



# THERMOSTATIC MIXING AND TEMPERING VALVES

WITH VALVE  
CONTROL GROUPS  
IN LOCKABLE  
STAINLESS STEEL  
ENCLOSURES



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## 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.



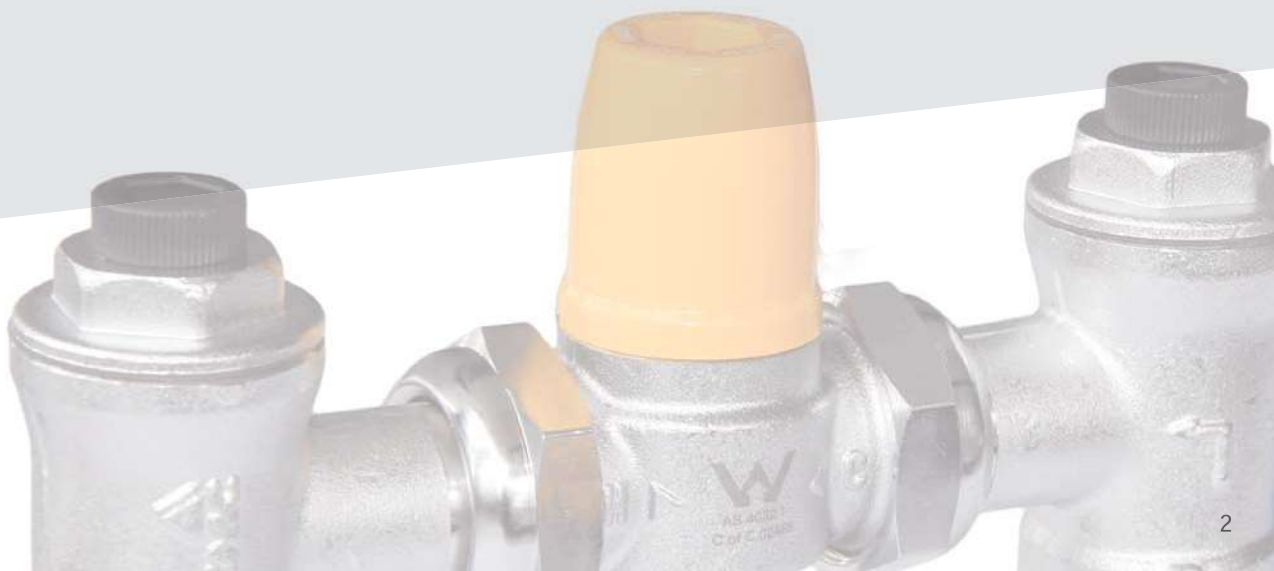
### AS4032 APPROVED VALVES

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.



### EXTENDED WARRANTY

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





## 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

CODES 15mm - 521312 20mm - 521319



The 5213 series tempering valves are suitable for domestic and commercial water heater systems. Now comes with insulation.

#### TECHNICAL SPECS

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

### SOLAR HIGH PERFORMANCE TEMPERING VALVE

CODES 15mm - 252212HP 20mm - 252219HP

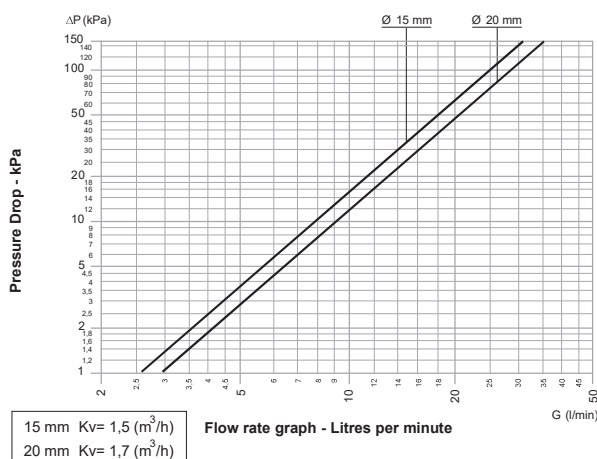


The 2522 series high performance tempering valve have been specifically designed to withstand the demands of solar hot water and instantaneous heater installations. Because of the high temperatures that can be associated with solar collectors, it is extremely important that the right equipment is used for safety reasons. Now comes with insulation.

#### TECHNICAL SPECS

Adjustable Range	35°C - 55°C	Min flow rate	4 L p/m
Cold Inlet Temperature	5°C - 30°C	Max flow rate	43 L p/m (15mm)
Hot Inlet Temperature	55°C - 100°C		49 L p/m (20mm)
Max static pressure	1400 kPa	Minimum temperature	
Max dynamic pressure	500 kPa	differential between hot water	
Minimum pressure	20 kPa	inlet and mixed water outlet to	
Max unbalanced pressure	6:1	ensure thermal shutoff is 10°C	

### PRESSURE LOSS CHART



### INSULATION



# THERMOSTATIC MIXING VALVES

The Caleffi 2522TM 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

CODES 15mm - 252212TMF 20mm - 252219TMF



The 2522TMF series has superseded the previous TMV models and is now our standard offer. Caleffi continues to provide industry leading technology and plumbing solutions, with the new valve featuring solar rated internals, excellent flow rates, and an override function for thermal disinfection against Legionella.

### TECHNICAL SPECS

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

## SOLAR THERMOSTATIC MIXING VALVE

CODE 25mm - 252225TM



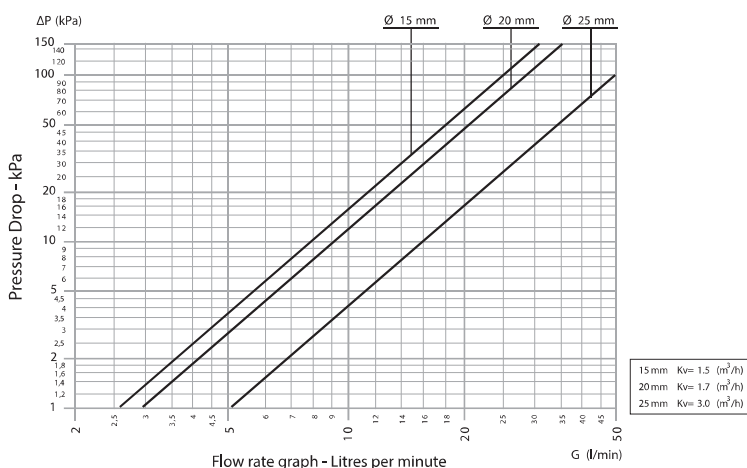
The Caleffi 252225TM mixing valve is solar rated and features superior flow rates, suitable for multiple bathrooms or outlets.

Note: the 25mm does not include a thermal override function or integrated isolation valves.

### TECHNICAL SPECS

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

## PRESSURE LOSS CHART

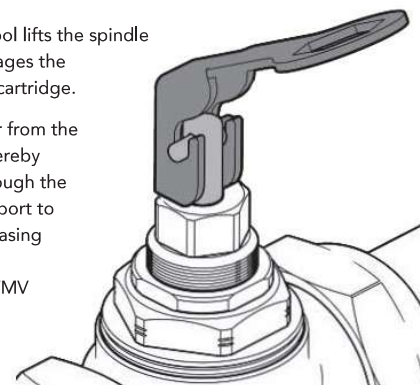


## THERMAL DISINFECTION

The OVERRIDE function (15mm & 20mm only) allows the user to perform thermal disinfection against Legionella using a special tool.

The special tool lifts the spindle which disengages the thermostatic cartridge.

The hot water from the network is thereby delivered through the mixed outlet port to the user. Releasing the spindle restores the TMV to its preset temperature.



# 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.

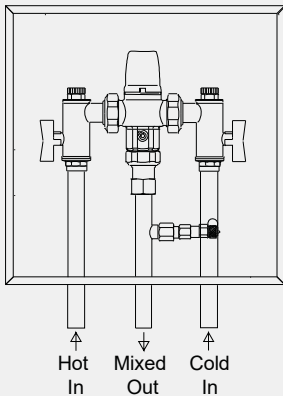
## FEATURES

- ⦿ 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



#### 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.

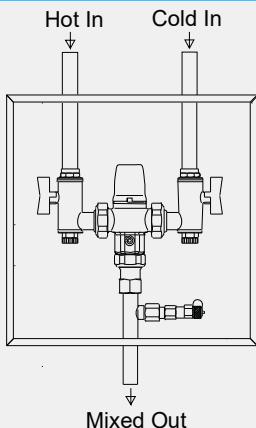
#### DIMENSIONS

15/20mm Valve  
300mm x 300mm x 70mm  
25mm Valve  
400mm x 350mm x 70mm

#### CODES

SOLAR TMV	TEMPERING VALVE	SOLAR TEMPERING VALVE
15mm SSTMF-15B	15mm SSTEMP-521312B	15mm SSTEMP-252212B
20mm SSTMF-20B	20mm SSTEMP-521319B	20mm SSTEMP-252219B
25mm SSTMF-25B		

### STANDARD TOP INLET CONFIGURATION



#### 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.

#### DIMENSIONS

15/20mm Valve  
300mm x 300mm x 70mm  
25mm Valve  
400mm x 350mm x 70mm

#### CODES

SOLAR TMV	TEMPERING VALVE	SOLAR TEMPERING VALVE
15mm SSTMF-15T	15mm SSTEMP-521312T	15mm SSTEMP-252212T
20mm SSTMF-20T	20mm SSTEMP-521319T	20mm SSTEMP-252219T
25mm SSTMF-25T		



## 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

15/20mm Valve  
350mm x 350mm x 70mm

25mm Valve  
400mm x 350mm x 70mm

#### CODES

##### SOLAR TMV

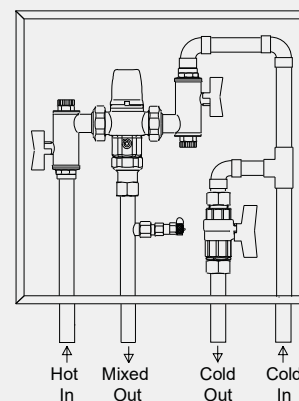
15mm SSTMF-BPC-15B  
20mm SSTMF-BPC-20B  
25mm SSTMF-BPC-25B

##### TEMPERING VALVE

15mm SSTEMP-BPC-521312B  
20mm SSTEMP-BPC-521319B

##### SOLAR TEMPERING VALVE

15mm SSTEMP-BPC-252212B  
20mm SSTEMP-BPC-252219B



### 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

15/20mm Valve  
350mm x 350mm x 70mm

25mm Valve  
400mm x 350mm x 70mm

#### CODES

##### SOLAR TMV

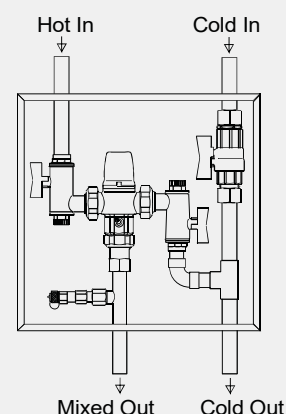
15mm SSTMF-BPC-15T  
20mm SSTMF-BPC-20T  
25mm SSTMF-BPC-25T

##### TEMPERING VALVE

15mm SSTEMP-BPC-521312T  
20mm SSTEMP-BPC-521319T

##### SOLAR TEMPERING VALVE

15mm SSTEMP-BPC-252212T  
20mm SSTEMP-BPC-252219T

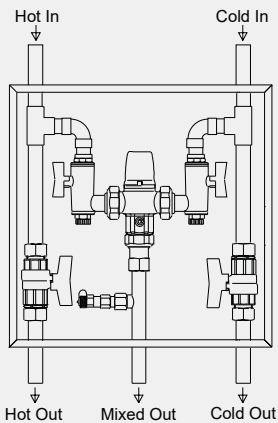


## 5 PIPE AND CUSTOM CONFIGURATION

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

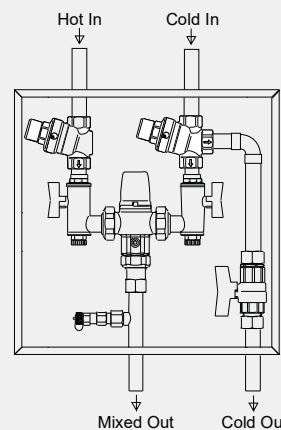


**DIMENSIONS**  
400x350x70mm

#### 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.

### PRESSURE BALANCED WITH COLD WATER BYPASS

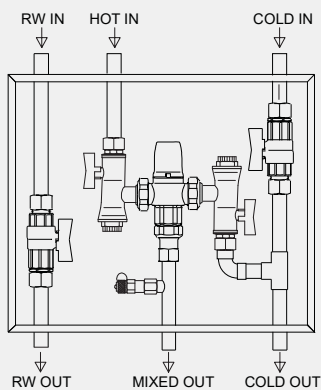


**DIMENSIONS**  
400x350x70mm

#### 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.

### COLD WATER BYPASS AND RAIN WATER BYPASS

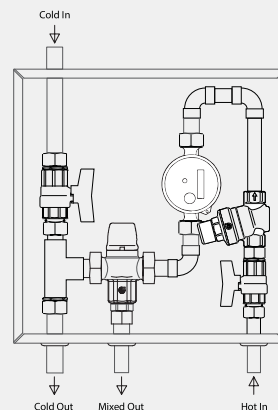


**DIMENSIONS**  
400x350x70mm

#### APPLICATIONS

A separate isolating valve can be plumbed into the enclosure enabling convenient access and control of recycled or rain water supply to recessed cisterns and other fixtures.

### PRESSURE CONTROL AND HOT WATER METER



**DIMENSIONS**  
350x350x80mm

#### APPLICATIONS

Custom apartment sets include a tempering valve, hot water meter and hot water pressure control valve for a neat and quick installation of critical valves for residential applications.



## OPTIONS



### ANTI VANDAL LIDS

For safety

The vandal and tamper resistant lid option utilises anti-vandal hex screws and has been designed specifically for applications such as correctional facilities and mental health services. In addition, the lid has a smooth bevelled edge giving it a tight, flush finish against the wall, thereby removing any ligature points.



### 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.



### 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.

## FEATURES



### 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.

### 5 YEAR WARRANTY

For peace of mind

All Valve Industries now offers a five 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.

### VALVE IDENTIFICATION

For maintenance purposes

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

Self embossing foil tags are supplied in each enclosure in order to label each valve for easy maintenance and record keeping purposes.



### THERMAL DISINFECTION

For safety

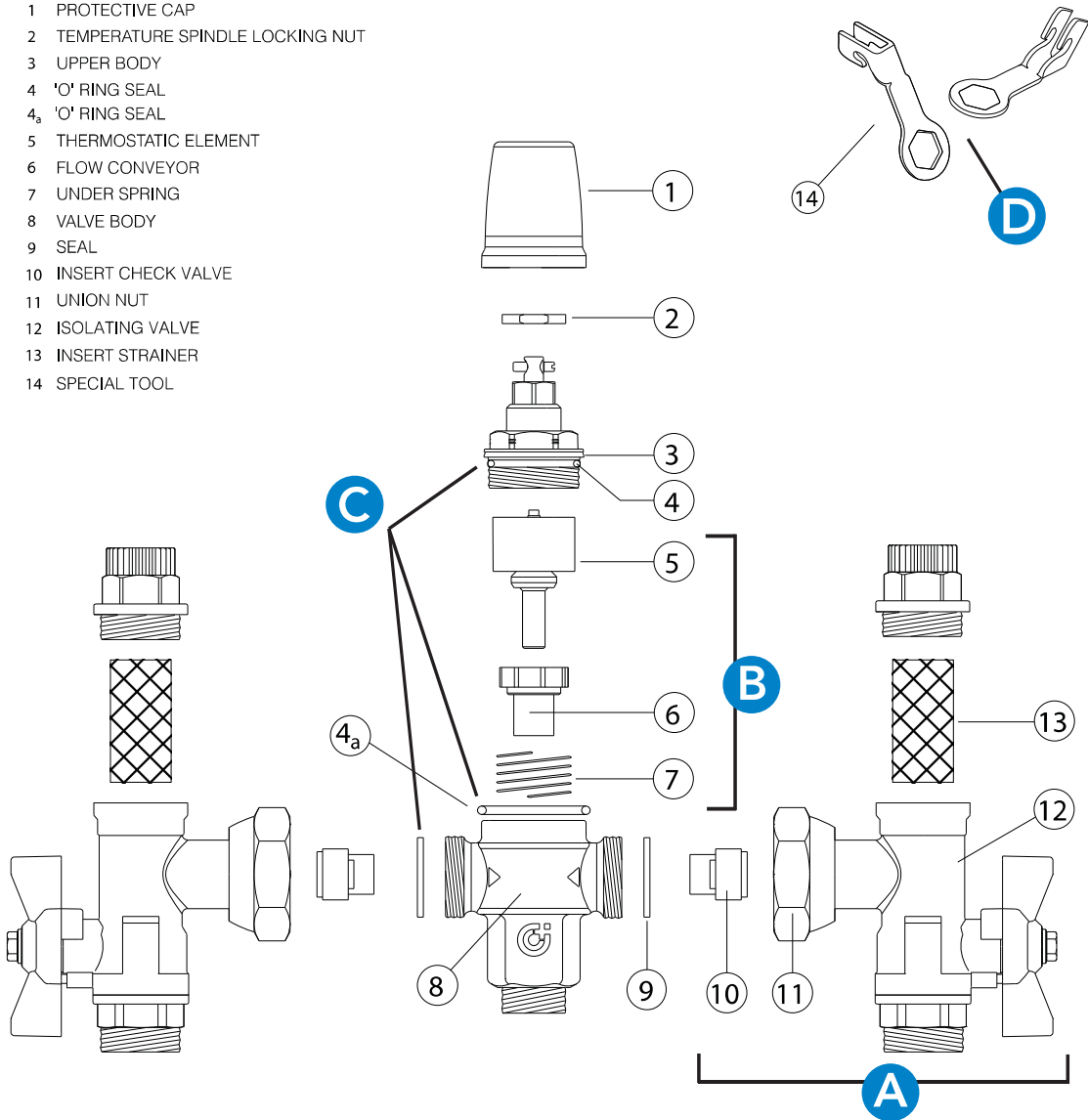
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# TMV SPARE PARTS

- 1 PROTECTIVE CAP
- 2 TEMPERATURE SPINDLE LOCKING NUT
- 3 UPPER BODY
- 4 'O' RING SEAL
- 4<sub>a</sub> 'O' RING SEAL
- 5 THERMOSTATIC ELEMENT
- 6 FLOW CONVEYOR
- 7 UNDER SPRING
- 8 VALVE BODY
- 9 SEAL
- 10 INSERT CHECK VALVE
- 11 UNION NUT
- 12 ISOLATING VALVE
- 13 INSERT STRAINER
- 14 SPECIAL TOOL



PART#	STANDARD 15/20mm	SOLAR 15/20mm	SOLAR 25mm	DESCRIPTION
KIT A	TMINTABALL015 (15mm) TMINTABALL020 (20mm)	TMINTABALL015 (15mm) TMINTABALL020 (20mm)	CAL 252225TM UNION	INTEGRATED END KIT (EACH)
				PARTS (9, 10, 11, 12, 13)
KIT B	CAL 2522TM MSK	CAL 2522TM MSK	CAL 252225TM MSK	MAJOR SERVICE KIT
				PARTS (5, 6, 7, 4, 4 <sub>a</sub> , 9)
KIT C	CAL 2522TM RSK		CAL 252225TM RSK	RUBBER SERVICE KIT
				PARTS (4, 4 <sub>a</sub> , 9)
KIT D		SPECIAL TOOL	SPECIAL TOOL	

\* No isolating valve supplied for 25mm integrated kit. New 2522TMF model uses the same parts as the previous solar 2522TM model

<p><b>A</b> Integrated End Kit</p>  <p>15/20mm</p>  <p>25mm</p>	<p><b>B</b> Major Service Kit</p> 	<p><b>C</b> Rubber Service Kit</p>  <p>Rubber Kit</p>
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