

520 adjustable

thermostatic mixing valve



altecnic
CALEFFI group

520 adjustable thermostatic mixing valve



Application

The 520 adjustable thermostatic mixing valve is designed to maintain the preset temperature of the mixed water delivered to the user despite variations in the temperature of the water contained in the system.

The 520 is ideally suitable for use on underfloor heating to maintain the circulating water through the underfloor coil at the preset temperature, by mixing hot water from the boiler with the return water from the coil.

Design

Supplied with parallel threaded ends complying with BS EN ISO 228-1

Construction Details

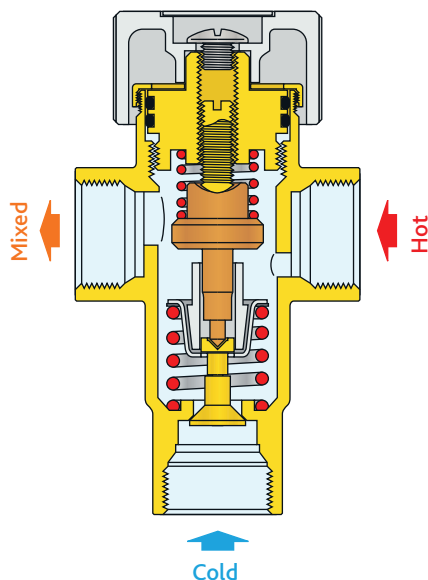
Component	Material	Grade
Body	Brass - chrome plated	BS EN 12165 CW17N
Obturator	Brass	BS EN 2164 CW614N
Spring	Stainless steel	AISI 302
Sealing element	EPDM	

Product Code	Temperature Range	Product Code	Temperature Range	Size
520430	30 to 48°C	520440	40 to 60°C	½"
520530	30 to 48°C	520540	40 to 60°C	¾"
520630	30 to 48°C	520640	40 to 60°C	1"

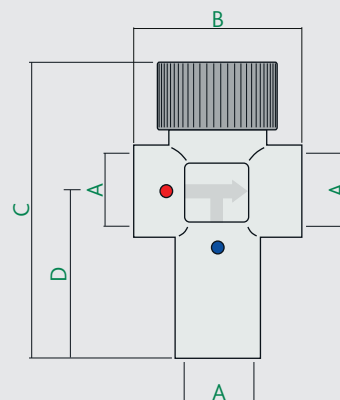
Operating Principle

The regulating element within the thermostatic mixing valve consists of a temperature sensor in contact with the mixed water outlet.

By expanding and contracting the sensor continuously ensures correct proportioning of the incoming hot and cold water by modulating with the obturator on the incoming cold water.



Dimensions



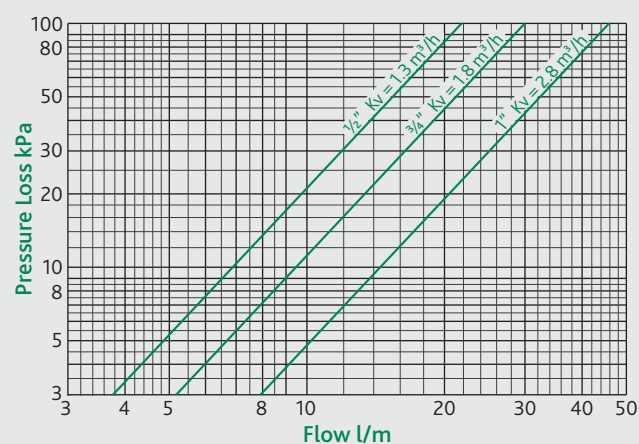
Size	A	B	C	D	kg
½"	G½	56	96	54	0.38
¾"	G¾	61	103	60	0.47
1"	G1	64	103	55	0.59

Technical Data

Max. working pressure:	10 bar (static)
Max. working pressure:	5 bar (dynamic)
Min. inlet pressure ratio (H-C or C-H):	1:1:1
Max. water temperature:	90°C
Setting range:	30 to 48°C 40 to 60°C

Min. flow rate to ensure optimum performance:	5 l/m
End Connections - female:	BS EN ISO 228

Kv Value and Flowrate



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Check Valves

Check valves should be installed in systems with thermostatic mixing valves to prevent undesired backflows.

Commissioning

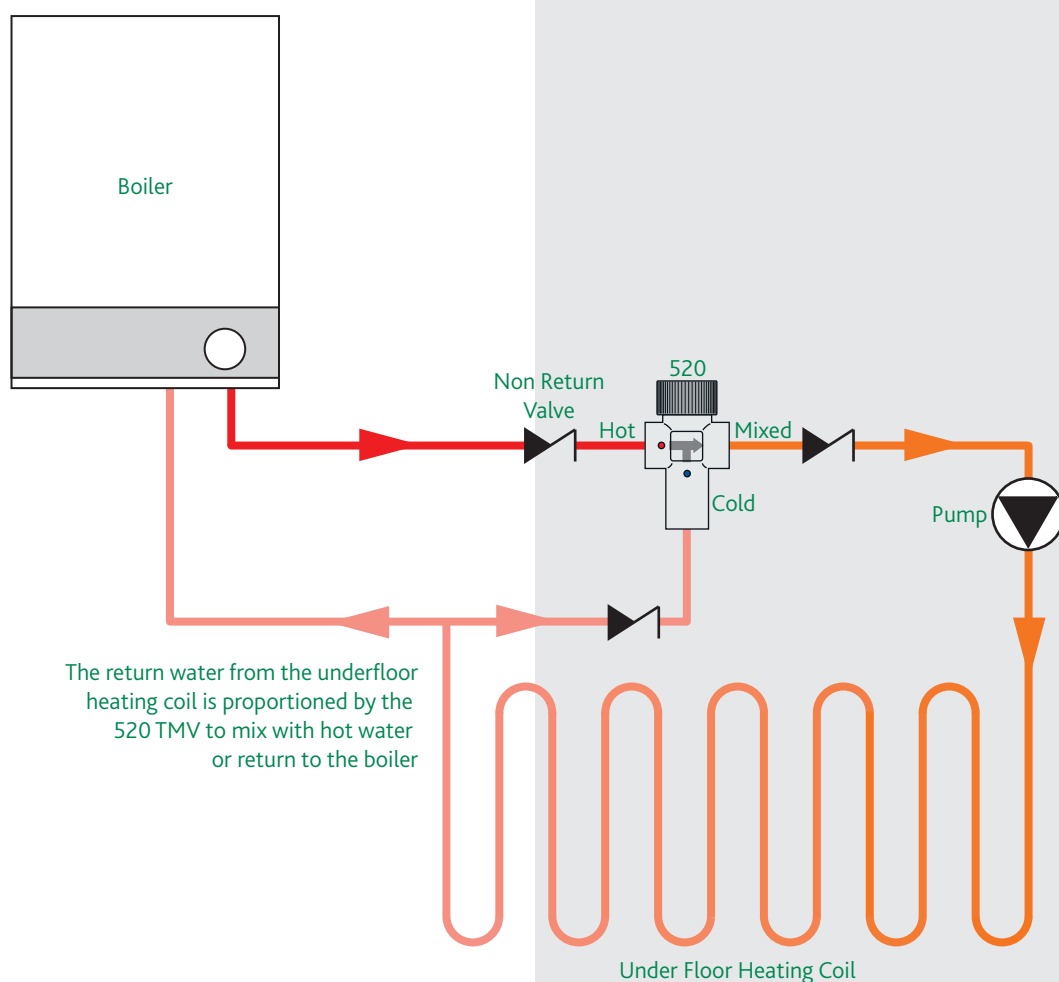
The 520 thermostatic mixing valve must be commissioned in accordance with current regulations and by a qualified engineer using suitable temperature measuring equipment.

We recommend the use of a digital thermometer for measuring the temperature of the mixed water.

Temperature Setting

The control knob is used to adjust the temperature between 30°C to 48°C or from 40°C to 60°C depending upon the model.

Application Diagram



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