Instruction Manual

Wmix
DHW Thermostatic Mixing Valve

EN
v. 1.4

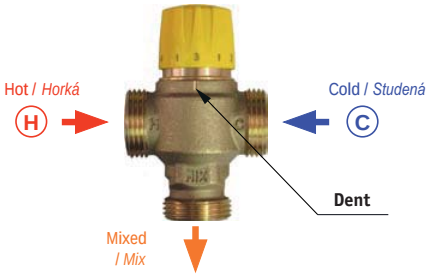
OPERATION INSTRUCTIONS

1 - Application

Wmix Thermostatic Mixing Valve is designed for installation in DHW piping outgoing from a storage water heater. The valve keeps the DHW temperature at a preset value. This way hot water of constant temperature is delivered from a tap, disregarded of the temperature inside the storage water heater.

2 - Description of the mixing operation

Wmix 3-way Mixing Valve is fitted with an integrated thermostatic element that opens H (hot) inlet when the water temperature at the "MIX" valve outlet is below the preset value. If the water temperature at the "MIX" valve outlet is higher than preset, the thermostat opens the C (cold) inlet in such a way that after mixing with hot water from the storage water heater ("H" inlet) the preset DHW temperature is reached.



Moreover, the valve features an anti-scalding function. In case of cold water supply breakdown, the hot water supply is interrupted as well. This safety function works from 10 K temperature difference between the incoming DHW and mixed hot water. Its functionality can be checked by closing cold water supply; the flow through the thermostatic valve should drop to zero very fast.

For mixing with a thermostatic valve, it is advisable to use the model marked "ZV" with check valves at inlets. In case a pressure difference exists in the thermostatic valve, these check valves prevent circulation. This model is also fitted with a strainer that protects the valve inner components and helps maintain its precision in long-term operation.

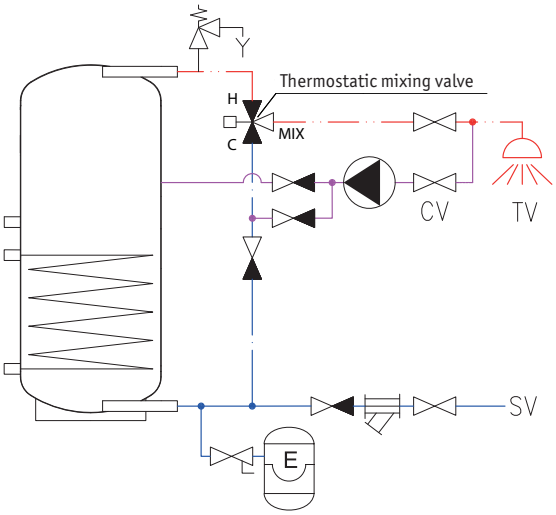
3 - Installation

This thermostatic diverter valve shall be installed by a qualified person, in compliance with this Manual and valid rules:
Wmix-k by turning the knob.
Wmix-i using an Allen key after removing the cover.

Max. water temperature is 100 °C, in short term it can withstand 120 °C.

It is recommended to install shut-off valves for the event of the valve replacement or maintenance.

4 -Recommended hydraulic scheme



5 - Technical data

Max. static pressure:	10 bar
Max. dynamic pressure:	5 bar
Max. pressure ratio at inlets:	2 : 1
Temperature adjustment:	30 to 65 °C ± 2 °C
Max. water temperature	continuous 100 °C (short term 120 °C max. 20 sec)

Knob adjusted temperature (with parameters T_H = 65 °C, T_C = 15 °C, p = 3 bar):

MIN	1	2	3	4	5	MAX
~25 °C	30 °C	40 °C	49 °C	57 °C	65 °C	~70 °C

DHW thermostatic mixing valve for solar systems,
outer thread with gasket,
knob adjusted 30-65 °C

Kvs	size	code	short name	name
0,9	3/4" M	12023	Wmix-K S20	*Wmix-K S20 Thermostatic mixing valve, 30-65 °C, G 3/4" M*
1,0	1" M	12020	Wmix-K S25	*Wmix-K S25 Thermostatic mixing valve, 30-65 °C, G 1" M*

DHW thermostatic mixing valve,
outer thread for gasket,
knob adjusted 30-65 °C

Kvs	size	code	short name	name
4,0	5/4" M	12025	Wmix-K 32	*DHW thermostatic mixing valve, G 5/4", M*

DHW thermostatic mixing valve for solar systems,
outer thread with coupler, check valve and strainer,
knob adjusted 30-65 °C

Kvs	size	code	short name	name
0,9	1/2" M	11663	Wmix-K S20 ZV	*Wmix-K S20 Thermostatic mixing valve, 30-65 °C, G 3/4" M incl. 3 threaded couplers and 2 inlet check valves with strainer, G 1/2" M*
1,0	3/4" M	11664	Wmix-K S25 ZV	*Wmix-K S25 Thermostatic mixing valve, 30-65 °C, G 1" M incl. 3 threaded couplers and 2 inlet check valves with strainer, G 3/4" M*

DHW thermostatic mixing valve,
outer thread with coupler, check valve and strainer,
knob adjusted 30-65 °C

Kvs	size	code	short name	name
4,0	1" M	11674	Wmix-K 32 ZV	*DHW thermostatic mixing valve, ZV, strainer, G 1", M*

DHW thermostatic mixing valve for solar systems,
outer thread for gasket,
Allen key adjusted 30-65 °C

Kvs	size	code	short name	name
0,9	3/4" M	12027	Wmix-I S20	*Wmix-I S20 Thermostatic mixing valve, Allen key, 30-65 °C, G 3/4" M*
1,0	1" M	12028	Wmix-I S25	*Wmix-I S25 Thermostatic mixing valve, Allen key, 30-65 °C, G 1" M*

DHW thermostatic mixing valve for solar systems,
outer thread with coupler, check valve and strainer,
Allen key adjusted 30-65 °C

Kvs	size	code	short name	name
0,9	1/2" M	12033	Wmix-I S20 ZV	*Wmix-I S20 Thermostatic mixing valve, Allen key, 30-65 °C, G 3/4" M incl. 3 threaded couplers and 2 inlet check valves with strainer, G 1/2" M*
1,0	3/4" M	12034	Wmix-I S25 ZV	*Wmix-I S25 Thermostatic mixing valve, Allen key, 30-65 °C, G 1" M incl. 3 threaded couplers and 2 inlet check valves with strainer, G 3/4" M*

DHW thermostatic mixing valve for solar systems,
outer thread for gasket,
temperature fixed at 48 °C

Kvs	size	code	short name	name
1,0	1" M	12029	Wmix-f S25	*DHW thermostatic mixing valve, fix 48 °C, G 1", M*

DHW thermostatic mixing valve for solar systems,
outer thread with coupler, check valve and strainer,
temperature fixed at 48 °C

Kvs	size	code	short name	name
1,0	3/4" M	11366	Wmix-f S20 ZV	*DHW thermostatic mixing valve, ZV, strainer, G 3/4", M*

Strainer and check valve for Wmix

size	code	short name	name
1/2" M x 3/4" F	11676	DBOI02S/SET	*Strainer and check valve for Wmix-K, I, 3/4" x 1/2" FM, in brass*
3/4" M x 1" F	11677	DBOI03S/SET	*Strainer and check valve for Wmix-K, I, 1" x 3/4" FM, in brass*

Fitting adapter for Wmix valve

size	code	short name	name
1/2"M x 3/4" F	11746	DBO3	*Fitting adapter for Wmix-K, I, 3/4" x 1/2" FM, in brass*
3/4" M x 1" F	11748	DBO4	*Fitting adapter for Wmix-K, I, 1" x 3/4" FM, in brass*

Fitting adapter for Wmix valve and 2x Strainer and check valve for Wmix

size	code	short name	name
1"M x 5/4" F	15891	04799SET	*Fitting adapter for Wmix-K, I, 5/4" x 1" FM, nickel plated* *2x Strainer and check valve for Wmix-K, I, 5/4" x 1" FM, nickel plated*

WARRANTY CERTIFICATE

Wmix

DHW Thermostatic Mixing Valve

Purchased from: ..... Date of purchase: .....

WARRANTY CONDITIONS

1. The warranty period is 24 months from the date of purchase.
2. The product shall be installed and commissioned by a competent company or a person trained by the manufacturer.
3. When claiming warranty, this Warranty Certificate must be submitted together with the purchase receipt.
4. The warranty is valid only when the technical conditions set by the Manufacturer, installation manual and instructions in the documentation and on the product itself are maintained.
5. The warranty does not cover defects caused by external conditions or improper working conditions, defects caused by normal wear and tear, further when the product is not used in compliance with its purpose and when the defect was caused by mechanical damage to the product, improper handling, tampering by a third person, improper installation, improper stocking, natural disaster etc.

COMMISSIONED

BY: .....

DATE: .....

Rubber stamp and signature:

08/2016

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