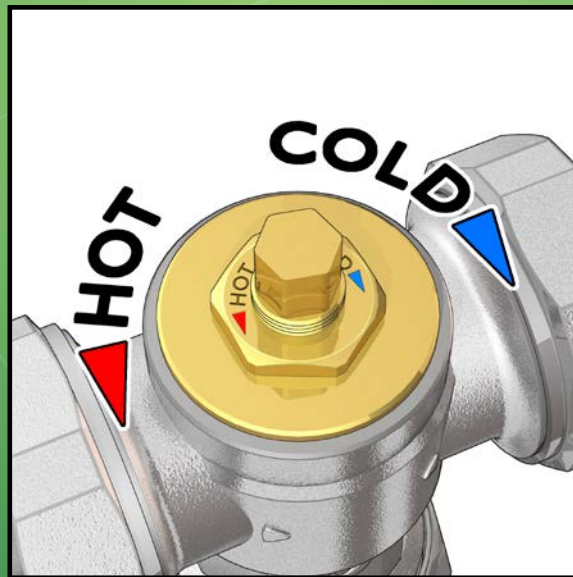


THERMOSTATIC MIXING VALVES

WITH VALVE CONTROL GROUPS IN STAINLESS STEEL ENCLOSURES

 **CALEFFI**
Hydronic Solutions



Distributed by **All Valve Industries**

Ph: +61 2 8543 9811 Fax: +61 2 8543 9822 www.allvalve.com.au

Mixing Valves. For any application.

TMV or Tempering Valves

Each Valve Control Group configuration in the stainless steel recessed box is available with either a thermostatic mixing valve or a tempering valve to make sure you get the right valve for the right application.

NSW Health Approval

All Caleffi TMVs are approved to the NSW Department of Health requirements, enabling any Caleffi TMV to be installed in Health Care applications such as hospitals or aged health care.

AS4032 Approved Valves

The thermostatic mixing valves are approved to AS4032.1 and tempering valves are approved to AS4032.2 meaning they are watermarked and approved for potable water.



CAD and Revit Drawings

TMVs and various Valve Control Group configurations are available in CAD files, as well as Revit families for your convenience.

Custom Configurations

In addition to the list of configurations listed in this brochure, All Valve Industries is able to manufacture just about any custom configuration you require. Please call one of our expert technical sales staff for further details.

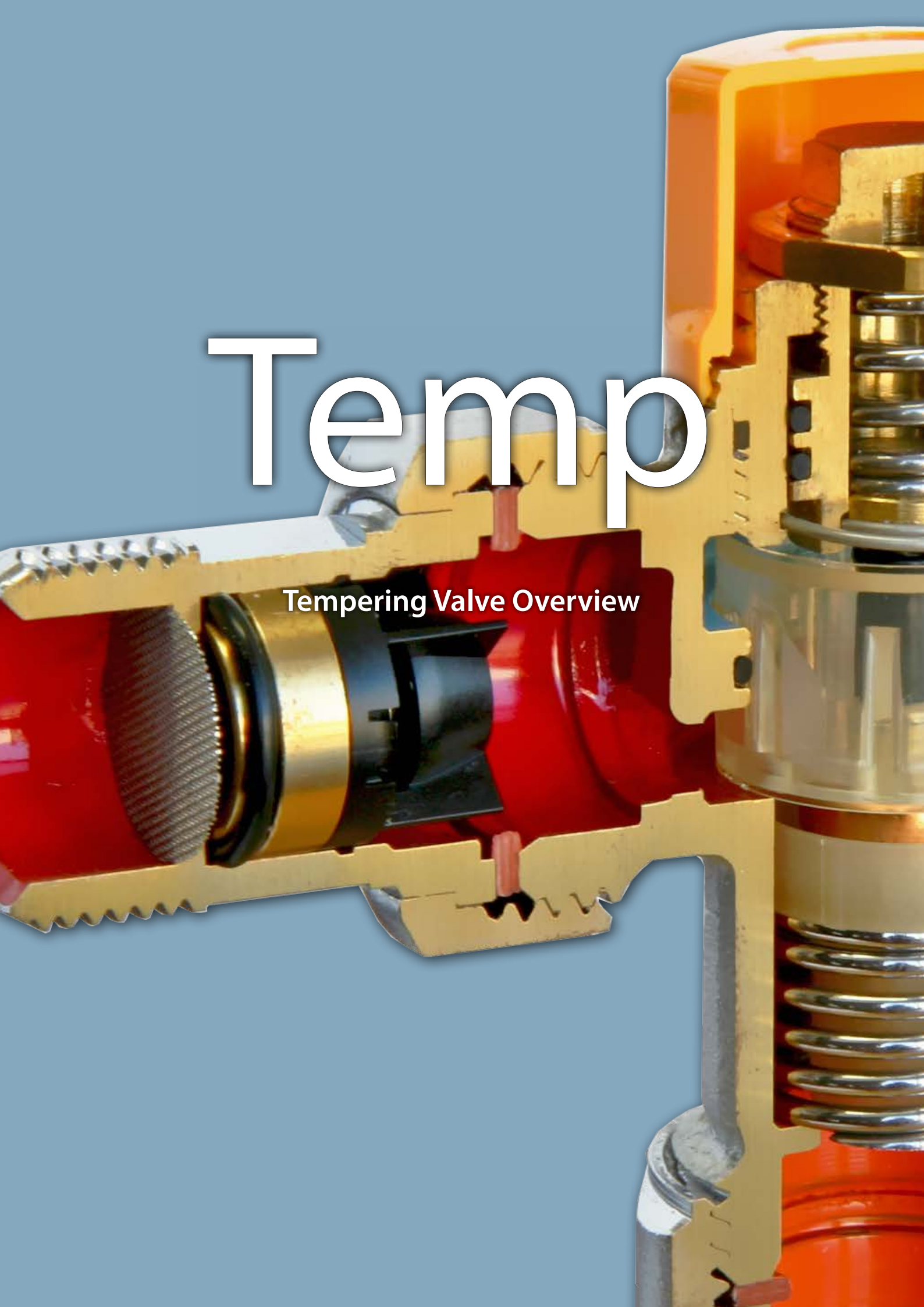
Extended Warranty

All Valve Industries now offers a two year warranty against manufacturing faults on Caleffi thermostatic mixing valves.



Temp



Tempering Valve Overview



Tempering Valves

Tempering Valves are designed to protect people from scalding by hot water in domestic situations. It is now a legal requirement in Australia that new homes have tempering valves fitted to supply water to bathrooms at a safe temperature. The valve is designed to prevent the flow of water discharging from the mixed water outlet in the event of the failure of hot or cold supply and will quickly resume flow when normal supply returns.

Standard Tempering Valve

The 5213 series tempering valves are suitable for domestic and commercial water heater systems.

Now comes with insulation

CODES:

15mm 521312
20mm 521319



TECHNICAL SPECS

Adjustable Range	30°C - 50°C
Cold Inlet Temperature:	5°C - 30°C
Hot Inlet Temperature:	55°C - 85°C
Max static pressure:	1400 kPa
Max dynamic pressure:	500 kPa
Minimum pressure:	20 kPa
Max unbalanced pressure:	6:1

Minimum temperature differential between hot water inlet and mixed water outlet to ensure thermal shutoff: 10°C

Min flow rate	4 L p/m
Max flow rate	43 L p/m (15mm) 49 L p/m (20mm)

Solar High Performance Tempering Valve

The 2522 series high performance tempering valve have been specifically designed to withstand the extreme demands of solar water installations.

Because of the high temperatures that can be associated with solar collectors, it is extremely important that the right equipment is used for safety reasons.

Now comes with insulation

CODES:

15mm 252212HP
20mm 252219HP

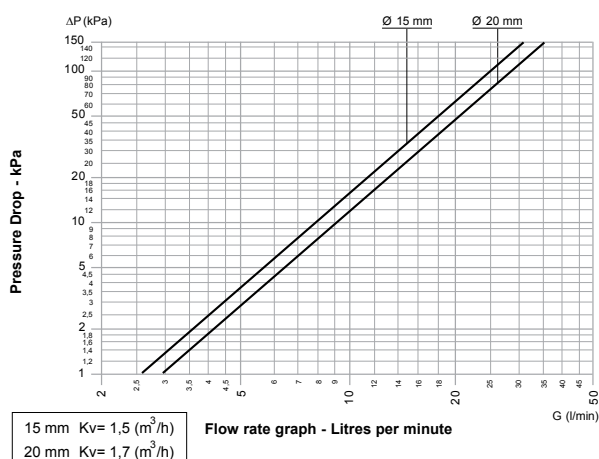
TECHNICAL SPECS

Adjustable Range	35°C - 55°C
Cold Inlet Temperature:	5°C - 30°C
Hot Inlet Temperature:	55°C - 100°C
Max static pressure:	1400 kPa
Max dynamic pressure:	500 kPa
Minimum pressure:	20 kPa
Max unbalanced pressure:	6:1

Minimum temperature differential between hot water inlet and mixed water outlet to ensure thermal shutoff: 10°C

Min flow rate	4 L p/m
Max flow rate	43 L p/m (15mm) 49 L p/m (20mm)

PRESSURE LOSS CHART

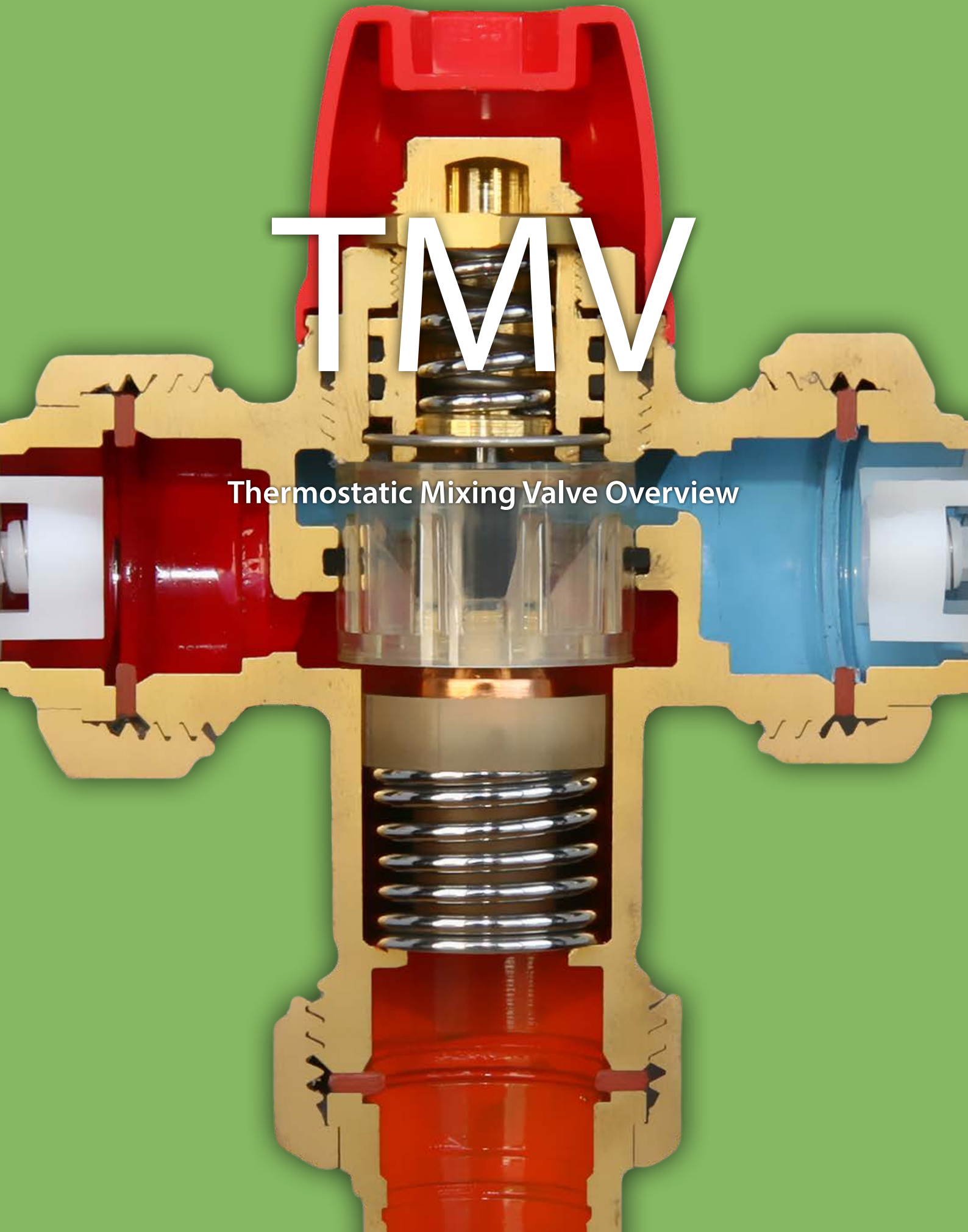


INSULATION



TMV

Thermostatic Mixing Valve Overview



Thermostatic Mixing Valves

The Caleffi 5213TM series is a high performance thermostatic mixing valve and has been specifically designed and manufactured to meet the requirements of AS 4032.1 and is suitable for use in hospitals, aged health care, child care, hotels, schools, gymnasiums and other health care related industries. The Caleffi TMVs are very easy to maintain. The compact design allows inline servicing and ensures minimum down-time. Flat faced connections allow removal of the valve without disturbing the pipework. In addition, the valve features just 2 o-rings for the rubber service kit which is quick and easy to replace. Each TMV is supplied with a detailed technical manual to facilitate installation, commissioning, maintenance and troubleshooting.

Thermostatic Mixing Valve

The Caleffi 5213TM series provides water at a safe and usable temperature in situation where the control of the temperature of the water discharging from an outlet is of the utmost importance, i.e. within hospitals, schools, nursing homes, etc.

CODES:

- 15mm IN521312
- 20mm IN521319

TECHNICAL SPECS

- Adjustable Range 30°C - 50°C
- Cold Inlet Temperature: 5°C - 30°C
- Hot Inlet Temperature: 55°C - 85°C
- Max static pressure: 1400 kPa
- Max dynamic pressure: 500 kPa
- Minimum pressure: 20 kPa
- Max unbalanced pressure: 6:1
- Min temperature differential between hot inlet and mixed outlet: 10°C
- Min flow rate 4 l/m
- Max flow rate 43 l/m (15mm)
- 49 l/m (20mm)



Solar Thermostatic Mixing Valve

The Caleffi 2522TM is able to handle up to 100°C as is often encountered in solar applications. The solar TMV range also features a large 25mm valve suitable for multiple bathrooms or outlets.

CODES:

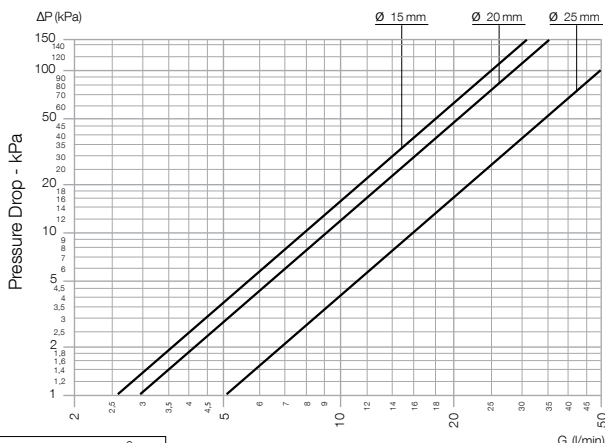
- 15mm IN252212
- 20mm IN252219
- 25mm 252225TM (no isolating valves)

TECHNICAL SPECS

- Adjustable Range 30°C - 50°C
- Cold Inlet Temperature: 5°C - 30°C
- Hot Inlet Temperature: 55°C - 100°C
- Max static pressure: 1400 kPa
- Max dynamic pressure: 500 kPa
- Minimum pressure: 20 kPa
- Max unbalanced pressure: 6:1
- Min temperature differential between hot inlet and mixed outlet: 10°C
- Min flow rate 4 l/m
- Max flow rate 43 l/m (15mm)
- 49 l/m (20mm)
- 86 l/m (25mm)



PRESSURE LOSS CHART



15mm	Kv= 1.5 (m ³ /h)
20mm	Kv= 1.7 (m ³ /h)
25mm	Kv= 3.0 (m ³ /h)

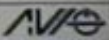
Flow rate graph - Litres per minute

VCG

Valve Control Group Overview

TMV IDENTIFICATION NUMBER

Valve Industries Pty Ltd
Melb, VIC Ph: 02 2543 5111



Stainless Steel Enclosures

The TMV and Valve Control Group is plumbed into a stainless steel enclosure. The full stainless steel box is robust and provides ample space for easy access and maintenance.

FEATURES

- Australian Made
- Available with either a TMV or with a tempering valve
- Full stainless steel box and lid
- Supplied fully plumbed and ready to be installed
- Key locked lid to prevent unauthorised access
- Recessed design with oversized fascia for flush installation
- Stainless steel bracket to support valve
- Test point standard on mixed outlet supply
- All components are Watermarked



3 Pipe Configurations

The 3 pipe configuration features a smaller enclosure and is a cost efficient option when the mixing valve needs to be isolated.

Standard Bottom Inlet Configuration

	<p>APPLICATIONS The bottom inlet configuration has all three pipes out the bottom of the enclosure which is suitable for when all pipework is run from the ground up.</p> <p>DIMENSIONS 300MM X 300MM X 70MM</p>	<p>CODES</p> <p>THERMOSTATIC MIXING VALVE 15mm SS521312B 20mm SS521319B</p> <p>TEMPERING VALVE 15mm SSTEMP521312B 20MM SSTEMP521319B</p> <p>SOLAR TEMPERING VALVE 15mm SSTEMP252212B 20MM SSTEMP252219B</p>
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Standard Top Inlet Configuration

	<p>APPLICATIONS The top inlet configuration has the inlet pipes coming in from the top of the enclosure which is suitable for when the pipework is run through the top slab.</p> <p>DIMENSIONS 300MM X 300MM X 70MM</p>	<p>CODES</p> <p>THERMOSTATIC MIXING VALVE 15mm SS521312T 20mm SS521319T</p> <p>TEMPERING VALVE 15mm SSTEMP521312T 20MM SSTEMP521319T</p> <p>SOLAR TEMPERING VALVE 15mm SSTEMP252212T 20MM SSTEMP252219T</p>
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4 Pipe Configurations - Hot or Cold Bypass

The bypass feature in a valve control group allows the cold or hot water be isolated and locked away in a convenient location should the need arise for maintenance in the bathroom or other ablutionary area.

Cold Water Bypass - Bottom Inlet Configuration

APPLICATIONS

The bottom inlet configuration is used when the water supply is from the bottom of the enclosure, or when obstacles in the wall may be hindering the use of the top inlet configuration.

DIMENSIONS

350MM X 350MM X 70MM

CODES

THERMOSTATIC MIXING VALVE

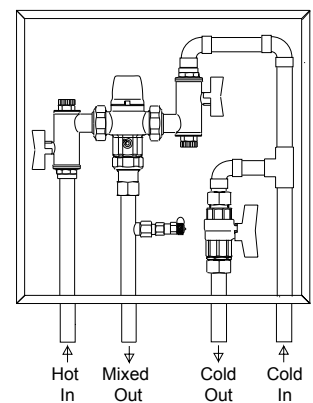
15mm SSBPC521312B
20mm SSBPC521319B

TEMPERING VALVE

15mm SSTEMPBPC521312B
20MM SSTEMPBPC521319B

SOLAR TEMPERING VALVE

15mm SSTEMPBPC252212B
20MM SSTEMPBPC252219B



Cold Water Bypass - Top Inlet Configuration

APPLICATIONS

The top inlet configuration is suitable for when the pipework is run through the top slab of the building.

This configuration also features the smaller 300mm box which may be useful when space is a concern.

DIMENSIONS

300MM X 300MM X 70MM

CODES

THERMOSTATIC MIXING VALVE

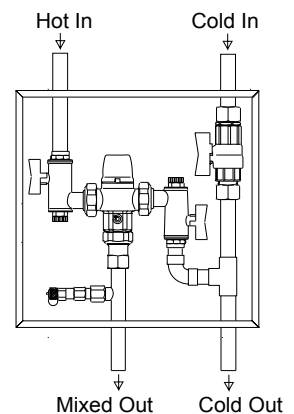
15mm SSBPC521312T
20mm SSBPC521319T

TEMPERING VALVE

15mm SSTEMPBPC521312T
20MM SSTEMPBPC521319T

SOLAR TEMPERING VALVE

15mm SSTEMPBPC252212T
20MM SSTEMPBPC252219T



Hot Water Bypass - Top Inlet Configuration

APPLICATIONS

A hot water bypass is often used in commercial or domestic applications where hot water will be supplied to a kitchen or other process and needs an isolation valve to be locked away in a convenient location.

MINIMUM QUANTITIES APPLY

DIMENSIONS

300MM X 300MM X 70MM

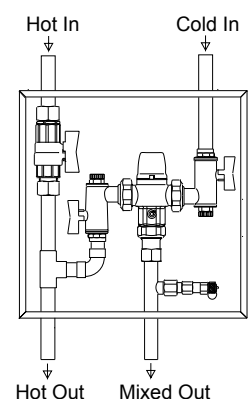
CODES

THERMOSTATIC MIXING VALVE

15mm SSBPH521312T
20mm SSBPH521319T

TEMPERING VALVE

15mm SSTEMPBPH521312T
20MM SSTEMPBPH521319T

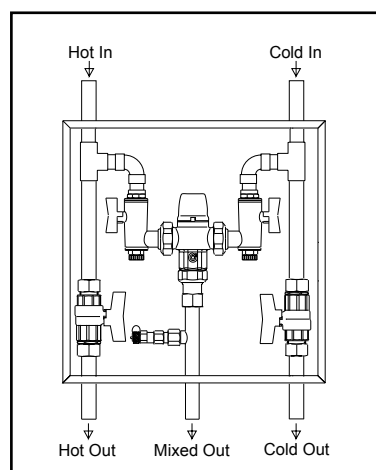


5 Pipe and Other Configurations

CONFIGURATIONS BELOW ARE MADE TO ORDER AND REQUIRE MINIMUM QUANTITIES FOR PRODUCTION

All Valve Industries is able to manufacture a range of different configurations based on the customer's requirements. Below are some of the examples of what has been produced to specifications. Please contact our expert team for further details.

Cold and Hot Water Bypass



APPLICATIONS

In certain applications, there is a need for both a hot and cold water bypass, for example, the hot water is bypassed to a kitchen or wash down area, and the cold water is bypassed to the cold taps of the shower and sink.

CODES

THERMOSTATIC MIXING VALVE

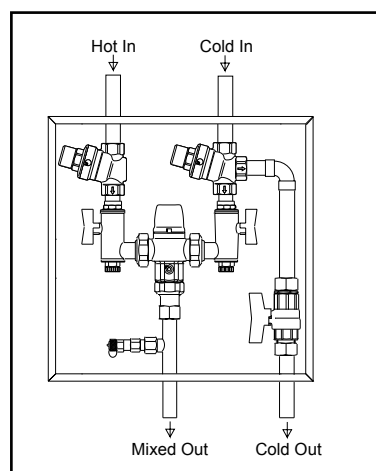
15mm SSBPCH521312T

20mm SSBPCH521319T

DIMENSIONS

350MM X 350MM X 70MM

Pressure Balanced with Cold Water Bypass



APPLICATIONS

The pressure balanced control group utilises pressure reducing valves to ensure that the TMV has the 10% differential pressure on the inlets as required by some authorities, as well as complying with the 500kPa maximum pressure regulation under AS3500.

CODES

THERMOSTATIC MIXING VALVE

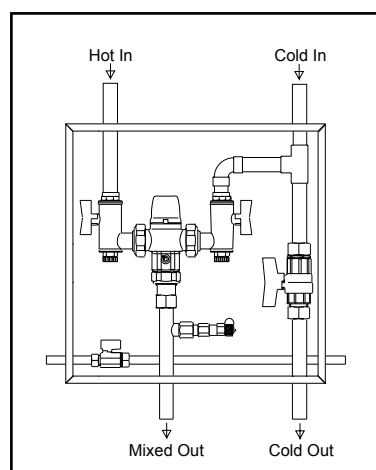
15mm SSBPC521312TPB

20mm SSBPC521319TPB

DIMENSIONS

350MM X 350MM X 70MM

Cold Water Bypass and Horizontal Control Valve



APPLICATIONS

This variation of the cold water bypass was developed with a horizontal 15mm pipe, thereby allowing water supply to be isolated in the enclosure in applications such as to a recessed cistern.

CODES

THERMOSTATIC MIXING VALVE

15mm SSBPC521312TR20

20mm SSBPC521319TR20

Available with a 15mm or 20mm horizontal or vertical bypass.

DIMENSIONS

300MM X 300MM X 70MM

A blue stainless steel enclosure door is shown partially open, revealing the internal components. The door has a silver-colored lock on the left side. The background is a solid light blue color.

Features

Stainless Steel Enclosure Options

Reversible Hinged Lid

For easier access

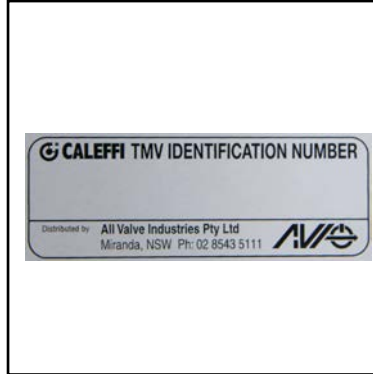


The hinged lid is an optional extra which allows for easier access during maintenance and is available on 300mm and 350mm enclosures.

The hinged lid can be installed with the hinge on the left or right hand side and can also be adjusted for depth; guaranteeing that the lid sits flush with the wall.

Valve Identification

For maintenance purposes



Maintenance records of thermostatic mixing valves must be kept by site management for every valve on the property.

These self embossing identification plates are used to record the safety checks during the monthly or yearly maintenance.

Powder Coating

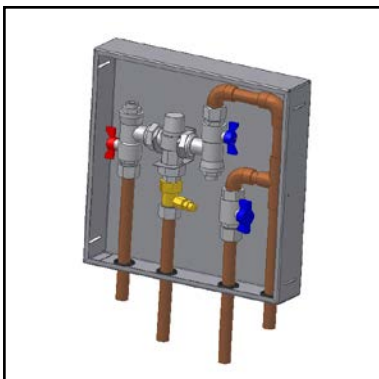
For pleasing aesthetics



Not everyone likes the industrial stainless steel look, so to help make the enclosure blend in with the rest of the building's colour scheme, it is able to be powder coated to match its surroundings. Both the flat faced and hinged lid is able to be powder coated to the standard Dulux colour range.

CAD Files

In Revit and DWG format

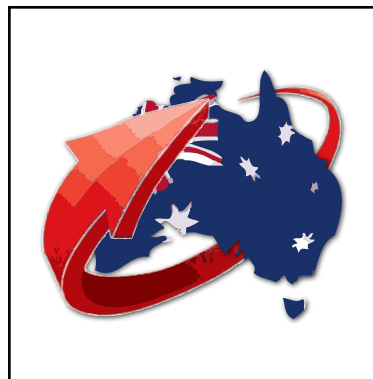


CAD files have been made of the most common configurations in both .dwg and .rfa to help accurately design and specify the Caleffi range in CAD programs.

Basic BIM information is available in the Revit families to help identify the product.

Short Lead Time

For fast delivery Australia wide



All components are kept in stock, which allows us to offer an excellent variety of options as well as produce them with a quick turn around time.

Our common configurations are kept in stock and makes it possible to deliver the boxes within a couple of days to most metro areas in Australia.

2 Year Warranty

For peace of mind



All Valve Industries now offers a two year warranty from manufacturer's defects on the Caleffi thermostatic mixing valves.

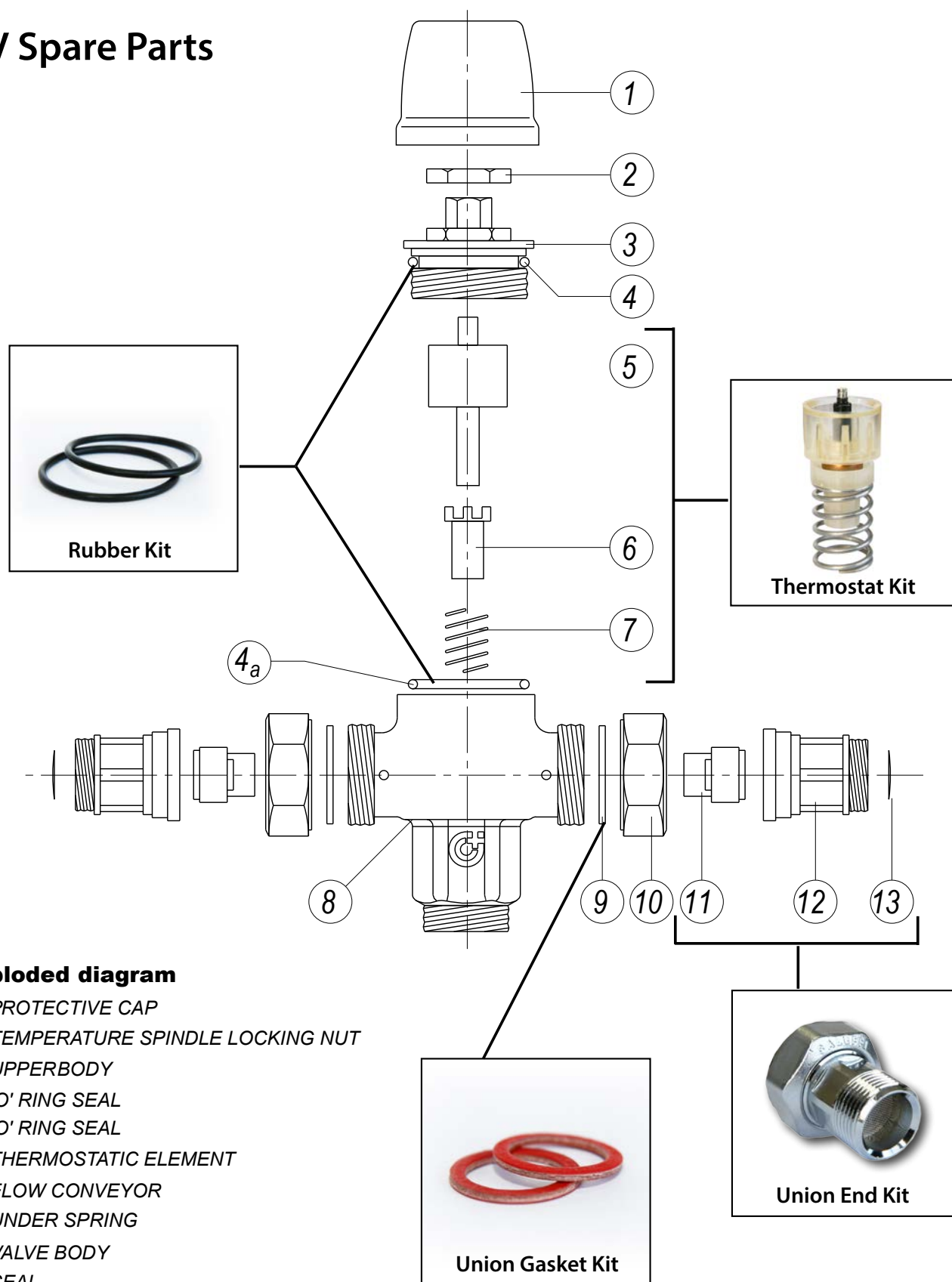
For more information or for a warranty card, please speak with one of our helpful team members.

Spare parts

Spare parts for thermostatic mixing valves



TMV Spare Parts



Exploded diagram

- 1 PROTECTIVE CAP
- 2 TEMPERATURE SPINDLE LOCKING NUT
- 3 UPPERBODY
- 4 'O' RING SEAL
- 4_a 'O' RING SEAL
- 5 THERMOSTATIC ELEMENT
- 6 FLOW CONVEYOR
- 7 UNDER SPRING
- 8 VALVE BODY
- 9 SEAL
- 10 UNION NUT
- 11 INSERT CHECK VALVE
- 12 TAIL PIECE BODY
- 13 INSERT STRAINER

Union Gasket Kit

Union End Kit

Rubber Kit

Thermostat Kit



CALEFFI ONE



CALEFFI TWO



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