

# THERMOSTATIC MIXING VALVE

## PREMIUM SERIES VTA360, VTA560

The ESBE thermostatic mixing valves series VTA360 and VTA560 are designed to satisfy the highest possible market requirements when it comes to accuracy of regulation, quick reaction and safe function with high flow capacity, regardless of varying pressure conditions.

### OPERATION

Series VTA360 is primarily designed to provide a highly accurate temperature regulation in point-of-use positions for domestic hot water, at taps or showers where no further temperature-control fittings have been installed.

Series VTA560 is primarily designed to provide an accurate in-line temperature regulation of the domestic hot water in high flow applications, according to standards EN15092 or EN1111/NF079, where further temperature-control fittings have been installed at taps or showers.

### FUNCTION

The quick reaction thermostat and the pressure balanced control valve regulator allow the VTA530/VTA560 to provide minimal changes of temperature regardless of varying pressure conditions. Symmetrical flow pattern. Scald safe\*.

### VERSIONS

The product range includes a wide choice of valves delivered with adapter fitting kits, each including three adapter fittings and two check valves, which facilitate easy installation and maintenance.

Supplied with a top cover, unless otherwise stated.

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

### MEDIA

These valves can handle the following types of media:

- Fresh water / Potable water
- Closed systems
- Water with antifreeze additive (glycol ≤ 50% mixture)



VTA360  
External thread



Compression fitting



VTA560  
External thread



With adapters,  
external thread



With adapters,  
compression fitting

### VALVES ARE DESIGNED FOR

Series	Temperature range				Application
	32 - 49°C	35 - 50°C	35 - 60°C	45 - 65°C	
VTA360	○		●		Potable water, in line
VTA560		●		●	
VTA360	●		○		Potable water, point of use
VTA560					
VTA360					Solar heating
VTA560		○		○	
VTA360					Cooling
VTA560					
VTA360	○		○		Floor heating
VTA560		○		○	

● 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)  
 Pressure drop diagram: \_\_\_\_\_ see catalogue  
 Media temperature: VTA360, VTA560 \_\_\_\_\_ max. 95°C  
 VTA560 \_\_\_\_\_ temporarily max. 100°C  
 Temperature stability: VTA360 \_\_\_\_\_ ±1°C\*  
 VTA560 \_\_\_\_\_ ±2°C\*\*  
 Connection: \_\_\_\_\_ External thread (G), ISO 228/1  
 \_\_\_\_\_ External thread (R), EN 10226-1  
 \_\_\_\_\_ Compression fitting (CPF), EN 1254-2

\* Valid at unchanged hot/cold water pressure, minimum flow rate 4 l/min. Minimum temperature difference between hot water inlet and mixed water outlet 10°C.

\*\* Valid at unchanged hot/cold water pressure, minimum flow rate 9 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

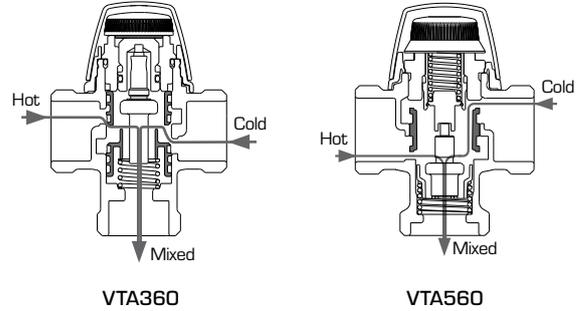
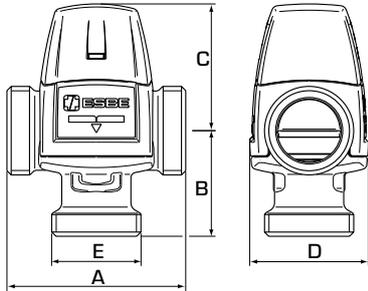
Surface treatment: \_\_\_\_\_ Nickel-plated

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.

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## PREMIUM SERIES VTA360, VTA560



### SERIES VTA362/VTA562, EXTERNAL THREAD

Art. No.	Reference	Temp. range	Kvs *	Connection E	Dimension				Note	Weight [kg]
					A	B	C	D		
31151400	VTA362	32-49°C	1.2	G ¾"	70	42	52	46		0.45
31681000	VTA562	35 - 50°C	2.3	G 1"	84	50	60	56	2)	0.78
31681100			2.5	G 1¼"						0.87
31151100	VTA362	35-60°C	1.2	G ¾"	70	42	52	46		0.45
31151200			1.3	G 1"						0.48
31680100	VTA562	45 - 65°C	2.3	G 1"	84	50	60	56	1)	0.78
31680200			2.5	G 1¼"						0.87

### SERIES VTA363, COMPRESSION FITTING

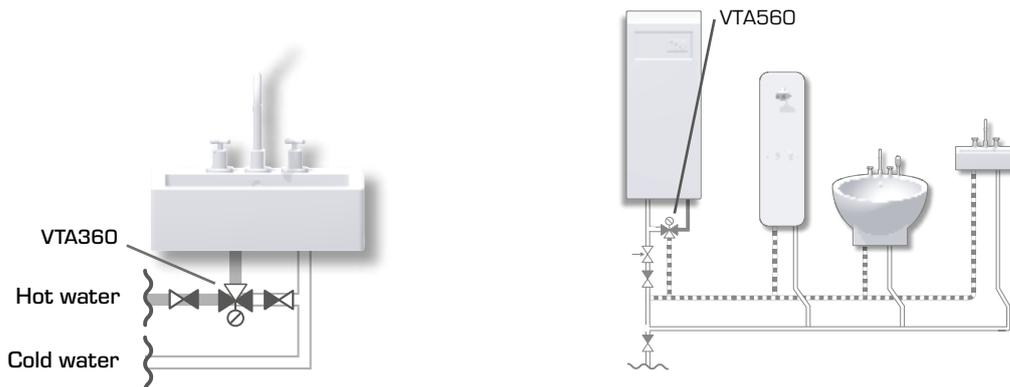
Art. No.	Reference	Temp. range	Kvs *	Connection E	Dimension				Note	Weight [kg]
					A	B	C	D		
31151000	VTA363	35-60°C	1.2	CPF 22 mm	86	50	52	46	3)	0.57

\* Kvs-value in m³/h at a pressure drop of 1 bar. CPF = compression fitting

Note 1) According to standard EN 15092, 2) According to standard EN 1111 + NF079 (France), 3) A non-return valve for the cold water is included.

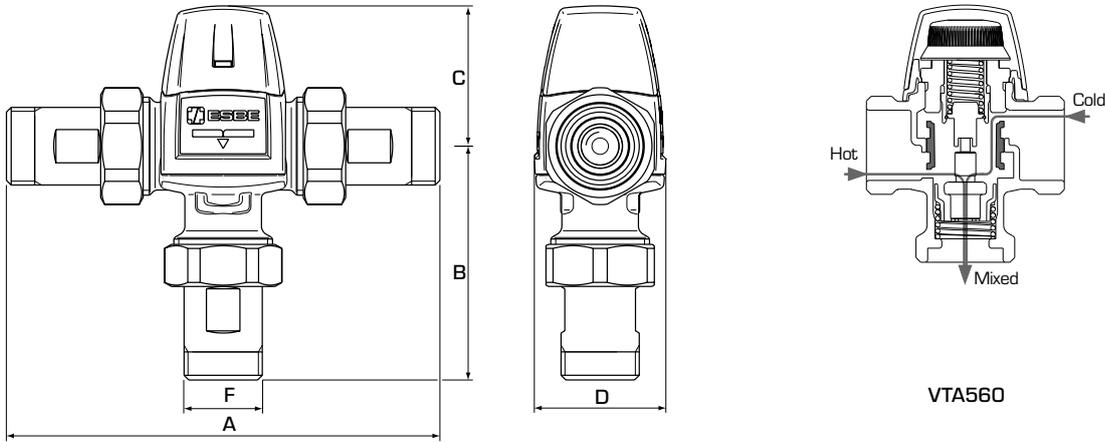
### INSTALLATION EXAMPLES

See the catalogue section "How to choose the correct installation/ position" for further information and connection examples.



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## PREMIUM SERIES VTA360, VTA560



### Series VTA562/VTA563, WITH ADAPTERS

Art. No.	Reference	Temp. range	Kvs*	Connection F	A	B	Dimension C	D	Surface treatment	Note	Weight [kg]
31681200	VTA562	35 - 50°C	2.2	R ¾"	154	85	60	56	Plated	2), 3)	1.14
31681300	VTA562		2.5	R 1"	164	90					1.51
31680300	VTA562	45 - 65°C	2.2	R ¾"	154	85	60	56	Plated	1), 3)	1.14
31680400	VTA562		2.5	R 1"	164	90					1.51

\* Kvs-value in m<sup>3</sup>/h at a pressure drop of 1 bar. CPF = compression fitting

Note 1) According to standard EN 15092, 2) According to standard EN 1111 + NFO79 (France), 3) Two check valves for both hot and cold water are included

### INSTALLATION EXAMPLES

See the catalogue section "How to choose the correct installation/ position" for further information and connection examples.

