

# Pressure Balancing Thermostatic Mixing Valves

### UNDERSTANDING THE UNIQUE BENEFITS OF FM MATTSSON VALVES

### **Generic - Thermostatic Mixing Valves**

Generic TMVs rely only on the thermostat element to control the mixed hot and cold water. These can be adjusted to a selected temperature and are suitable for direct contact with skin. Because generic TMVs use only a wax element, they can be slow at reacting to pressure changes or natural fluctuations in the water supply, so the mixed water temperature may spike and cause discomfort to end users.

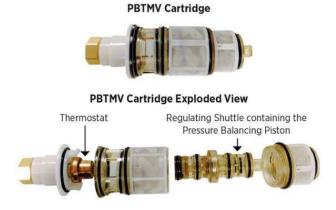
In the event of a cold water failure, the warm water of a generic TMV may spike to dangerous temperatures before the wax element has time to activate and cut off the hot water supply. This can be fatal for frail/elderly people and babies.

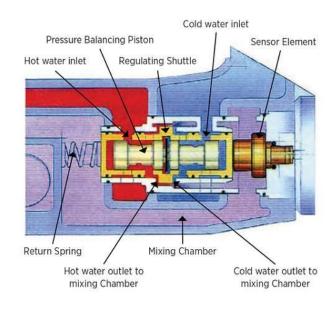
### The Best - Thermostatic Mixing Valves

FM Mattsson TMVs rely on **both** a wax thermostatic element and a 'built in' pressure balancing piston to ensure a safe and constant mixed warm water temperature. The 'built in' pressure balancing system ensures that the warm water stays within +/- 1°C of set temperature. Where water supply pressures are unequal (13:1 ratio) or there is natural fluctuations in the piping system, the 'built in' pressure balancing system will balance the incoming pressures and control the temperature at a safe and stable level.

In the event of a cold water failure, the 'built in' balancing system combined with the thermostatic element, cuts off the hot water supply safely and quickly - within a second. The 'built in' balancing system function provides additional safety against scalding.

### THE BEST - THERMOSTATIC MIXING VALVES







The internal pressure balancing piston balances, at the respective inlets and outlets of the regulating shuttle, the amount of incoming hot and cold water that is able to enter the mixing chamber. Simultaneously the thermostatic sensor element both monitors and adjusts the regulating shuttle's position to cover the hot water outlet to the mixing chamber, preventing scalding.



# **FM Mattsson**

Different on the inside

# Pressure Balancing Thermostatic Mixing Valves









### **BENEFITS**

- Thermal Flush for legionella control simply remove the Red Lockshield cap, wind out the valve completely to flush through the desired / maximum degree of hot water.
- Only valve on the market that can cope with sudden pressure peaks and fluctuating temperatures.
- · Minimum flow rate as low as 1L per minute.
- Safe temperature, safe touch and comfortable showers
  no temperature spikes.
- Accurate, constant water temperature and pressure within +/- 1°C no matter what happens in the pipework - thanks to the unique Pressure Balancing Piston.
- "Built-in" Pressure Balancing Piston function also provides additional safety against scalding.
- Simple cartridge design easy to maintain, reduced maintenance costs over the lifetime of the installation.
- Widest range of PBTMV solutions for all commercial, domestic, multi and single outlet applications.
- Exceptional safety, performance and superior quality to all other brands.
- · Multi and single outlet installations.
- Complete with built-in line strainers/non return valves on both hot and cold inlets.
- · No pressure limiting valves required.
- FM Mattsson Valves will changeover from older brands (Grohe, Hansa, Rada, Aquablend, Horne).

















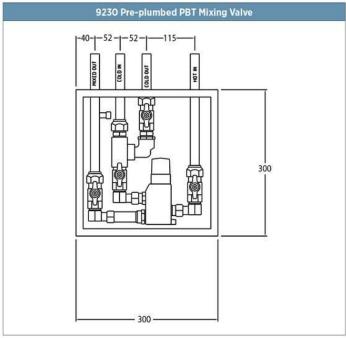


# 9230 Pre-plumbed Pressure Balanced Thermostatic Mixing Valve#



(300 x 300 x 75mm Stainless Steel Box)





Flow Table		
Pressure (kPa)	Flow (I/min)	
100	15.5	
200	22.5	
300	28	
400	32.5	
500	36.5	
600	40.3	



### **APPLICATION**

Suitable for hospitals, nursing homes, child care centres and public areas.

Designed to deliver tempered water to single or multi-point installations without the risk of unauthorised persons altering preset temperature.

### INSTALLATION

9230 valve pre-plumbed with 20mm isolating ball valves and pipework and supplied in high quality stainless steel box (300 x 300 x 75mm) for concealed (recessed) and exposed (wall mounted) installation.

### BENEFITS

- Uses 9230 PB Thermostatic Mixer (with fixed temperature knob).
- The box has been purposely designed with pilot holes for easy fixing to stud work and 150mm extended pipes for joining to existing pipework.
- Branch in cold water inlet pipe with 20mm ball valve for continuous supply of cold water whilst mixer is being serviced.
- · Lockable lid is keyed alike.
- Operates from Min 50kPa to Max 1000kPa.
- Recommended working pressure 100kPa to 500kPa.
- · Valves made in Sweden.
- Pre-plumbed stainless steel boxes for concealed or exposed installation are Australian made.

### COLOURS

Box - Stainless steel Valve - Raw brass Temperature knob - Red

See Next Pages for plumbing configurations and Product Codes in our stainless steel boxes.

# Bath/Shower/Basin/Multi-Point Application



## MAG Pre-Plumbed Standard Box, Stainless Steel With Flat Panel Door

Stainless Steel Box Size: 300mm X 300mm X 75mm Panel Door on Recessed Box: 330mm X 330mm X 1.5mm 4 pipes has **Cold Water Bypass** 



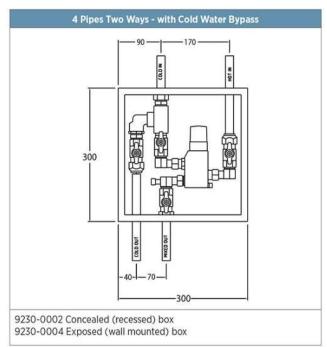


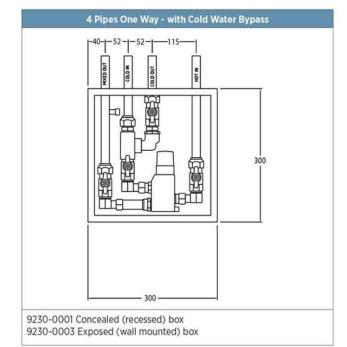


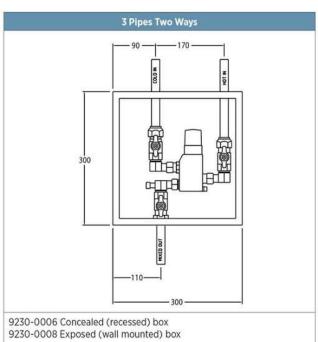


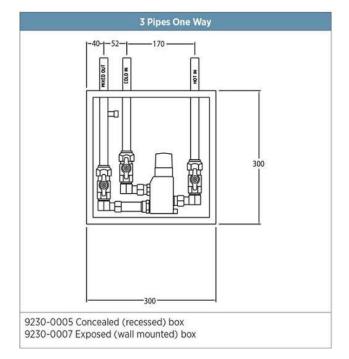
Front Panel

Back Panel







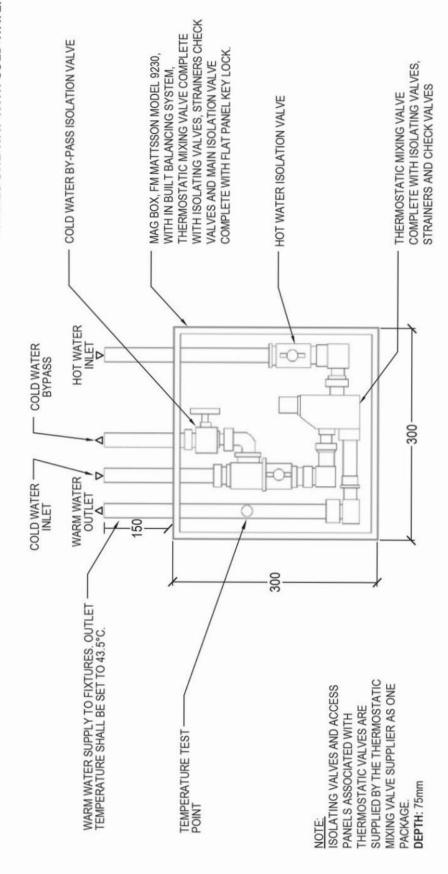




# **MAG MATTSSON**

# Pressure Balanced Thermostatic Mixing Valve

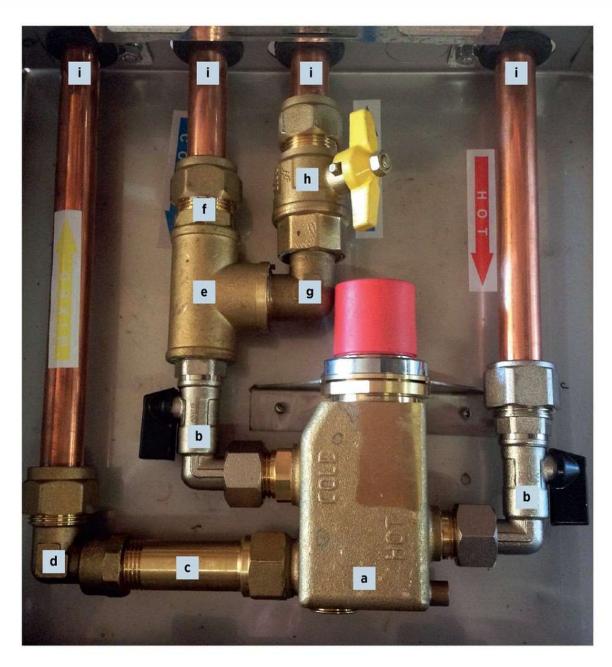
# 4 PIPES ONE WAY WITH COLD WATER BYPASS





# 9230 Thermostatic Mixing Valve Assembly Breakdown 4 Pipes One Way





### COMPONENT

### WATERMARK LICENCE NO.

a	TMV x 1	Lic 1186
b	Chrome Ball Valve x 2	Lic 02072
c	M/F Brass Extension x 1	Lic 2387
d	Elbow x 1	Lic 2387
е	Tee Piece x 1	Lic 2387
f	Male Union x 1	Lic 2387
g	M/M Elbow x 1	Lic 2387
h	Ball Valve x 1	Lic 21813
i	Copper Pipe x 4	Lic 25726



