

THERMOSTATIC CONTROL UNITS

SOLAR KIT SERIES VMC300, VMC500

The ESBE thermic solar kit series VMC300/VMC500 offers dual functionality for tap water applications: It diverts incoming water when additional heating is needed and makes outgoing water scald safe*, all in an easy-to-install solar kit.

OPERATION

ESBE solar kit VMC300/VMC500 offers optimized energy usage, scald protection and comfort in a compact and efficient way. Using only thermostatic components (non-electrical) the unit is completely independent and provides very easy installation.

Series VMC300 is intended for smaller solar heating systems and series VMC500 is intended for larger systems.

FUNCTION

If the incoming water from the solar collector is not hot enough, it is diverted to an additional heat source, such as a gas boiler, and once it is heated it is mixed to a suitable temperature for domestic hot water applications. If the incoming water from the solar collector is already hot enough, it will be mixed directly for domestic hot water use, efficiently utilizing the solar energy.

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



VMC300
External thread

With adapters,
external thread

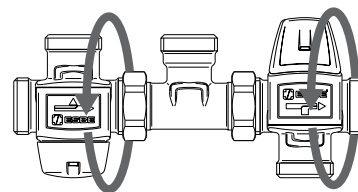


VMC500
External thread

With adapters,
external thread

VALVE VMC300/VMC500 DESIGNED FOR

- Heating
- Comfort Cooling
- Potable water
- Floor heating
- Solar heating
- Ventilation
- Zone
- District Hot Water
- District Heating
- District Cooling



All parts can be rotated 360° for maximum flexibility of connection.

TECHNICAL DATA

Pressure class: _____ PN 10
 Max. flow from collector- VMC300: _____ 0.7 l/s (42 l/min)
 VMC500: _____ 1.0 l/s (60 l/min)
 Temperature of water from collector: _____ max 95°C
 _____ min 0°C
 Temperature from additional heat source: _____ max. 95°C
 Change-over point, accuracy: _____ ±1°C
 Diverting range shut off: _____ 45°C ±2°C
 _____ 50°C, 60°C ±3°C
 Temperature range, mixing valve - VMC300: _____ 35 - 60°C
 VMC500: _____ 45 - 65°C
 Temperature stability of outgoing water - VMC300: _____ ±2°C*
 VMC500: _____ ±4°C**
 Connection: _____ External thread (G), ISO 228/1
 _____ External thread (R), EN 10226-1

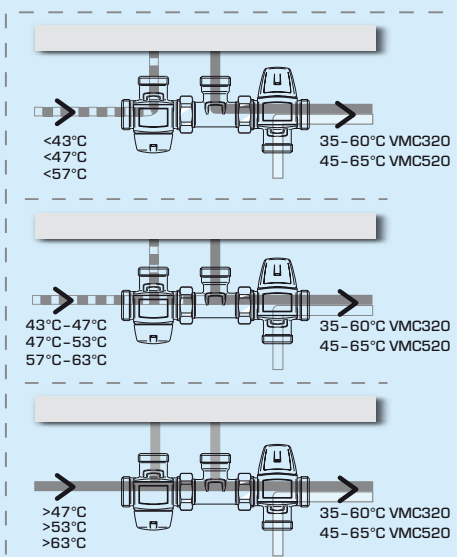
* Valid at unchanged hot/cold water pressure, minimum flow rate 4 l/min.
 Minimum temperature difference between hot water inlet and mixed water outlet 10°C.
 ** Valid at unchanged hot/cold water pressure, minimum flow rate 9 l/min.
 Minimum temperature difference between hot water inlet and mixed water outlet 10°C.

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

PED 97/23/EC, article 3.3

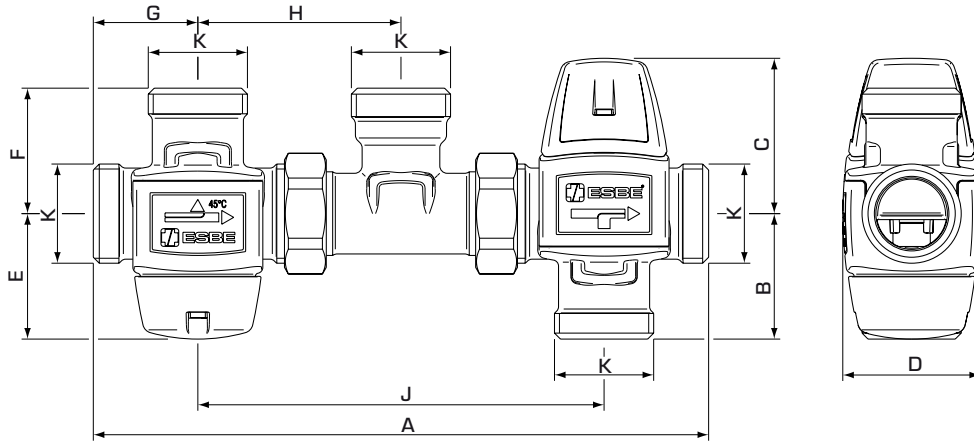
Pressure Equipment in conformity with PED 97/23/EC, article 3.3 (sound engineering practice). According to the directive the equipment shall not carry any CE-mark.

FLOW PATTERN



SOLAR KIT

SERIES VMC300, VMC500



SERIES VMC322, EXTERNAL THREAD

Art. No.	Reference	Change-over point	Kvs *	Connection K	Dimension									Note	Weight [kg]
					A	B	C	D	E	F	G	H	J		
3152 10 00	VMC322	45°C	1.5	G 1"	206	42	52	46	42	42	35	68	136		1.22
3152 11 00		50°C													
3152 12 00		60°C													

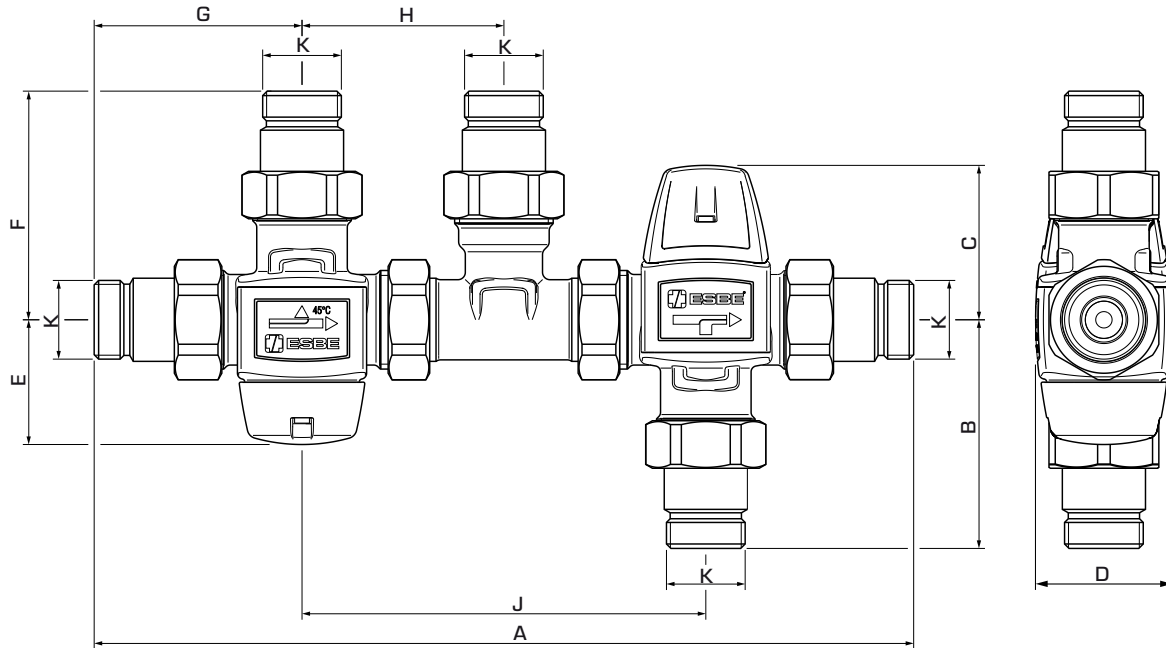
SERIES VMC522, EXTERNAL THREAD

Art. No.	Reference	Change-over point	Kvs *	Connection K	Dimension									Note	Weight [kg]
					A	B	C	D	E	F	G	H	J		
3152 30 00	VMC522	45°C	2.5	G 1"	220	62	60	56	42	42	35	68	143		1.50
3152 31 00		50°C													
3152 32 00		60°C													

* Kvs-value in m³/h at a pressure drop of 1 bar.

SOLAR KIT

SERIES VMC300, VMC500



SERIES VMC322, WITH ADAPTERS

Art. No.	Reference	Change-over point	Kvs *	Connection K	Dimension									Note	Weight [kg]
					A	B	C	D	E	F	G	H	J		
3152 13 00	VMC322	45°C	1.4	R 3/4"	276	77	52	46	42	77	70	68	136	1)	1.86
3152 14 00		50°C													
3152 15 00		60°C													

SERIES VMC522, WITH ADAPTERS

Art. No.	Reference	Change-over point	Kvs *	Connection K	Dimension									Note	Weight [kg]
					A	B	C	D	E	F	G	H	J		
3152 33 00	VMC522	45°C	2.3	R 3/4"	290	97	60	56	42	77	70	68	143	1)	2.14
3152 34 00		50°C													
3152 35 00		60°C													

* Kvs-value in m³/h at a pressure drop of 1 bar. Note 1) Two check valves for both hot and cold water are included

INSTALLATION EXAMPLES

