THERMOSTATIC CONTROL UNITS

THERMOSTATIC MIXING VALVE SERIES VTG140

The ESBE thermostatic mixing valves series VTG140 offer high flow capacity and high functionality in heating applications.

VTG141

OPERATION

The series VTG140 is the number one choice for underfloor heating. The valves provide a scald safe* function, which is important in order to protect e.g. under floor heating pipes and also the floor itself from to uncontrolled rise of temperature.

FUNCTION

The valves have 4 connections which gives flexibility during the installation and is delivered with a 20-55°C temperature range. The wax element reacts on the water temperature and moves the cone to mix cold and hot water achieving desired, set mixed temperature.

MEDIA

These valves can handle the following types of media:
- Water
- Heating water
- Water with antifreeze additive (glycol ≤ 50% mixture)

**) 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 – 55°C	Application
VTG140		Potable water, in line
VTG140		Potable water, point of use
VTG140		Solar heating
VTG140	●	Floor heating
VTG140	○	Radiator heating

● recommended ○ secondary alternative

TECHNICAL DATA

Pressure class: PN 10
Working pressure: 1,0 MPa (10 bar)
Differential pressure, mixing: max. 0,1 MPa (1 bar)
Max. media temperature: continuously 95°C
temporarily 100°C
Min. media temperature: 0°C
Temperature stability: ±3°C*
Connection: Internal thread (Rp), EN 10226-1
External thread (G), ISO 228/1

Material
Valve housing and other metal parts with fluid contact:
Dezincification resistant brass, DZR
Surface treatment: Nickel-plated

* Valid at unchanged cold/return water pressure, minimum flow rate 9 l/min. Minimum temperature difference between cold water inlet and mixed water outlet 3°C and recommended maximum temperature difference between return water and mixed water outlet: 10°C.

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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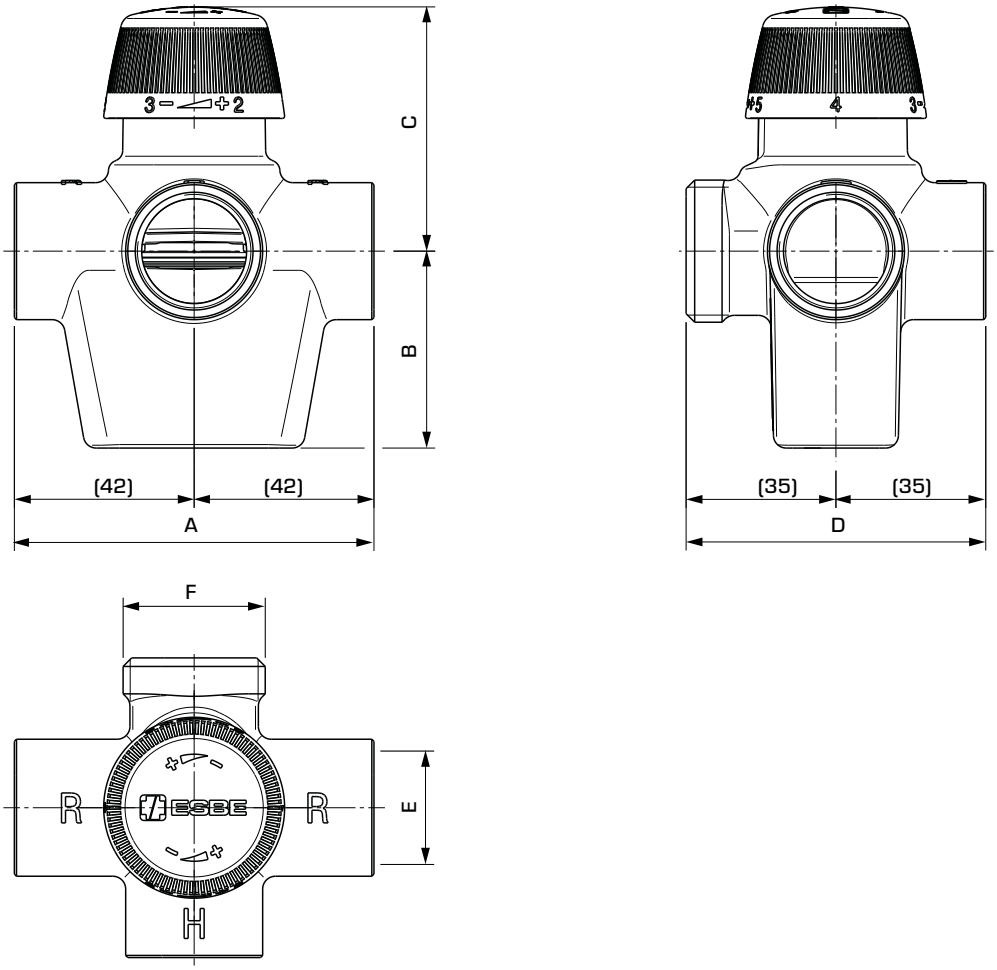
THERMOSTATIC MIXING VALVE
SERIES VTG140



SERIES VTG141, INTERNAL AND EXTERNAL THREAD

Art. No.	Reference	Temp. range	Kvs*	Connection		Dimension				Weight [kg]	Note
				E	F	A	B	C	D		
31810100	VTG141	20 - 55°C	3,4	Rp ¾"	G 1"	84	46	max 60	70	0,75	

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

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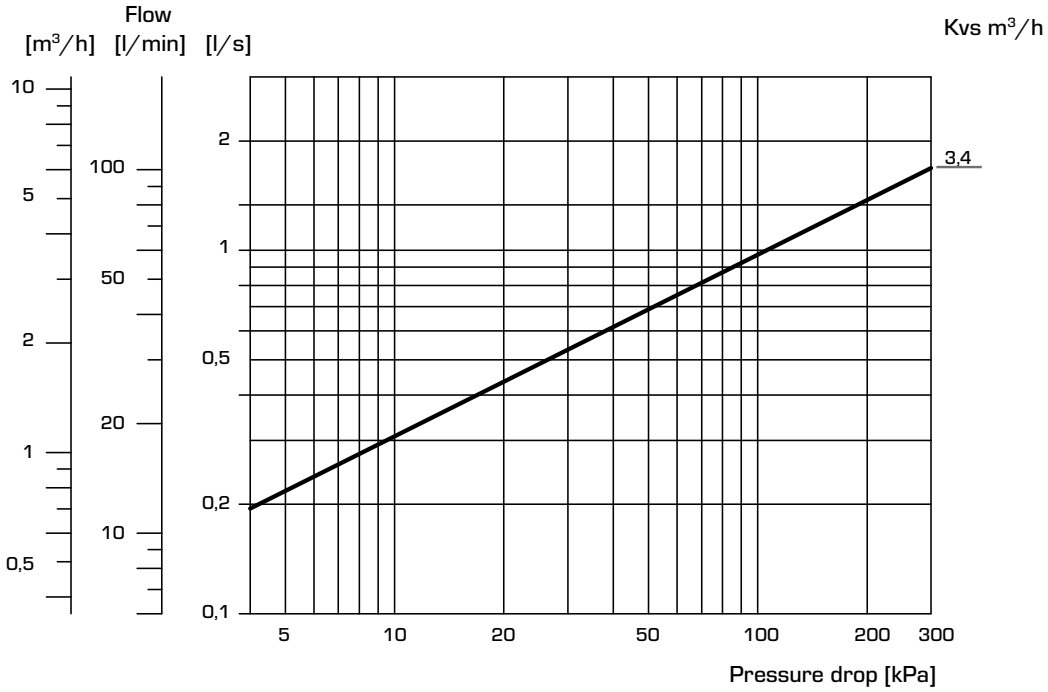
THERMOSTATIC MIXING VALVE SERIES VTG140

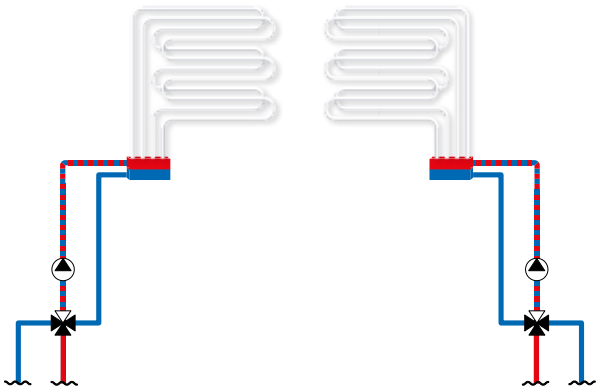
CAPACITY DIAGRAM



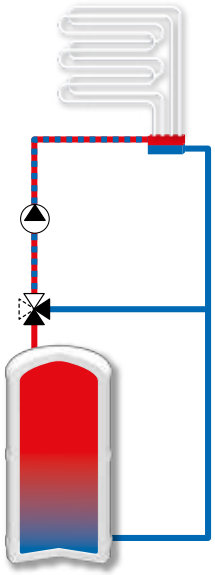
INSTALLATION EXAMPLES

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

4-WAY CONNECTION



3-WAY CONNECTION



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