

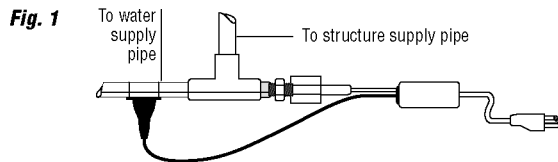
Installation Instructions

Description

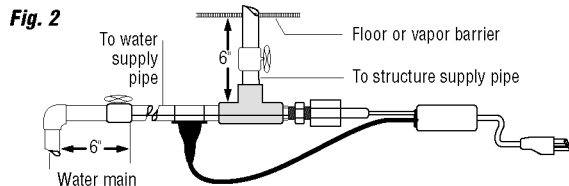
Mini WinterGard In-Pipe Heating Cable is for freeze protection of insulated PE, PVC, CPVC and copper potable water lines ranging from 1/2" to 1 1/4" in diameter. The cable is pre-assembled with a thermostat and a cord that simply plugs into a ground-fault circuit interrupter receptacle outlet located in a dry area.

Installation In New Pipes

1. Shut off water supply.
2. Uncoil cable assembly.
3. Slide appropriate tee assembly and necessary couplings, adapters, etc., over the heating cable. Temporarily fasten to threaded coupling. The cable should pass through the in-line segment of the tee assembly with no bending required, as shown in Figure 1.



4. To determine the length of pipe to be protected, place the end of the tee assembly, with the cable in it, against one end of the pipe. Place the straightened, uncoiled heating cable along the outside of the pipe. Mark and cut the pipe at a point 1/2" (13 mm) longer than the end of the cable.
5. Attach one end of the pipe just measured and connect to the water supply main, per local codes, using appropriate hardware. If a shutoff valve is to be used, **the total length of unheated pipe (pipe plus valve without cable in it) must not exceed 6" (150 mm) (see Figure 2).**



6. Remove the cable from the tee assembly. Then attach the tee assembly to the near end of the installation pipe, per local codes. Be sure the tee is installed so that the cable will be able to pass straight through the tee and into the pipe with no bending required (see Figure 1).
7. Attach structure supply pipe to the tee opening as shown in Figure 1, per

local codes, using appropriate materials. If a shutoff valve is used in this section of the pipe, **the total length of unheated pipe (pipe plus valve without cable in it) must not exceed 6" (150 mm) (see Figure 2).**

Do not position the pipe in which the heating cable will be inserted in such a way as to cause sharp bends in the pipe.

Note: If this installation is for a pipe supplying water to a manufactured home, the structure supply connection should be made underneath the vapor barrier supplied with the home, if possible.

8. Fully insert the cable in the installation pipe through remaining opening in tee assembly. Once the cable is inserted, fasten the coupling to the tee using the appropriate materials, per local codes. **Do not overtighten coupling assembly.** **Do not plug in the assembly to power source at this time.**

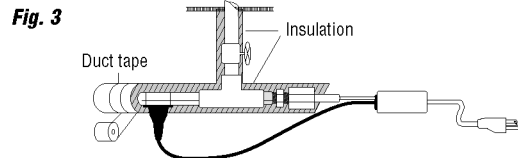
9. Turn on water supply to new pipe and check installation for leaks.
10. Fully extend thermostat cord and attach thermostat to new pipe as shown in Figure 1, using tie-wraps provided.

Note: If pipe has been added to both sides of the tee assembly to install the unit, the thermostat must be mounted on the outside of the pipe that will carry water. Do not mount thermostat on pipe where water will not flow.

Do not leave thermostat exposed to sense air temperature.

Use duct tape to secure cord to outside of pipe in several places.

11. Install 1/2" (13 mm) thick (minimum) closed cell split tube insulation over all pipe, with and without heating cable inside. Also cover valve bodies with insulation (see Figure 3).



12. Cover seams and joints in insulation with duct tape or other suitable material to prevent water from entering the insulation.
13. Plug the power cord directly into three-prong grounded 120-V GFCI outlet installed in accordance with national and local electrical codes. **Do not use an extension cord.**

⚠ WARNING:

Mini WinterGard must be installed correctly to ensure proper operation and to prevent shock, fire or damage to the pipe. Read these important warnings and carefully follow all the installation instructions.

- A 5-mA ground-fault circuit interrupter (GFCI) must be used.
- Mini WinterGard should not be used in uninsulated pipe. For uninsulated pipes contact Tyco Thermal Controls.
- The heating cable must be installed in accordance with local and national electrical codes.
- Do not use a two-prong outlet, an extension cord, or with any voltage other than 120 volts AC.

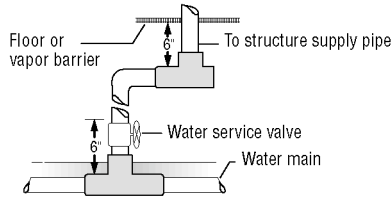
- Do not unduly work or bend the cable. Bend gently and avoid repeated sharp bends, pinching, crimping, or flattening.
- Do not cut or alter the length of the heating cable or power cord.
- The heating cable must not pass through a valve or shut off of any kind.
- Do not install this heating cable on the outside of piping.
- Do not energize the system until installation is complete and the pipe is filled with water. Never energize the system if the pipe is not filled with water.
- The thermostat sensor must contact the pipe at all times or it could sense an incorrect temperature.

Installation in Existing Pipes

1. Shut off water supply and drain pipe that is to have heating cable installed.
2. Measure and mark existing pipe from top of water service valve to within 6" (150 mm) of where pipe (pipe plus valve) enters vapor barrier or floor. This distance must be at least 2" (50 mm) less than the length of the unit to be installed (see Figure 4).

The unheated pipe (pipe plus valve from the water service valve to the main water supply line) must not exceed 6" (150 mm).

Fig. 4

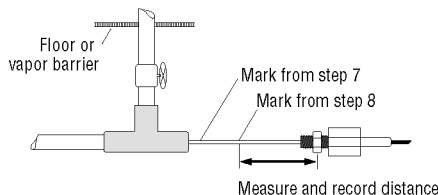


3. Cut pipe where marked in Step 2.
4. Insert fish tape or snake back through cut water supply pipe, attached to main water supply line, until the tape or snake comes in contact with closed water service valve. Mark fish tape or snake to indicated pipe length, remove from pipe and measure distance from end to mark. The length indicated should be less than the length of the unit purchased. If the measure length exceeds your cable length by 6" (150 mm), do not install the cable; return it for the next larger size.

Do not remove length mark from fish tape or snake. You will need it in Step 7.

5. Following local codes, attach one end of appropriate tee assembly on cut end of pipe which leads back to main water supply line. Be sure tee assembly is attached so that the cable will pass in a straight line through the tee assembly and into the supply pipe with no bends (see Figure 6).
6. Attach the tee assembly, as shown in Figure 1, to the structure supply pipe, per local codes, using appropriate materials. This connection may require the addition of a small section of pipe to the existing pipe. **The total length of unheated pipe (pipe plus valve, and new pipe addition, without cable in it) must not exceed 6" (150 mm), measured from vapor barrier or floor of structure.**
7. Uncoil and straighten the heating cable and place side by side next to uncoiled fish tape or snake, making sure ends match up evenly. Using a crayon or marker, indicate on the cable the length marking from the snake or tape where it entered the pipe in Step 4.
8. Insert the cable through tee assembly into supply pipe until it stops accepting cable. Using a crayon, mark cable where it enters the tee assembly. Pull some of the cable back out of the pipe and check for the original length mark. The two marks should be separated approximately the length of the tee assembly. Measure and record the distance from the mark placed on the cable in this step and the plastic nut in the center of the threaded coupling (provided with the cable) (see Figure 5). If there is no excess cable, as shown in Figure 5, skip steps 9 through 11.

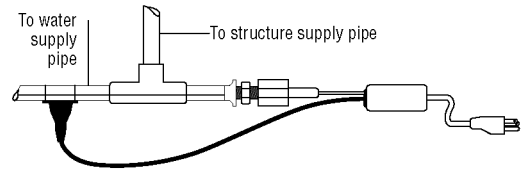
Fig. 5



9. Remove the entire assembly from the pipe.
10. Cut a piece of appropriate pipe material. The length is that which was determined in Step 8, plus 2" (50 mm) (eg: 21" + 2" = 23"). Using the appropriate connection hardware, as required by local codes, attach the length of newly cut pipe to the remaining tee opening.

11. Per local codes, attach to the just installed length of pipe the appropriate hardware needed to accept the coupling.
12. Fully insert the cable through the opening in the pipe, and fasten the coupling to pipe.
Do not overtighten coupling.
Do not plug in the assembly to power source at this time.
13. Turn on water supply and check installation for leaks.
14. Fully extend the thermostat cord and tie the thermostat to pipe as shown in Figure 6, using tie-wraps provided.

Fig. 6



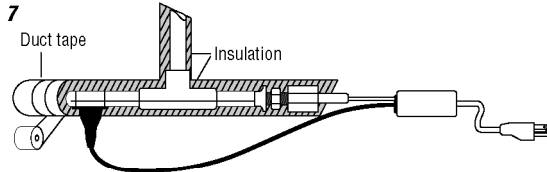
Note: If additional pipe has been added to install the unit, the thermostat must be mounted on pipe that will carry water. Do not mount thermostat on pipe where water will not flow.

Do not leave thermostat exposed to sense air temperature.

Use duct tape to secure thermostat cord to outside of pipe in several places. This is done to prevent accidental damage to the cord.

15. Install 1/2" (13 mm) thick (minimum) closed cell split tube insulation over all pipes, with and without heating cable inside. Also cover valve bodies with insulation (see Figure 7).

Fig. 7



16. Cover seams and joints in insulation with duct tape or other suitable material to prevent water from entering the insulation.
17. Plug the power cord directly into a three-prong grounded 120-V GFCI protected outlet installed in accordance with national and local electrical codes. **Do not use an extension cord.**

Limited Warranty

Mini WinterGard In-Pipe Heating Cable

Tyco Thermal Controls warrants the heating cable against faulty workmanship and use of defective materials for two (2) years from the date of purchase. This warranty can be amended only by a written instrument signed by a duly authorized officer of Tyco Thermal Controls. Buyer's exclusive remedy under this warranty shall be to have Tyco Thermal Controls, within a reasonable time, repair such goods or supply replacement goods or credit Buyer's account for such goods and accept their return whichever Tyco Thermal Controls may elect at its sole discretion. Tyco Thermal Controls shall in no event be liable for the cost of removal or installation, for loss or damage to or loss of use of facilities or other property, loss of revenue, loss of use of revenue, loss of anticipated profits, or other damages or costs of any kind whatsoever, whether direct, indirect, incidental, or consequential.

Notwithstanding the foregoing, Tyco Thermal Controls shall have no liability whatsoever unless: (a) Buyer promptly notifies Tyco Thermal Controls in writing after discovery of an alleged nonconformity and includes a detailed explanation of the alleged nonconformity; (b) Buyer promptly returns the goods to Tyco Thermal Controls postage prepaid, at 250 West Street, Ontario, Canada K8V 5S2 and (c) Tyco Thermal Controls examination of such goods establishes to Tyco Thermal Controls satisfaction that such alleged nonconformities actually exist and occurred in the cause of proper and normal use and were not caused by accident, misuse, neglect, alteration or improper installation, repair or testing or such other cause outside of the responsibility of Tyco Thermal Controls under this Limited Warranty.

THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER REPRESENTATIONS, WARRANTIES, OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, AND OF ANY OTHER OBLIGATION OR LIABILITY ON THE PART OF TYCO THERMAL CONTROLS, WHETHER BY STATUTE, CONTRACT, STRICT LIABILITY, TORT OR OTHERWISE.

If the goods are a consumer product in buyer's jurisdiction, the above exclusion or limitation of incidental or consequential damages and the above disclaimer of implied warranties may not apply. The term of any such implied warranty is limited to the term of this two-year Limited Warranty. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply. This warranty gives consumers specific legal rights, and consumers may also have other rights, which vary by jurisdiction.

InPipe Heat Tape Prices

Mini **WINTERGARD**[®] IN-PIPE HEATING CABLE Câble chauffant pour intérieur de tuyaux d'eau

tyco / Flow Control



Ideal for :
Manufactured Homes
Cottages
Farm Stock Tank Lines
Well Piping and More

Idéal pour :
Maisons préfabriquées
Bungalows
Tuyauteries des réservoirs de stockage agricoles
Prise d'eau dans les puits, etc.

A Safe and Easy Way to Freeze Protect Water Lines

Mini WinterGard In-Pipe Heating Cable is for freeze protection of insulated PE, PVC, CPVC and copper potable water lines ranging from 1/2" to 1 1/4" in diameter. The cable is pre-assembled with a thermostat and a cord that simply plugs into a ground-fault circuit interrupter receptacle outlet located in a dry area.

Une manière simple et sécuritaire de protéger vos tuyaux d'eau contre le gel

Le câble chauffant pour intérieur de tuyaux d'eau Mini WinterGard est conçu pour la protection des tuyaux d'eau potable en polyéthylène, PVC, CPVC et cuivre isolés d'un diamètre compris entre 1/2 po et 1-1/4 po. Le câble est livré préassemblé avec son thermostat et son cordon d'alimentation prêt à être branché dans une prise protégée par un disjoncteur différentiel, dans un endroit sec.

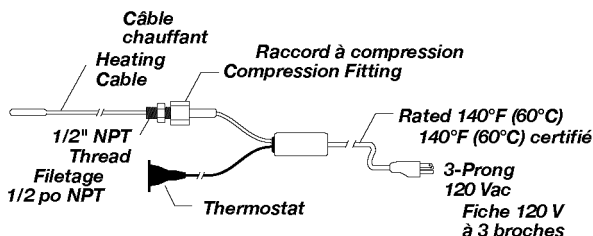
The Secret's in the Cable

WinterGard In-Pipe Heating Cables are series type Mineral Insulated heating cables that get right to the heart of cold weather water problems – inside your water supply pipe. That's where the system goes to work, automatically keeping water flowing safely.

Installation only requires simple home plumbing tools, takes just minutes, and protects your water supply for many years to come.

Le secret est dans le câble!

Les systèmes chauffants pour intérieur de tuyaux d'eau WinterGard utilisent un câble à isolation minérale qui va droit au coeur des problèmes d'eau liés au froid – ils sont immergés dans l'eau, dans les tuyaux. C'est de cette manière que le système fonctionne : il se déclenche automatiquement, permettant à l'eau de s'écouler en toute sécurité. L'installation n'exige qu'un minimum d'outillage de plomberie simple. En quelques minutes, protégez votre alimentation en eau pour les années à venir.



Tools Required

Depending on the pipe material used, you may require:

- A hack saw
- Teflon tape
- Two adjustable wrenches

Copper pipe will require:

- Steel wool
- An appropriate heat source
- Flux and solder

Plastic pipe will require:

- Cleaning solvent
- Pipe adhesive

In addition:

- A fish tape or snake if installation is to be in an existing pipe system.
- Pipe insulation and duct tape will also be required no matter what the pipe material used.

Outillage nécessaire

Selon la nature du tuyau, vous pouvez avoir besoin de :

- Scie à métaux
- Deux clés à molette
- Ruban téflon

Pour un tuyau en cuivre:

- Laine d'acier
- Source de chaleur appropriée
- Flux et soudure

Pour un tuyau en plastique:

- Solvant de nettoyage
- Adhésif à tuyaux

En plus :

- Ruban de tirage ou sonde de plombier pour poser le câble dans une tuyauterie existante.
- Isolation thermique et ruban adhésif seront aussi nécessaires pour tous les types de tuyaux.

Additional Materials Required

The actual installation will determine your final hardware needs. In addition to the supplied 1/2" NPT compression fitting, your system will require the following:

- A slip, sweat or threaded tee fitting that matches your pipe size and type.
- An adaptor, coupling and/or compression fitting to connect the pipe to the supplied 1/2" NPT compression fitting.

Note: For plastic pipe applications, the plastic pipe must be rated for 75 psi and capable of withstanding 206°F (97°C).

Autres fournitures requises

C'est le type d'installation qui déterminera les besoins en accessoires de plomberie. En plus du raccord à compression 1/2 po NPT (fourni), vous aurez probablement besoin des articles suivants:

- Un raccord en T à coller, souder ou visser correspondant au diamètre et au type du tuyau.
- Un réducteur, un raccord droit et / ou un raccord à compression pour le raccordement de votre tuyau au raccord à compression 1/2 po NPT fourni.

Remarque: Les tuyaux en plastiques doivent être certifiés pour une pression de 75 lb/po2 et une température de 206°F (97°C).