ART 5214

adjustable thermostatic mixing valve

SD 009 07-05-2020

Application

Thermostatic mixing valves are used to maintain the domestic hot water supplied to the user at a constant and safe temperature, when variations in the hot and cold water supply conditions and draw off flow rates occur.

The valves are also equipped with an anti-scald safety function which immediately shuts off the flow of hot water in the event of a failure in the cold water supply.

The failsafe design also shuts off the mixed water flow automatically in the event of disruption in the hot water supply to the valve.

Art 5214 mixing valves also offer an override function which makes it possible, during the disinfection process, to supply users with water at the same temperature of the hot water inlet.

TMV2

The Art 5214 valves meet the requirements of BS EN 1111: 2017 and BS EN 1287: 2017 and the TMV2 Type Scheme. The valves have been independently tested and approved as a type 2 valve under the TMV2 scheme by the WRc - NSF.

Art 5214 TMV2 thermostatic mixing valves are suitable for use in domestic housing and commercial building for single user outlets including wash basins, showers, baths and bidets but are also suitable for multiple outlet use.

Temperature Adjustment and Overide Function

The required temperature is selected using the control knob in conjuction with the setting/temperature scale.

The overide function is used during the disinfection process by turning the control knob passed the MAX setting until the stop is encountered.

When the knob is set to the override function, water is supplied to users at the same temperature as the water at the hot inlet.

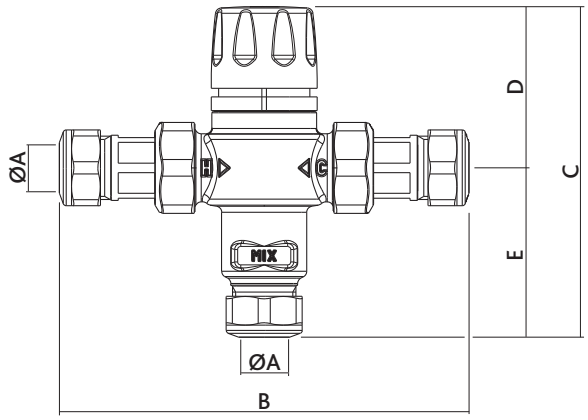
Special care must therefore be taken in order to prevent serious scalding.

HOT ▼ OVERRIDE	MAX	5	4	3	2	1	MIN
T_{MIX}	>54°C	53°C	51°C	49°C	45°C	40°C	<30°C

with: T_{HOT} = 70˚C • T_{COLD} = 15˚C • P_{HOT} = 3 bar • P_{COLD} = 3 bar

Ref No	Size	Connection	Type
521411	15 mm	compression	Cu x Cu x Cu
521412	22 mm	compression	Cu x Cu x Cu

Dimensions



Ref No	ØA	B	C	D	E	kg
521411	15	135	109	53	56	1.1
521412	22	150	110	53	57	1.1

Construction Details

Component	Material	Grade
Body	DZR - chrome plated	BS EN 12165 CW602N
Shutter	PSU	
Springs	Stainless steel	
Seals	EPDM	
Knob	Poymer	ABS

Technical Data

Max. working pressure:		10 bar - Static
Max. working pressure:		5 bar - Dnamic
Max. inlet temperature:		90˚C
Temperature Setting Range:		30 to 50˚C + T_D
Override function:		$T_D = T_{HOT}$
Inlet temperature recommended for optimum performance:		≤65°C
Max. inlet pressure ratio (H/C or C/H):		4:1
Accuracy:		±2˚C
Min. temperature difference between inlet hot water and outlet mixed water:		15˚C
Min. flow for stable operation		4 l/m
Kv value	15mm	1.5 m^3/hr
	22mm	1.7 m^3/hr

T_D = disinfection temperature
T_{HOT} = hot water inlet temperature

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