

# **NCLX T&P Relief Valve**

#### **DESCRIPTION**

Cash Acme NCLX Combination Temperature and Pressure Relief Valves are designed for the protection of water heaters and storage tanks.

Cash Acme NCLX Valves are designed to meet ANSI Z21.22/CSA 4.4 and ASME Boiler Code Section IV in most configurations (see Certifications for details) and are ideal for all domestic water heater applications.

Cash Acme NCLX Valves are completely automatic and reseat after either temperature or pressure relief. They are offered in 1/2" and 3/4" sizes with male inlets and female outlets. The NCLX Valve incorporates an innovative "white coat" thermal element coating; an inert covering that provides effective isolation from mineral deposits (liming) and galvanic corrosion, offering many years of dependable safety protection.

The NCLX-5 model provides the standard length body and thermal element. Five models of the 3/4" size are available with extended length bodies (NCLX-5S, NCLX-5L, NCLX-5LX, NCLX-LS and NCLX-A) for use with super-insulated water heaters. The 3/4" NCLX-8 model is available for applications where an extended thermal element is required, and the NCLX-1 is available for applications where a reduced length thermal element is required.

Cash Acme NCLX Valves come with standard factory settings of 150 psi for pressure relief and 210°F for temperature relief. Most models are also available in a 125 psi factory setting. A 75 psi and 175 psi factory setting is also offered for the 3/4" NCLX-1 and 3/4" NCLX-5. The 3/4" NCLX-5, NCLX-5LX, and NCLX-A are also available with a factory temperature relief setting of 180°F (combined with factory pressure setting of 100 psi).

The NCLX Series Relief Valves feature a cast bronze body, brass and stainless steel internal parts, silicone seat disc, and stainless steel pressure spring.

Lead Free\* versions of most models are available.



Incorporates an inert thermal element coating:

Provides effective isolation from mineral deposits (liming) and galvanic corrosion.

Completely automatic and reseats after temperature or pressure relief: Ideal for all domestic water heater applications.

Listed by CSA (ANSI Z21.22/CSA 4.4) and the National Board (ASME Boiler Code Section IV): Inspector friendly, peace of mind!

Every valve is tested for performance prior to shipping: Specify and install with confidence!

#### **SPECIFICATIONS**

A temperature and pressure relief valve shall be installed to protect the water heater or water storage tank from excessive temperature and pressure. The valve shall be ASME and CSA listed and shall be design certified per ANSI Z21.22/CSA 4.4. The valve shall have a BTU rating in excess of the input rating of the water heater in which it is installed. The valve shall be a Cash Acme NCLX T&P Relief Valve.





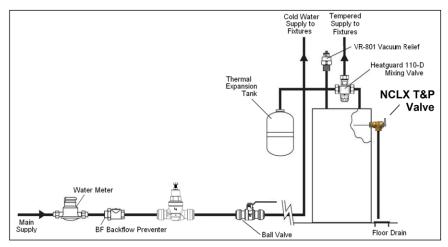
<sup>\*</sup> A device is defined as Lead Free if its normally wetted surface has a weighted average lead content not exceeding 0.25%.

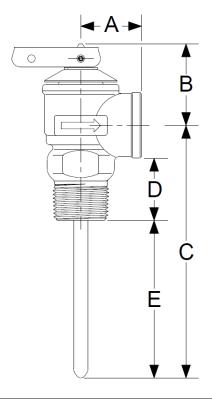


# **NCLX T&P Relief Valve**

#### TYPICAL INSTALLATION

Recognized authorities specify a temperature actuated relief valve installed in such a manner that the temperature sensing element is in contact with hot water in the top-six inches of the tank. This is a necessary safety precaution due to temperature stacking – to insure that the temperature element is sensing the hottest water in the top of the tank. The discharge from the relief valve must be conducted to a suitable place for disposal when relief occurs by installation of an appropriate drain line in accordance with applicable codes.





## **SPECIFICATION DATA**

Performance:
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(75, 100, 125, and 175 psi available for select models; see Rating Table)

Temperature Relief ...... 210°F standard

(180°F available for select models;

see Rating Table)

Service ...... Hot Water

Materials

Body ..... Bronze

Internal Parts ...... Brass and stainless steel

Seat Disc Silicone
Pressure Spring Stainless steel

Time	Size (NPS)	DIMENSIONS					
Туре		Α	В	С	D	E	
NCLX - 1	1/2"	1-3/32"	1-9/16"	3-3/16"	1-3/16"	1-7/16"	
NCLX - 1	3/4"	1-5/32"	1-9/16"	3-3/16"	1-3/16"	1-5/16"	
NCLX - 5	1/2"	1-3/32"	1-9/16"	4-7/8"	1-3/16"	3-1/8"	
NCLX - 5	3/4"	1-5/32"	1-9/16"	4-7/8"	1-3/16"	3-1/16"	
NCLX – 5S	3/4"	1-5/32"	1-9/16"	4-7/8"	1-1/2"	2-11/16"	
NCLX – 5L	3/4"	1-5/32"	1-9/16"	4-7/8"	2-3/32"	2-1/8"	
NCLX - 5LX	3/4"	1-5/32"	1-9/16"	4-7/8"	2-5/16"	1-7/8"	
NCLX - LS	3/4"	1-5/32"	1-9/16"	4-7/8"	2-5/8"	1-9/16"	
NCLX - A	3/4"	1-5/32"	1-9/16"	4-7/8"	3-5/16"	7/8"	
NCLX - 8	3/4"	1-5/32"	1-9/16"	9-3/4"	1-3/16"	7-7/8"	

### **CONNECTIONS**

Threaded (NPT) ...... Male inlet and female outlet

### **CERTIFICATIONS**

Cash Acme NCLX Relief Valves are certified to ANSI Z21.22/CSA 4.4 and are capacity certified to ASME Boiler Code Section IV (see Rating Table).

(1/2" sizes are CSA listed only).

CSA (ANSI Z21.22/CSA 4.4) and ASME (Boiler Code Section IV) Ratings									
Size		CSA Rating	ASME Rating at Pressure Setting Indicated						
Type	(NPS)	(BTU/hr)	75 psig (BTU/ <u>hr</u> )	100 psig (BTU/hr)	125 psig (BTU/hr)	150 psig (BTU/hr)	175 psig (BTU/ <u>hr</u> )		
NCLX - 1	1/2"	15,000	$\langle$	$\langle$	N/R	N/R	$\langle$		
NCLX - 1	3/4"	95,000	300,000	$\mathbb{X}$	500,000	500,000	N/R		
NCLX - 5	1/2"	15,000	$\mathbb{X}$	$\mathbb{X}$	N/R	N/R	$\tilde{\ \ }$		
NCLX - 5	3/4"	105,000 (1)	300,000	N/R (2)	500,000	500,000	N/R (1)		
NCLX - 5S	3/4"	105,000	> <	$\times$	$\sim$	500,000	$\setminus$		
NCLX – 5L	3/4"	105,000	><	$\sim$	$\sim$	500,000	><		
NCLX – 5LX	3/4"	105,000	$\mathbb{X}$	N/R (2)	500,000	500,000	$\bigvee$		
NCLX - LS	3/4"	105,000	$\mathbb{N}$	$\mathbb{X}$	$\mathbb{N}$	500,000	$\bigvee$		
NCLX - A	3/4"	105,000	$\stackrel{\vee}{\wedge}$	N/R (2)	$\mathbb{N}$	500,000	$\bigvee$		
NCLX - 8	3/4"	105,000	$\nearrow$	$\times$	500,000	500,000	$\bigvee$		

- (1) For 3/4" NCLX-5 at 175 psig CSA Rating is 95,000 BTU/hr.
- (2) The 100 psig pressure set is only offered with the 180°F temperature relief.
- (3) N/R indicates Type is available but Not ASME Rated at the indicated pressure set.

