

INNOGAZ Low and Medium Volume Tapping Tee QUICK REFERENCE INSTALLATION INSTRUCTIONS

Assembly of Pressure Tapping Tees

1.25 – 8" by ½" CTS – 1.25 IPS for

Pipes PE2406 – PE2708 - PE3408 - PE4710

Observe the further applicable documents

This brief instruction is part of the technical documentation for this product.

Other applicable documents are:

- Innogaz General Installation Guide
- Technical Data sheets
- Operation instructions for tools

Any deviations from the Innogaz General Installation Guide or a failure to observe the safety instructions can cause death, serious injuries or damages to properties.

Intended use and areas of application

Innogaz fittings are used for fused joints at pressure pipes made of high density & medium density polyethylene in gas distribution systems with a wall thickness ranging from SDR 17 to 10. Other SDR range on request.

Innogaz Electrofusion fittings are tested and approved according to ASTM F1055, ASTM D2513, and CSA B137.4 for a maximum operating pressure up to 128 psi (Gas).

Innogaz fittings are suitable for installation in ambient temperatures ranging from -22°F to 120°F (-30°C to 50°C) and operating temperatures from -22°F to 140°F (-30°C to 60°C).

Obligations of the installer

All persons involved in the installation of Innogaz Electrofusion fittings should

- be qualified fusion fitting operators
- strictly observe this brief instruction used in conjunction with company approved electrofusion installation procedure

Transport and storage

- in original packed conditions
- UV-protected
- transport and storage temperature from 32°F up to 122°F (0°C up to 50°C).

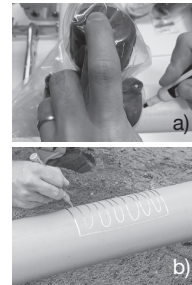
Observe safety advice in the detailed assembly instructions contained in the *Innogaz General Installation Guide*.

1. Clean pipe of rough contaminations.



2. Mark the saddle area.

With fitting in bag, position over pipe, using marker trace out line of saddle fusion. Be generous in this initial estimate.



3. Remove the oxide layer from the pipe surface using a scraper tool. Marked scraping area should exceed fitting perimeter by approx. ½"(12mm).

Use appropriate tool to remove min .006" (.15 mm) to max of .01" (.25mm) for ≤ 2" IPS and .014" (.35mm) for ≥ 3" IPS



4. Clean the pipe surface and the fitting fusion area with prescribed cleaning agent, let evaporate, mark fusion zone again.

Remove fitting from protective bag, inspect the underside for contamination. Cleaning may be necessary.

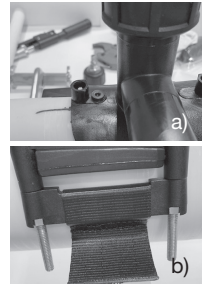


5. Assemble the fitting. Using Molded PE underclamp or nylon belt strap

PE Underclamp- Slide underclamp onto tee saddle lips until contact with stop.

Nylon Belt- Tighten until upper and lower stops make contact

See also on back page.



6. Connect the fusion unit to the fitting then read in the barcode and start fusion process.



7. Document fusion parameters on the pipe. Watch cooling time!



8. Fuse branch pipeline fitting according to assembly instruction.



9. Observe cooling times before tapping! Turn the drill down to the lower stop using the hex wrench and then turn anti-clockwise up to the upper stop, continue an additional ¼ turn. **Excessive force can damage upper stop!** Some leakage from the upper stop after this operation is normal.



10. The tapping tee stack is sealed when the cap is properly installed. Hand tighten cap to positive stop. No tool required.

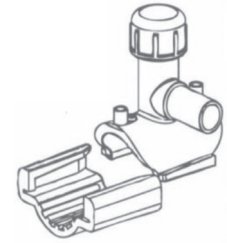


Fusion parameter table saddle fittings

Fitting	Clamp time minutes	Rough handling time minutes	Before applying pressure time minutes	Before tapping time minutes	Fusion time at 23C / 74F seconds	Fusion time at -30C / -22F seconds	Fusion time at 50C / 122F seconds
1.25 IPS LVTT & MVTT	10	SAME	SAME	SAME	28	34	25
1.5 IPS LVTT & MVTT	10	SAME	SAME	SAME	60	73	54
2 IPS LVTT & MVTT	10	SAME	SAME	SAME	70	85	62
3 IPS LVTT & MVTT	10	SAME	SAME	SAME	70	85	62
4 IPS LVTT & MVTT	10	SAME	SAME	SAME	70	85	62
6 IPS LVTT & MVTT	10	SAME	SAME	SAME	70	85	62
8 IPS LVTT & MVTT	10	SAME	SAME	SAME	70	85	62

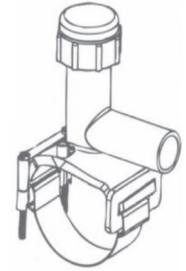
Permanent PE Underclamp

Slide the underclamp on the tapping tee lips and insert it with a mallet until contact with stop. Ensure underclamp is inserted in correct direction.



Permanent Strap Underclamp

Slide the end of the strap with screws onto the opposite lip of the tapping tee outlet and tighten regularly the screws until they lock.



Joint Acceptance Criteria

NOTICE

The described sequence of the processes is absolutely to be adhered to.

Ensure the pipe was scraped properly and a minimum of .006" (.15 mm) wall thickness but not more than .01" (.25mm) for ≤ 2" IPS and .014" (.35mm) for ≥3" IPS of the wall thickness was removed.

1. Ensure fitting is installed within marked saddle area markings.
2. Ensure fitting was aligned and secured during the fusion and cooling cycles.
3. Ensure the proper fusion cycle was completed with no interruption or error code from the electrofusion control box.
4. Ensure the proper cooling time was followed.
5. Ensure there is no "outflow" anywhere around the base of the fitting. If there are visible signs of "outflow", the fitting must be replaced. Outflow is defined as any material visible beyond the fitting when viewed from a 90 degree angle.
6. Check the pop-up indicators were acceptable and meet the criteria stated in the procedures.

On all FRIALEN and INNOGAZ electrofusion fittings, movement of the fusion indicator is only a witness that a fusion cycle has been done. This indicator is under no circumstances the proof of a proper joint. Any movement of the fusion indicator(s) is just a visual verification that energy / heat during the fusion were in place.

In case of no movement, confirm the following:

- all steps in the preparation of the joint (scraping, cleaning & clamping) have been respected
- a visual check to ensure no melt outflow is present

⚠ WARNING!

Fusion with escaping media is not permissible.

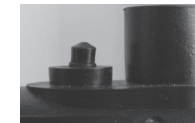
- no errors are shown on the fusion unit display

Provided this criteria are met, the fusion joint may be accepted and subject to normal pressure test requirements.

Limited or no movement



Normal movement



Above normal movement



Outflow



NOTICE

Any fusion not meeting the Joint Acceptance criteria above must be cut out and replaced accordingly.