES ARISING FROM ANY DEFECT. THE WARRANTIES SET OUT ABOVE ARE THE ONLY WARRANTIES MADE AND ARE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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