

Vacu-Stop™ Vacuum Relief Valve

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304 Series

Function



Vacu-Stop™ vacuum relief valves automatically allow air to enter into a tank or piping system to prevent vacuum conditions that could siphon water and/or damage equipment. Vacuum relief valves are suitable for water and low pressure steam service. They are ideal for use in water heaters, supply tanks, and low pressure steam systems. Complies with ANSI Z21.22 and CSA 4.4 Relief Valves for Hot Water Supply Systems.



Product range

304 Series, Vacu-Stop

NPT male, connection sizes 1/2", 3/4"

Technical specifications

Materials

Body:	DZR low-lead brass CW724R
Cartridge, check:	PPSU
Spring:	stainless steel ISO 6931-1 (4310-301-00)
Washer:	silicon 240/T
Top:	ABS
Cover plate:	PA6G30

Performance

Medium:	Water, low pressure steam
Max. working pressure (water):	200 psig (14 bar)
Max. working pressure (steam):	15 psig (1 bar)
Working temperature range:	32 – 250°F (0 – 120 °C)
Vacuum relief opening pressure:	0.3" Hg (1 kPa) vacuum
Relief capacity:	4.5 CFM @ 2" Hg (130 lpm @ 7 kPa) vacuum

Complies with ANSI Z21.22/CSA 4.4 and NSF/ANSI/CAN 61 and NSF/ANSI/CAN 372, Drinking Water System Components-Lead Content Reduction of Lead in Drinking Water Act, California Health and Safety Code 116875 S.3874, Reduction in Drinking Water Act, Vermont Act 193 - The Lead in Plumbing Supplies Law and Maryland's Lead Free Law HB.372, as certified by ICC-ES.



SAFETY INSTRUCTION

This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.**



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warning.ca.gov.



CAUTION: All work must be performed by qualified personnel trained in the proper application, installation, and maintenance of systems in accordance with all applicable codes ordinances.



CAUTION: Over-tightening and breakage can occur with the use of Teflon® pipe joint compounds. Teflon® provides lubricity so that care must be exercised not to over-tighten joints. Failure to follow these instructions could result in property damage and / or personal injury.



CAUTION: System fluids under pressure or temperature can be hazardous. Be sure the pressure has been reduced to zero and the system temperature is below 100°F (38°C). Failure to follow these instructions could result in property damage and/or personal injury.



CAUTION: Clean the pipes of any debris, rust, incrustations, welding slag and any other contaminants. For optimal operation, air in the system must be removed.



CAUTION: Do not install an isolation valve in between the pressure vessel and the vacuum relief valve. If the vacuum relief valve is not installed properly, according to the instructions contained in this manual, it may not operate correctly and may endanger the user.



CAUTION: Make sure that all the connecting pipework is water tight.

Caleffi shall not be liable for damages resulting from stress corrosion, misapplication or misuse of its products..



CONSIGNE DE SÉCURITÉ

Ce symbole d'avertissement servira dans ce manuel à attirer l'attention sur la sécurité concernant instructions. Lorsqu'il est utilisé, ce symbole signifie. **ATTENTION! DEVENEZ ALERTE ! VOTRE SÉCURITÉ EST EN JEU ! NE PAS SUIVRE CES INSTRUCTIONS PEUT PROVOQUER UN RISQUE DE SECURITE.**



AVERTISSEMENT: Ce produit peut vous exposer à des produits chimiques comme le plomb, qui est connu dans l'État de Californie pour causer le cancer, dommages à la naissance ou autre. Pour plus d'informations rendez-vous www.P65Warnings.ca.gov.



AVERTISSEMENT: Tous les travaux doivent être effectués par du personnel qualifié formé à la bonne application, installation et maintenance des systèmes conformément aux codes et règlements locaux.



AVERTISSEMENT: Un serrage excessif et une rupture peuvent survenir avec l'utilisation de Teflon® composés de joint de tuyau. Le Teflon® offre un pouvoir lubrifiant de sorte que les soins doivent être exercé pour ne pas trop serrer les joints. Non-respect de ces instructions pourrait entraîner des dommages matériels et / ou des blessures corporelles.



AVERTISSEMENT: Les liquides du système sont sous pression ou de la température peuvent être dangereux. Être sûr que la pression a été réduite à zéro et la température du système est inférieure à 100°F (38°C). Le non-respect de ces instructions peut entraîner des dommages matériels et/ou des blessures.



AVERTISSEMENT: Nettoyer les tuyaux de tout débris, roille, incrustations, scories de soudure et d'autres contaminants. Pour un fonctionnement optimal, de l'air dans le system doit être retiré.



AVERTISSEMENT: Si la valve, n'est pas installée, mise en service et entretenue correctement, selon les instructions contenues dans ce manuel, il peut ne pas fonctionner correctement et peut mettre en danger l'utilisateur.



AVERTISSEMENT: S'assurer que tous les raccords sont étanches.

Caleffi ne pourra être tenue responsable des dommages résultant de la corrosion, d'une mauvaise utilisation ou d'une mauvaise utilisation des produits.

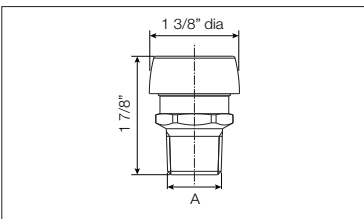
Installation:

Install the Caleffi 304 Series Vacu-Stop vacuum relief valve in the cold water supply line at or above the highest point in the tank, vertically in the upright position. The illustration below shows a typical and correct position when the valve is installed on a water heater tank. The valve opens at a vacuum of 0.3” mercury column.

When installing the vacuum relief valve on a low pressure steam heating system, use a pigtail.

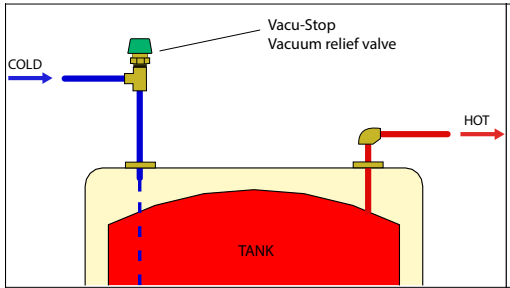
Caution: DO NOT install an isolation valve in between the water supply and the vacuum relief valve.

Dimensions

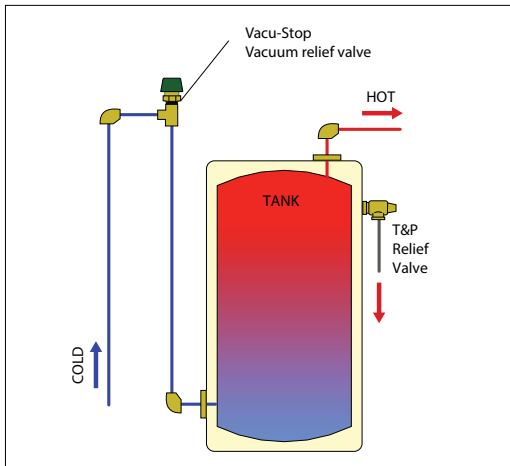


Code	A	Wt. (lb./kg)
NPT male threaded		
304040A	1/2"	0.8/0.4
304050A	3/4"	0.8/0.4

Top connection water heater tank



Bottom connection water heater tank



Safety

If the vacuum relief valve is not installed, commissioned and maintained properly in accordance with these instructions, it may not operate correctly, and may cause damage to objects and/or people. Make sure all the connections are watertight.

When installing the vacuum relief valve, make sure not to over-tighten the connection. Over time, a failure can occur with subsequent water leakage causing damage.

LEAVE THIS MANUAL WITH THE USER.

Laissez ce manuel à la disposition de l'utilisateur.



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