WARNING:

IMPORTANT SAFETY INSTRUCTIONS

FAILURE TO COMPLY WITH THESE INSTRUCTIONS CAN RESULT IN SERIOUS PERSONAL INJURY OR DEATH AND/OR SERVERE PROPERTY DAMAGE.

Combination temperature and pressure relief valves with extension thermostats must be installed so that the temperature-sensing element is immersed in the water within the top 6" (152mm) of the water storage tank. They must be installed either in the hot outlet service line or directly in a tank tapping. Combination temperature and pressure relief valves that do not have extension elements must be mounted directly in a tank tapping located within the top 6" (152mm) of the water storage tank. Valves must be located so as to assure isolation from flue gas heat or other ambient conditions that are not indicative of stored water temperature.

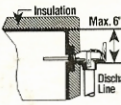
WARNING: To avoid water damage or scalding due to valve operation, discharge line must be connected to valve outlet and run to a safe place of disposal. Discharge line must be as short as possible and be the same size as the valve discharge connection throughout its entire length. Discharge line must pitch downward from the valve and terminate at least 6" (152mm) above a drain where any discharge will be clearly visible. The discharge line shall terminate plain (unthreaded) pipe. Discharge line material must conform to local plumbing code or A.S.M.E. requirements. Excessive length, over 30 feet (9.14m), or use of more than four elbows or reducing discharge line size will cause a restriction and reduce the discharge capacity of the valve. No shut-off valve shall be installed between the relief valve and tank, or in the discharge line. This device is designed for emergency safety relief and shall not be used as an operating control.

This valve must be installed by a licensed plumbing contractor or trained professional in accordance with these instructions and/or local plumbing codes and standards.

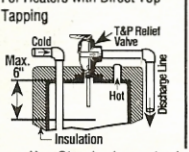
Repair or alteration of valve in any way is prohibited by national safety standards/local codes.

WARNING: If discharge occurs, **CALL A PLUMBER IMMEDIATELY.** A licensed contractor must evaluate the system and determine the cause of discharge and correct the cause immediately. Discharge may indicate that an unsafe temperature or pressure condition exists within the tank which requires immediate attention by a licensed plumbing contractor.

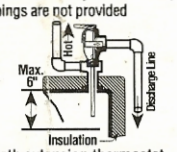
Direct Side Tapping
FOR EXTERNAL FLUE HEATERS
Use extra length extension thermostat to extend into water storage tank.
FOR INTERNAL FLUE HEATERS
Use short or standard length thermostat.
Vertical discharge line must be installed with its direction downward.



For Heaters with Direct Top Tapping



"Alternate" Only when the tappings are not provided



Use Standard or extra length extension thermostat

For maintenance instructions:
See warning tag attached to valve for important safety information.

WATTS® REGULATOR

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To Whom It May Concern:

The Watts Regulator Company recommends that all Temperature and Pressure Relief Valve discharge lines be installed per local codes. We recommend that the instructions as shown on the warning tag supplied with the valve be followed as a minimum.

If approved by local authorities, a discharge line that exceeds 30 feet or requires more than 4 elbows may be run as follows. The relief valve discharge line must be run full pipe size downward and discharge through an air gap into a larger drain line that is at least one-pipe sizes larger than the T&P Relief valve size. This will eliminate any possible backpressure that might build up on the T&P relief valve, reducing the BTU capacity.

The Watts Regulator Company

Doug Phinney

Doug Phinney
Technical Service

CC: J. McCabe

Sizing Manifolds For Multiple Drain Lines From T & P Relief Valves

Table shows size of common drain line, capable of handling discharge from multiple T & P relief valves.

Example 1: 6 - ¾" size relief valve drain lines are to be manifolded into a common drain.
Selection is 2" drain line.

Example 2: 3 - 1" size relief valve drain lines are to be manifolded into a common drain.
Selection in 2" drain line.

Valve Size	Number of Relief Valve Drain Lines				
	2	3	4	5	6
	Common Drain Size				
½"	1"	1¼"	1¼"	1½"	1½"
¾"	1¼"	1½"	2"	2"	2"
1"	1½"	2"	2½"	2½"	3"
1¼"	2"	2½"	3"	4"	4"
1½"	2½"	3"	4"	4"	4"
2"	2½"	3"	4"	4"	4"

Important

The rating of a T & P relief valve is based on having a full size drain line throughout its entire length. Any reduction or restriction in the drain line could reduce the valve's capacity and cause an unsafe condition.

1. Drain line must be installed to avoid water damage or scalding due to valve operation.
2. Drain line must be as short as possible and be same size as valve outlet throughout its entire length.
3. Drain line must pitch downward from valve and be free draining.
4. Drain line must terminate at least 6" above floor drain, where the discharge will be visible.
5. Drain line must terminate plain, not threaded, with material serviceable for temperatures up to 250°F or greater.
6. No shut-off valve shall be installed between the relief valve and tank, or in the drain line.

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CASH ACME
A Division of the Reliance Worldwide Corporation

RE: Discharge (drain) line installation.

To whom it may concern:

Cash Acme recommends the following minimum requirement for the installation of Temperature and Pressure relief valves:

Discharge lines must be fitted to relief valves by means of threaded connection. Copper or type CPVC plastic tube will necessitate the use of thread x sweat (weld) transition fittings at this connection. Lines shall be as short as possible and be of the same size as the valve discharge connection (3/4", for example) throughout their entire length. Lines must pitch downward from the valves and terminate at least 6" above drains where discharge will be clearly visible. The discharge end of a line shall be plain (unthreaded). Discharge line material must suitable for at least 180F water, shall be no more than 30 feet in length or contain more than four elbows or bends. No valve of any type may be installed in the discharge lines.

John Brill
Cash Acme