

# Cryogenic Thermal Relief Valve

Brass

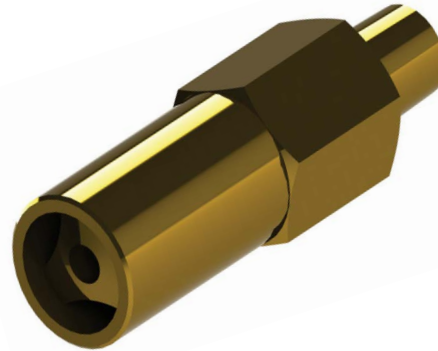
Nozzle 6 (1/4")

A compact cryogenic relief valve designed to prevent damage to piping and equipment caused by the expansion of liquefied gases.

When liquefied gases are trapped between two closed valves (a situation known as liquid lock) the reheating and consequent boiling can lead to a dangerous rise in pressure.

The Parker Bestobell Thermal Relief Valve has been designed with this application specifically in mind using materials which are particularly suited to this purpose. One major benefit of this is that the valve will not stick in its seat even when left unused for long periods of time. The valve also reseats correctly after venting off the expanding fluid, thus preventing the waste of expensive cryogenic gases. It is available with a variety of outlet connections to suit the customers' requirements.

All valves are degreased for oxygen duty, assembled in clean room conditions and pressure tested prior to dispatch.



Nozzle 6 Brass Thermal Relief Valve  
 Open to Atmosphere

Relief Valves

## Maximum Working Pressure (MWP)

Subject to end connections

Up to 40 bar (580 psi) at -196°C to + 65°C

## Features

- Valve will not stick in its seat even when left unused for long periods of time
- Design allows the valve to reseat correctly after venting off the expanding fluid which prevents wastage of cryogenic gases
- Accuracy of lifting pressure is +/- 3%
- Valve is tight up until 90% of set pressure
- Valve reseats before 50% of set pressure
- Orifice diameter is 8mm

## Technical

- Designed and engineered for use with Group 1 gases.
- Designed and manufactured in accordance with ASTM B31.1, BS EN 1626 and BS ISO 21011
- Optional full material traceability backed by BS EN 10204 3.1/3.2 certification.

CE Marked according to the Pressure Equipment Directive



Pipe Away Adaptor

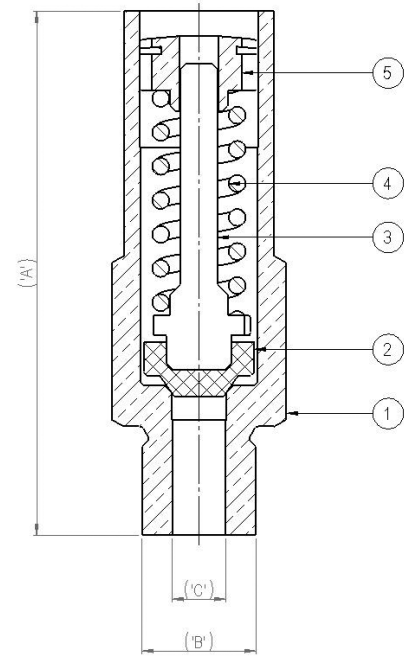


Ring Pull

## Materials

	Brass
1. Body	Naval Brass BS EN 12163 CW712R
2. Disc	Hostaflon Electro Carbon Filled
3. Stem	Stainless Steel 10088-3 1.4401
4. Spring	Stainless Steel 302
5. Adjuster	Naval Brass BS EN 12163 CW712R

\* Stainless Steel version available on request.



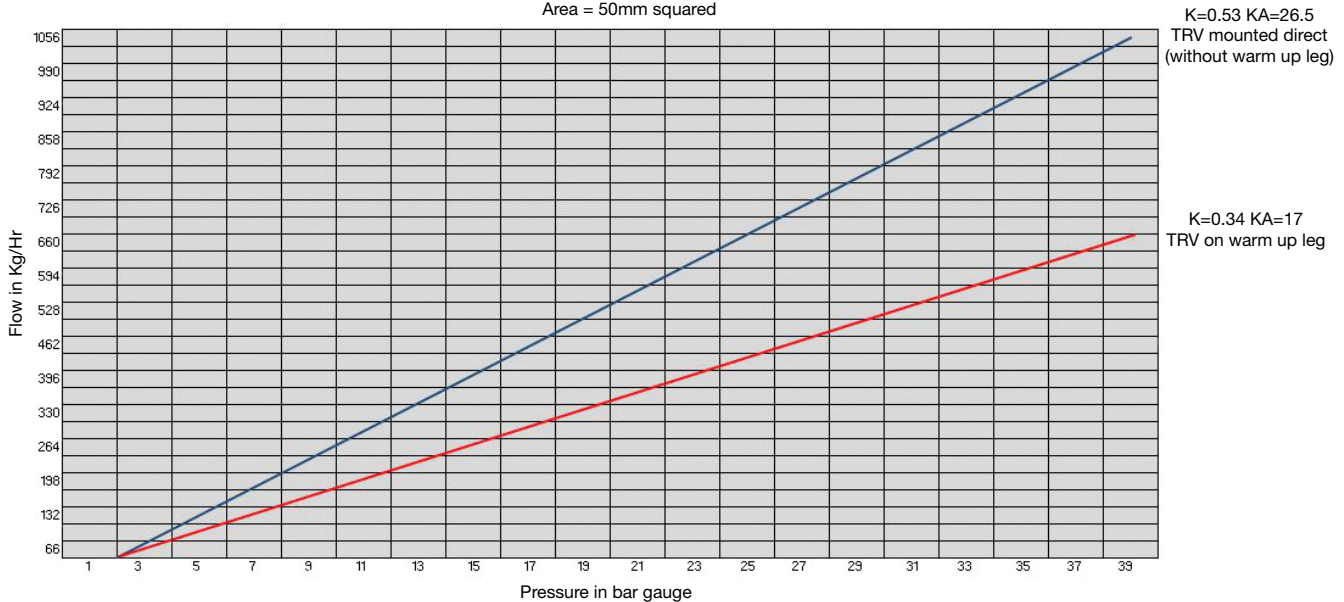
## Specifications

Pressure Ranges	
psi	bar
25 - 49	1.72 - 3.38
50 - 99	3.45 - 6.83
100 - 199	6.90 - 13.72
112 - 148	7.72 - 10.20
200 - 434	13.80 - 29.90
435 - 580	30.00 - 40.00

Outlet Type	Unit	A	C
Plain	mm	73	8
Ring Pull	mm	84	8
Male Threaded	mm	99	8
Shrouded	mm	93	8

B - Inlet Type (Male BSPT/NPT)

DN6 V2698 Thermal Relief Valve  
Flow in Kg/Hr @ 0 deg C Inlet & P+10%  
Area = 50mm squared



## How to Order

The correct part number is easily derived from the following number sequence

CVF	10	B	1	07	N00
Series	Orifice Diameter	Inlet Connection	Outlet Connection	Pressure Range	Option
CVF Cryogenic Thermal Relief Valve	10 8.00mm	<b>B</b> ¼" BSP-TR Male <b>C</b> ¼" NPT Male <b>K</b> ½" BSP-TR Male <b>L</b> ½" NPT Male	<b>1</b> Open to Atmosphere <b>3</b> Ring Pull <b>C</b> ½" BSP-TR <b>F</b> ½" NPT	<b>07</b> 25-49 psi (1.7-3.3 bar) <b>15</b> 50-99 psi (3.4-6.8 bar) <b>29</b> 100-199 psi (6.9-13.7 bar) <b>32</b> 112-148 psi (7.7-10.2 bar) <b>45</b> 200-434 psi (13.8-29.9 bar) <b>60</b> 435-580 psi (30-40 bar)	<b>N00</b> No Drain

Please contact us for other options.