



altecnic



### 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 5231 range has been designed especially for centralised systems which demand high flow rates, for example with multiple outlets such as shower and wash basins.

## Operating Principle

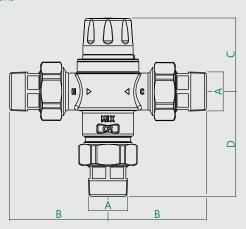
The controlling element of the mixing valve is a temperature sensor fully immersed in the mixed water outlet port, which expands or contracts, continuely maintaining the correct proportion of hot and cold water entering the valve.

Even when the supply pressures drop, due to draw off of hot and cold water by other users on the same system, or variations in the incoming water temperatures, the mixing valve automatically responds and maintains the mixed outlet water at the required temperature.

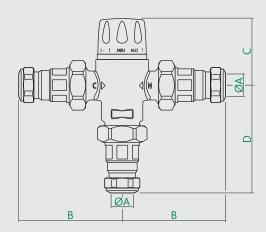
#### **Construction Details**

Component		Material		Grade
Body		DZR	¾" size	BS EN 12165 CW724R
				BS EN 1982 CB752S
Shutter		Polymer		PPS G40
Springs		Stainless stee	l	AISI 302
Seals		EPDM		
Сар		Polymer		ABS
Product	Size	Connection		Туре
Code				
523150	3/4"	screwed iron	$M \times M \times$	M without check valve
523160	1"	screwed iron	$M \times M \times$	M without check valve
523170	1¼"	screwed iron	$M \times M \times$	M without check valve
523180	11/2"	screwed iron	$M \times M \times$	M without check valve
523190	2"	screwed iron	$M \times M \times$	M without check valve
523162	28	Compression	Cu x Cu	x Cu with check valve

#### **Dimensions**



Prod Code	A	В	С	D	kg
523150	R3/4	78.5	73.5	95.5	1.35
523160	R1	104.5	109	86.5	2.50
523170	R11⁄4	104.5	109	86.5	3.38
523180	R11/2	121	129	90.5	3.81
523190	R2	131	139	95.5	5.58

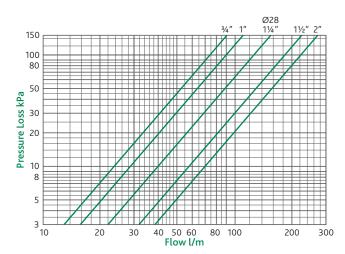


Prod Code	А	В	С	D	kg
523162	28	121	86.5	125.5	2.70

#### Technical Data

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Max. working pressure:	14 bar - Static
	5 bar - Dynamic
Min. working pressure:	0.2 bar - Dynamic
Max. hot inlet temperature:	90°C
Min. hot inlet temperature:	50°C
Max. cold inlet temperature:	25°C
Min. cold inlet temperature	5°C
Max. inlet pressure ratio (H/C or C/H):	2:1
Accuracy:	±2°C
Setting range:	35 to 65°C
Male threads:	BS EN 10226
Compression ends:	BS EN 1254-2
WRAS approved product	

#### Flow Chart and Kv Values

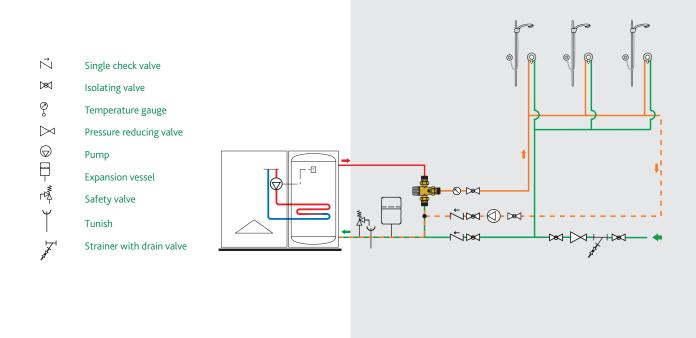


Flow rates recommended to ensure stable operation and accuracy of ±2°C (balanced pressure Hot/Cold)

Size	Kv - m³/h	
3/4"	4.5	
1"	5.5	
Ø28 &1¼"	7.6	
11/2"	11.0	
2"	13.3	

*∆P = 1.5 bar	Min m³/h	Max.* - m³/h	
3/4"	0.6	5.5	
1′	0.8	6.7	
Ø28 & 1¼"	1.0	9.3	
11/2"	1.5	13.5	
2"	2.0	16.3	

# Typical Application



E & O.E

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