THERMOSTATIC MIXING VALVES

THERMOSTATIC MIXING VALVE UNIT SERIES UPTT520

The ESBE thermostatic mixing valves series UPTT520 offer high flow capacity and good functionality for domestic hot water systems with higher flow such as apartment buildings, bath and shower facilities, schools, industries, and commercial buildings etc.

UPTT522
External thread

OPERATION

Series UPTT520 are the number one choice for larger domestic hot water systems requiring an in-line scald safe* function and where further temperature control devices have been installed at the water taps. These series of valves are also suitable for domestic hot water installations equipped with HWC (hot water circulation).

By combining two Thermostatic Mixing Valves Series VTA520 in a parallell coupling, you receive a higher flow rate capacity without comprimising with the valves quick and exact regulation at both high and low flow.

The valve unit is non-electrical, meaning only thermostatic components are used.

FUNCTION

The high sensitivity of the thermostat, and a short stroke, ensures the quick and exact regulation of mixing cold and hot water to a set temperature. Desired mixing temperature is easily set by lifting of the top covers.

Asymmetrical (L-shaped) flow pattern, meaning that the hot water inlet and the mixed water outlet are on the same axis. Scald safe*.

VERSIONS

The Thermostatic Mixing Valve unit can be supplied in two different temperature ranges.

MEDIA

These valves can handle the following types of media:
- Fresh water / Potable water
- Closed systems (VDI2035)
- Water with antifreeze additive (glycol ≤ 50% mixture)

SERVICE AND MAINTENANCE

Under normal conditions maintenance will not be required. If, however, it should prove necessary, the gasket (O-rings), the sensing element and the valve plug are easily replaced.

**) Scald safe means that in the case of a cold water failure, the hot water supply shuts off automatically.*

VALVES ARE DESIGNED FOR

Series	Temperature range 20 – 43°C	45 – 65°C	50 – 75°C	Application
UPTT520	●	●	●	Potable water, in line
				Potable water, point of use
				Solar heating
				Cooling
	○			Floor heating
		○	○	Radiator heating

● recommended ○ secondary alternative

TECHNICAL DATA

Pressure class: PN 10
Working pressure: 1,0 MPa (10 bar)
Differential pressure: Mixing, max. 0,3 MPa (3 bar)
Media temperature: max. 95°C
temporarily max. 100°C
Temperature stability: ±4°C*
Connection: External thread (G), ISO 228/1

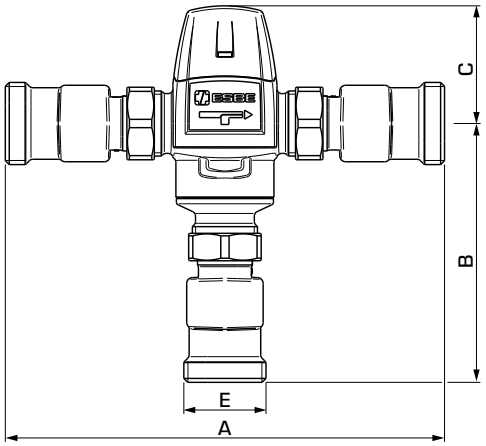
* Valid at unchanged hot/cold water pressure, minimum flow rate 18 l/min. Minimum temperature difference between hot water inlet and mixed water outlet 10°C.

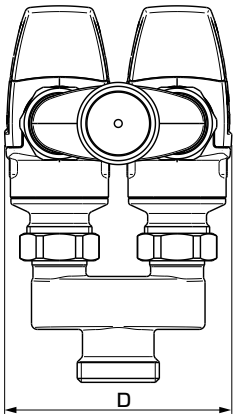
Material
Valve housing and other metal parts with fluid contact:
Dezincification resistant brass, DZR

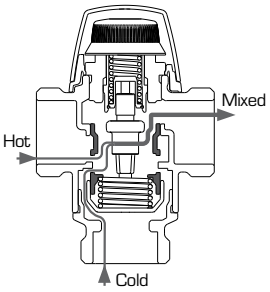
PED 2014/68/EU, article 4.3

Pressure Equipment in conformity with PED 2014/68/EU, article 4.3 (sound engineering practice). According to the directive the equipment shall not carry any CE mark.

THERMOSTATIC MIXING VALVE UNIT
SERIES UPTT520







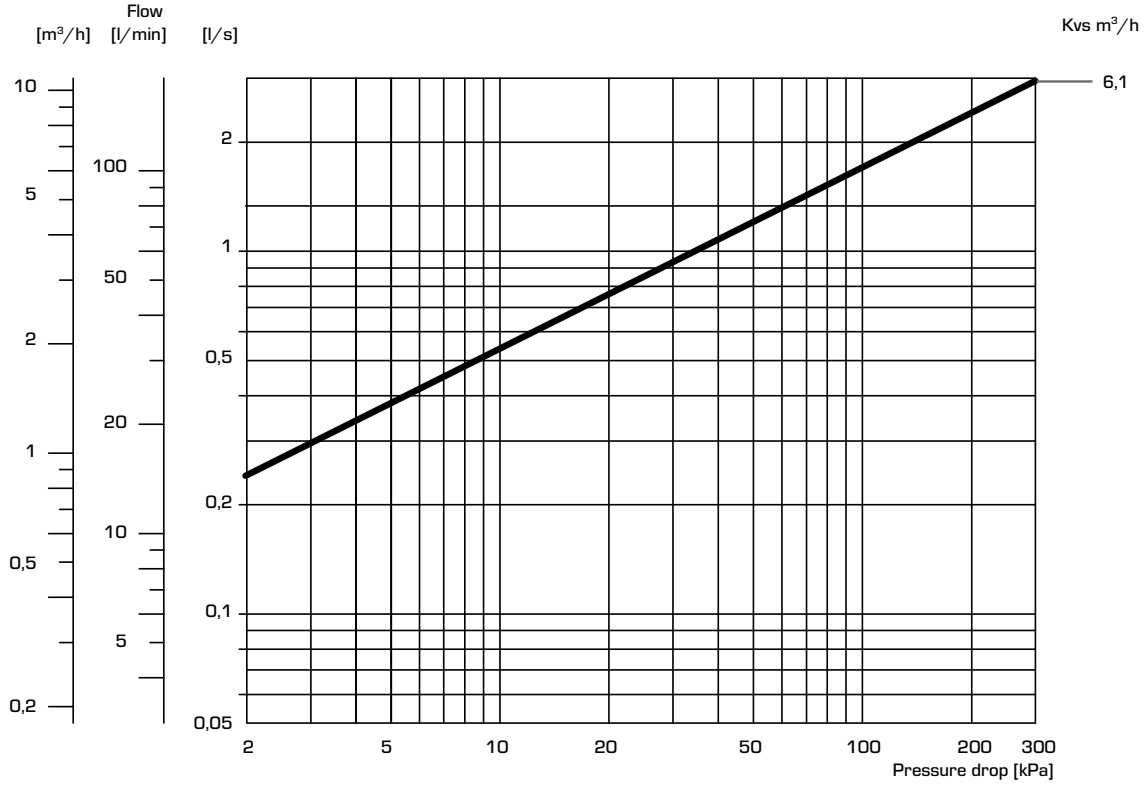
VTA520

SERIES UPTT522, EXTERNAL THREAD

Art. No.	Reference	Temp. range	Kvs*	Connection E	Dimension A	B	C	D	Note	Weight [kg]
31420100	UPTT522	20 – 43°C	6,1	G 1¼"	224	132	60	116		2,8
31420200		45 – 65°C								2,8
31420300		50 – 75°C								2,8

* Kvs-value in m^3/h at a pressure drop of 1 bar.

CAPACITY DIAGRAM



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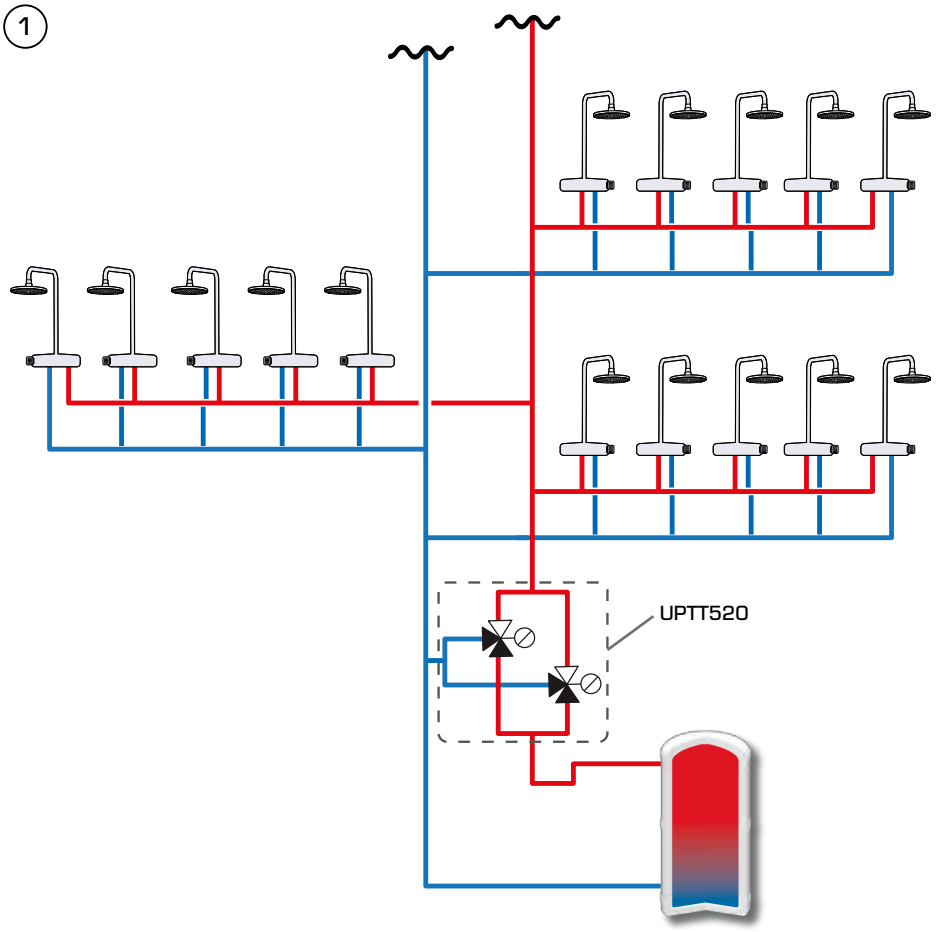
INSTALLATION EXAMPLES⇦

1



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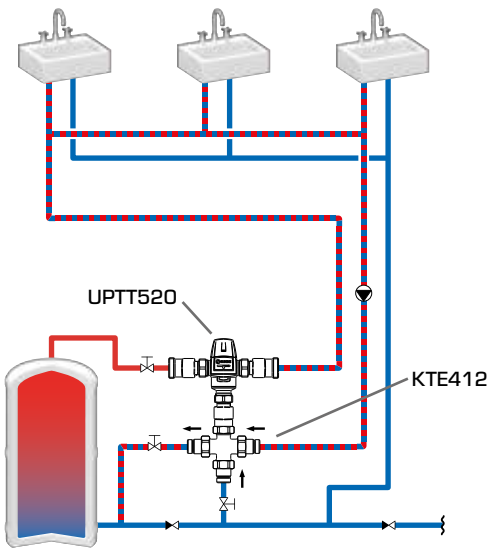

The shown applications are only examples of product use!
Before using the product in any application, the regional and national regulations need to be checked.