

Product Warranty

To be read in conjunction with and subject to warranty conditions and exclusions found in this document. Claims that instructions were missing are not accepted as a means of avoiding this condition.

From date of purchase, Waterware Sales Ltd warrants the following to be free from manufacturing defect for 5 years on parts and labour.

Warranty conditions and exclusions;

This limited warranty is not transferable, and rests with the original householder.

If any fault arising from the manufacturing processes is found in a new product and if after consultation with Waterware, the product is returned, within the stated warranty period for that product, for inspection and or testing, Waterware will repair or exchange the product at its sole discretion.

Waterware Service Ltd shall in no way be liable for any loss, damage (direct, indirect or consequential), cost or expense suffered or incurred by the purchaser.

Any costs associated with the removal, replacement and return of any faulty product are not accepted without prior arrangement with Waterware. Under no circumstances will such costs be accepted by Waterware for products purchased and installed in remote, rural or locations greater than 50km's from the point of purchase.

Warranty does not apply where faults arise from;

- Normal wear and tear of perishable components like working seals and surface finishes.
- Normal maintenance, cleaning or tuning requirements or faults that are a result of minimum maintenance requirements not being followed.
- Foreign matter in the water supplies.
- Water supplies that do not meet normal expected municipal water quality standards.
- Installation in a manner not in accordance with the manufacturers installation instructions or relevant NZ and or Australian Standards and local plumbing codes including G12.
- Environment operating conditions that are outside the minimum and or maximum recommendations

Evidence must be produced which confirms the relevant product was purchased from a known customer of Waterware to validate any claim.

Obligations accepted by Waterware are in addition to all other rights and remedies had by the Purchaser in law in respect of the product and does not limit the right the Consumer may have under the Consumers Guarantee Act 1993.

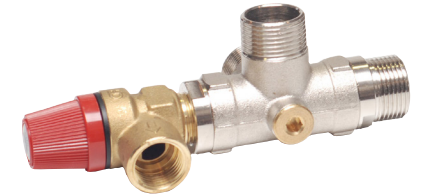
Subject to the exceptions and conditions previously listed, all expressed or implied conditions, statements warranties as to the quality of fitness on any purpose of a product or otherwise are hereby expressly excluded to the fullest extent permitted by law except under conditions and warrants which cannot be legally excluded by law and which are intended in the contract for the supply of the valve by the Trade Practises and any other Act of Law.

WATERWARE

COMBOPU20A Mains Pressure Valve Set



Adjustable Tempering Valve



Inlet Manifold



Ball Valve Male/Male



Y-STRAINER (BFY)

Pack Includes:

1 x BFY20

1 x BV20M

1 x DSV312480

1 x MA20

1 x TV5213

Y strainer female/female

Ball Valve male/male

Cold water expansion valve (8 bar relief)

Inlet manifold + male adaptor + male isolator adaptor

Adjustable Tempering Valve (30-55°C)

PH 09 273 9191 | info@waterware.co.nz

PO Box 58 776 Botany, Manukau

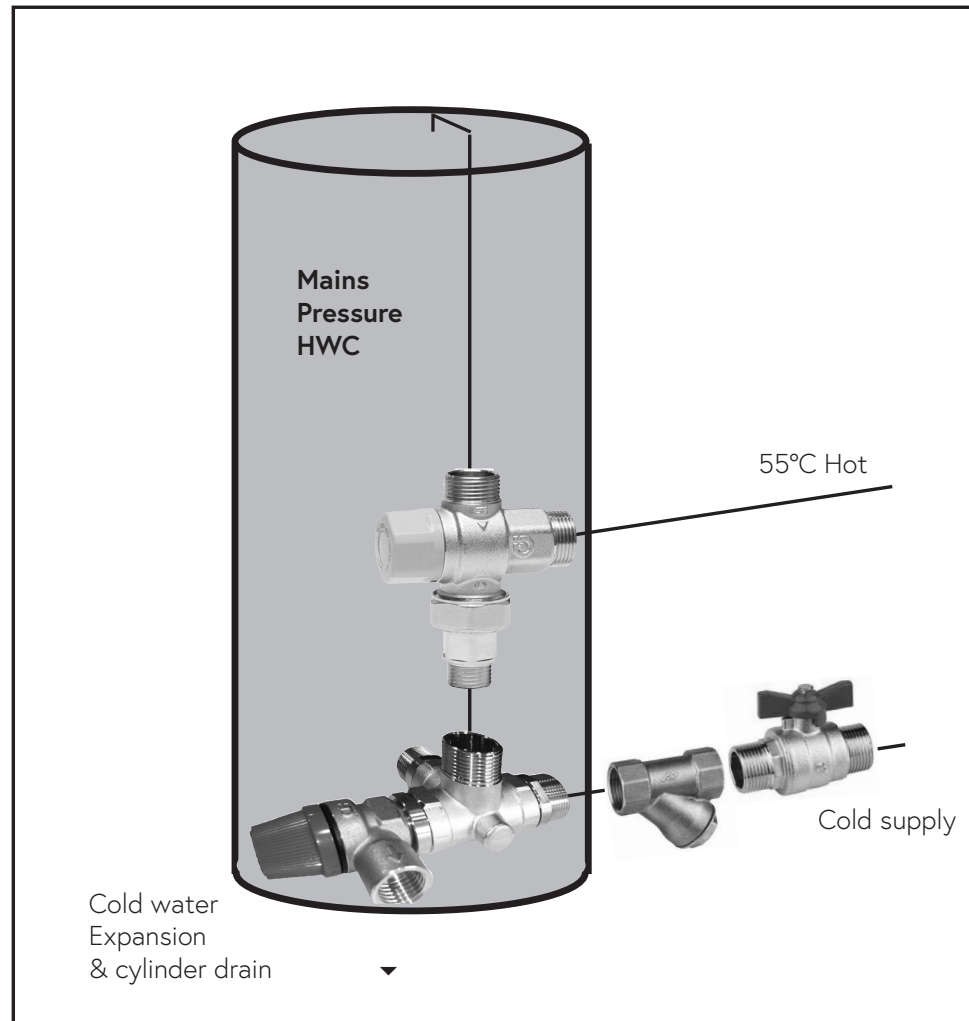
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Installation Configuration

Installations should firstly conform to any relevant local requirements, NZ and or Australian plumbing standards. The valve train connects directly to the bottom of the cylinder via the cylinder isolation valve.

Important tips;

- The manifold inlet and cold water expansion adaptors can be swapped left to right to provide either left or right hand entry to the manifold.
- The primary isolating valve provided can be located before the Y-strainer as shown for ease of maintenance.
- Use only synthetic thread seal or tape on any connections to the hot water cylinder.

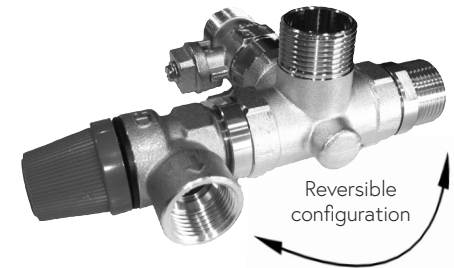


Inlet Manifold (left or right hand entry)

The Inlet Manifold provides a cold water expansion valve, a cylinder drain, a 20mm check valve non-return cold water entry, a cylinder isolator and a 20mm cold balanced tempering valve feed.

Inlet manifold features

- The manifold inlet and cold water expansion adaptors can be swapped left to right to provide either left or right hand entry to the manifold. The adaptors use o-ring seals and so do not require thread tape or similar.
- The cylinder inlet isolator also uses o-ring seals. The flow can be isolated using a spanner or similar to turn the hex shaped cap that drives the isolator spindle.



Cold water expansion valve function

The cold water expansion valve will start to vent and then discharge at a pressure greater than 8 bar inside the cylinder. As the cylinder heats and its contents expand, the volume of discharged water could reach 3% of the cylinders total capacity during the process. For example a 180 litre cylinder could vent 5.4 litres when heated from cold.

It is recommended the ideal set pressure of any pump driven supply be set to 300 kPa, a pressure suited to ceramic disk taps and mixers, limiting the occurrences of water hammer.

WARNING!!

We recommend a pressure differential of 300 kPa between the cold water expansion valve setting of 800 kPa and the setting of the system pump pressure to minimise water loss due to expansion and prevent premature seat failure. Therefore **DO NOT** do not adjust system pressure higher than 500 kPa.

NOTE: The drain connection from the cold water expansion valve should only vent to atmosphere and not to upstream pressure. No air break is required unless the drain is over 10m in length.

To drain the hot water cylinder

To drain the hot water cylinder, turn the expansion valve knob having previously closed the cold supply. Ensure a hot water tap is open to allow air into the system and prevent a vacuum being formed in the system.

Cold water expansion valve specifications

Factory set 800kPa

Stainless steel seat

Maximum opening pressure + 20%

Minimum reseating pressure -20%

Maximum Temperature 110°C

TV5213 Series Tempering Valve

The Caleffi tempering valve is adjustable from 30 - 55°C and is preset to 55°C but should be checked once the system has been commissioned.

Remove cap and adjust using a spanner as required.

- Place valve at supply source to prevent un-tempered hot water bursts from being delivered to the outlet.
- Valve can be installed in vertical or horizontal position (any orientation).
- Standard valves include a check valve in the cold union for domestic HWC installations.
- All supply lines should be protected by a y strainer or similar.
- The valve must not be subjected to extreme temperatures either during installation or in use. In particular, avoid brazing or soldering near the valve.
- Before final installation and commissioning the system must be thoroughly flushed out to ensure removal of all debris (See above on y-strainers). On older systems, it may be necessary to consider chemical cleaning (de-scaling) of the system. In known hard water areas, the use of a water softener in the system should be considered to promote ongoing trouble-free operation.



Note re:G12;

G12 requires a minimum 1m of copper pipe between the outlet of the hot water cylinder and the tempering valve. The manufacturer of the Caleffi tempering valve, series 5216, states there is no technical reason against installing this valve directly into the outlet of a domestic hot water cylinder providing all other standard installation instructions are followed.

Important Note;

- Valve is rated for continuous hot water up to a maximum of 85°C. Systems operating beyond this temperature will cause irreparable damage not covered by the conditions of warranty.
- The check valve installed on the cold water union to the TV provides a non-return check valve to prevent un-wanted re-circulation.

