

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	Application
VTG140	20 – 55°C	 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.

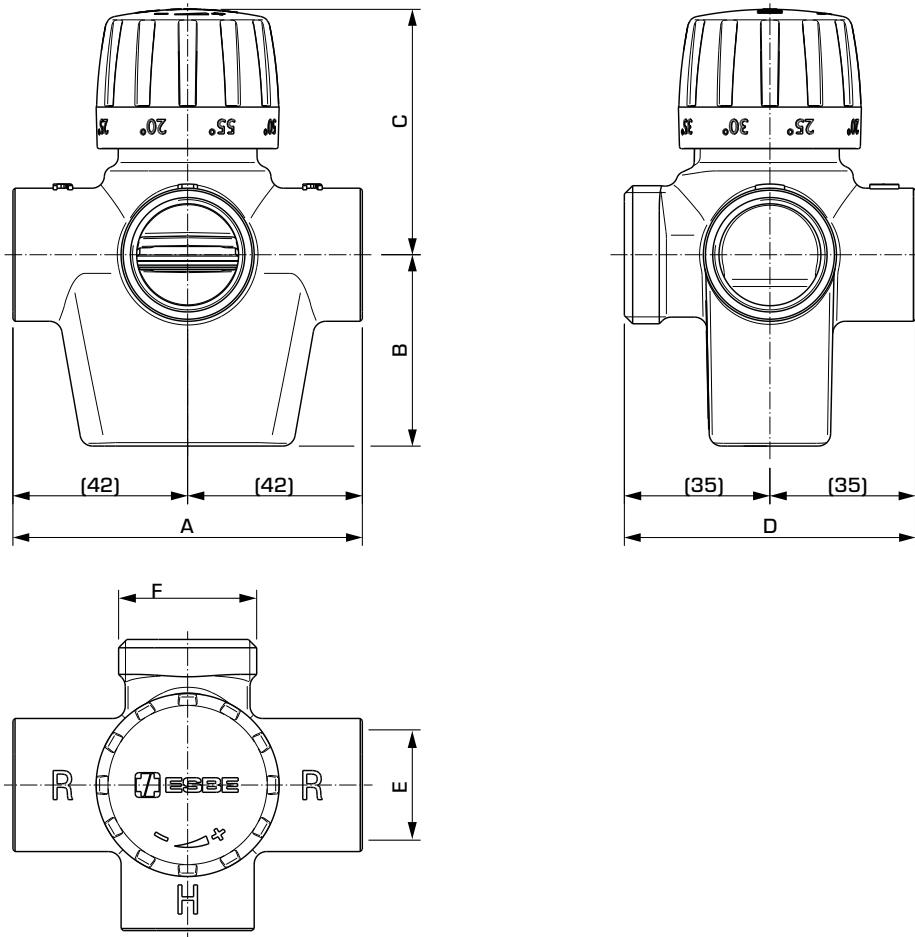
PED 2014/68/EU, article 4.3 / SI 2016 No. 1105 (UK)

Pressure Equipment in conformity with PED 2014/68/EU, article 4.3 and Pressure Equipment (Safety) Regulations 2016, (sound engineering practice). According to the directive/regulation the equipment shall not carry any CE or UKCA mark.

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# THERMOSTATIC MIXING VALVE

## SERIES VTG140



### SERIES VTG141, INTERNAL AND EXTERNAL THREAD

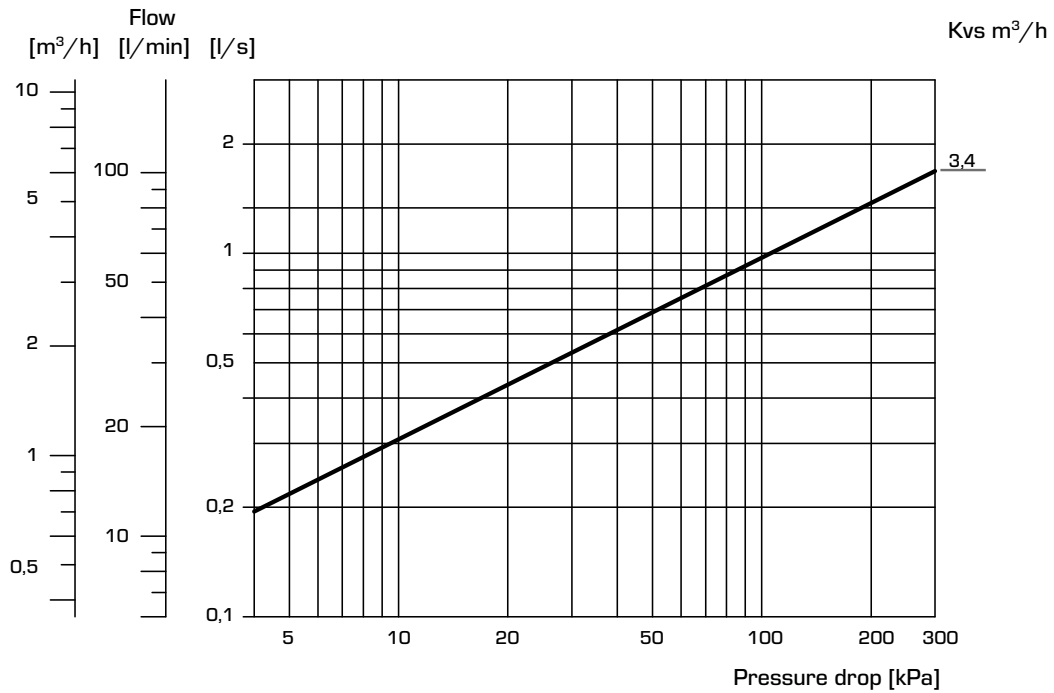
Art. No.	Reference	Temp. range	Kvs*	Connection		Dimension				Weight [kg]	Note
				E	F	A	B	C	D		
31810100	VTG141	20 - 55°C	3,4	Rp 3/4"	G 1"	84	46	max 60	70	0,75	

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

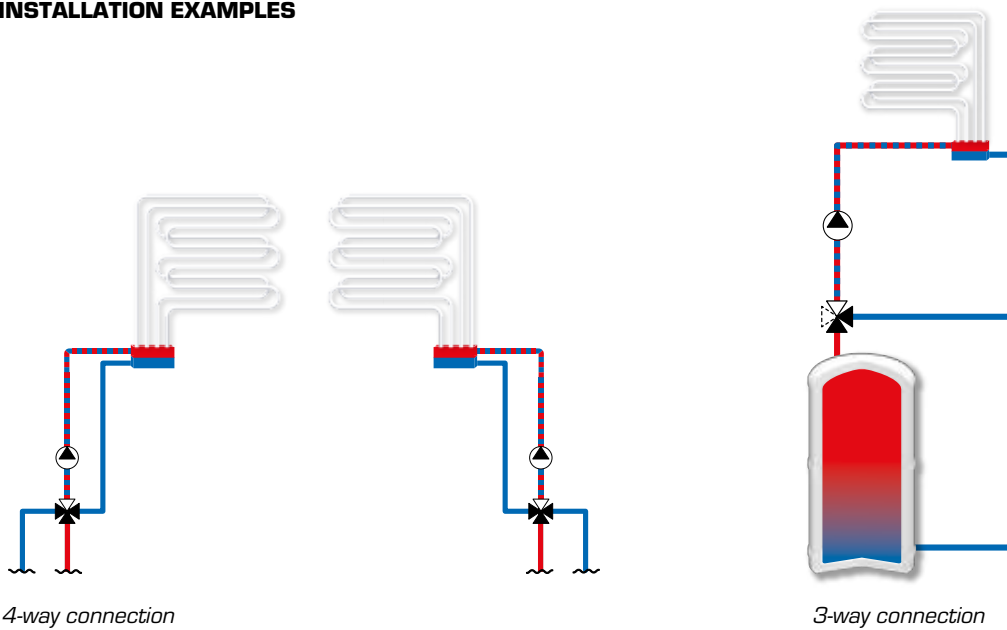
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### CAPACITY DIAGRAM



### INSTALLATION EXAMPLES



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.