

NOVAMIX HIGH CAPACITY

THERMOSTATIC MIXING VALVE



ADVANTAGES

- Constant temperature of the water at the outlet
- Automatic mixing function without the need for auxiliary power
- Infinite regulation of the mixed water temperature in the range from 20 – 70 °C
- Protection against scalding; the NovaMix High Capacity model closes tightly
- In the functional area: polished surfaces to prevent limescale deposits
- Can be used in panel heating systems and for loading storage tanks by means of solid-fuel boilers

Maintaining constant mix temperatures and limiting temperatures in hot water systems

DESCRIPTION

The automatic thermostatic mixing valve NovaMix High Capacity ensures a constant temperature of the mixed water at the outlet when used as the central mixing device. This prevents scalding at the outlet, even with high storage tank temperatures.

The large valve cross sections in the NovaMix High Capacity reduce the valve's intrinsic pressure loss (high k_{vs}), permitting high flow rates even at peak times. Special valve seals on the controller piston reduce unwanted mixtures to a minimum (very low internal cold water leakage rate), which provides maximum utilization of the storage temperature.

The NovaMix High Capacity is mainly used in sanitary applications as a regulating device for reducing the temperature of the water coming out of hot water tanks. If the cold water supply fails, the DHW supply is automatically interrupted and sealed off. It can also be used in numerous other applications requiring a constant mixing temperature. For example as a mixing unit for constant water mixing temperatures in panel heating systems and for loading storage tanks by means of solid-fuel boilers.

INSTALLATION POSITION

Any.

OPERATION

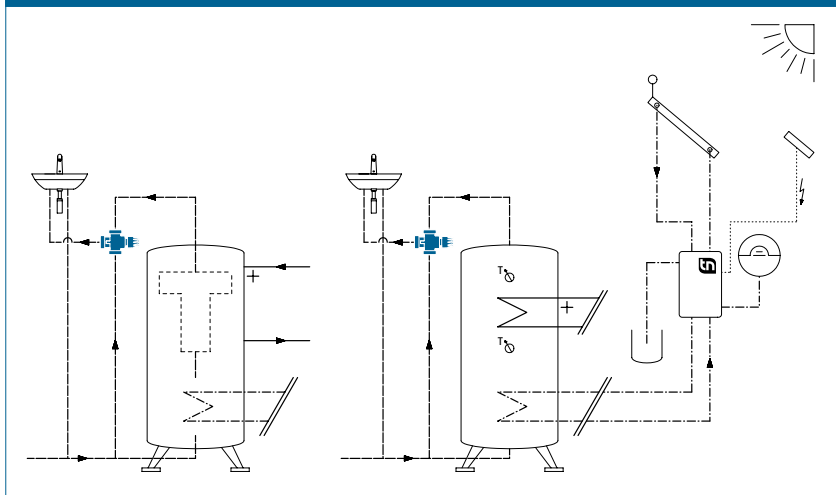
The mixing valve is supplied with hot water from the storage tank and cold water from the mains network. The temperature of the mixed water is detected by the thermostatic expansion element. If the mixed water temperature diverges from the target value, the thermostatic expansion element moves the regulator piston, thus regulating the hot and cold water intake quantity accordingly, until the mixed water temperature corresponds to the target value.

BUILDING CATEGORIES

For pipe installations in drinking water and heating area:

- Apartment blocks, housing estates, multiple dwelling units
- Residential care facilities, hospitals
- Administration and service buildings
- Hotels and restaurants, industrial kitchens
- School buildings and sports facilities
- Commercial and industrial buildings

SYSTEM/BASIC DIAGRAM



NOVAMIX HIGH CAPACITY | THERMOSTATIC MIXING VALVE

SPECIFICATION TEXT

See www.taconova.com

TECHNICAL DATA

General

- Adjustable temperature range: 20 – 70 °C
- k_{VS} values and dimensions as per the relevant tables
- Operating temperature $T_{0,max}$: 90 °C
- Max. operating pressure $P_{0,max}$: 10 bar
- Constant inlet pressure differential: max. 2 bar
- Temperature stability for mixing: max. 4 K (for change in hot water temperature: 20 K)
- Locking function in the event of failure of the cold water supply
- Weight: 0.9 kg
- Recommended minimum tap flow rate: 5 l/min
- Male thread G (cylindrical) to ISO 228
- Noise class 2
- Installation position: can be installed in any position

Material

- Housing and inner parts: brass (resistant to dezincification)
- Seals: EPDM, NBR
- In the functional area: polished surfaces to prevent limescale deposits

Fluids

- Heating water (VDI 2035; SWKI BT 102-01; ÖNORM H 5195-1)
- Potable water (DIN 1988-200)

Special application

- Diverting function possible (inflow via a mixing gate)

APPROVALS / CERTIFICATES

- DVGW (UBA hygiene conformity), ACS, PZH

NOTE

The brochure „NOVAMIX ONE RANGE - NEW APPLICATIONS“ contains additional information on the various applications of Taconova mixing valves.

TYPE OVERVIEW

NovaMix High Capacity | Thermostatic mixing valve for storage water heating unit, temperature range 20 – 70 °C

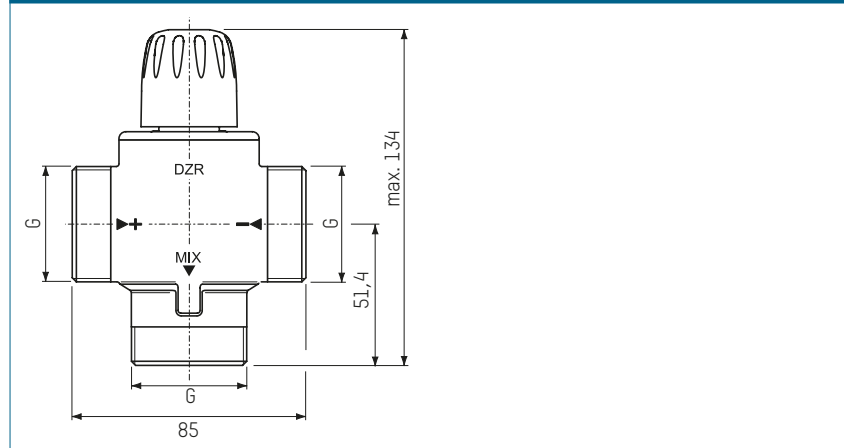
Order no.	DN	G	E (l/min)	k_{VS} 1	k_{VS} 2
252.6034.107	25	1 1/4"	102	6,1	5,9

E = Extracted [outlet] quantity at $\Delta p = 1,0$ bar

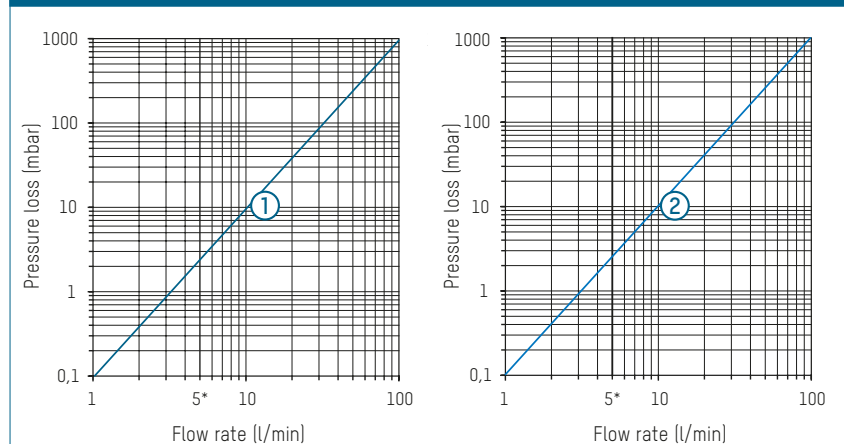
k_{VS} 1 = without check valve

k_{VS} 2 = with check valve

DIMENSIONAL DRAWING



PRESSURE LOSS DIAGRAMS



1 252.6034.107 without check valve: $k_{VS} = 6,1$

2 252.6034.107 with check valve: $k_{VS} = 5,9$

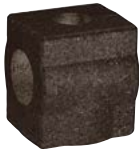
* Recommended minimum tap flow rate

INFORMATION

If the handwheel of the mixing valve is fully open, the mixing element will not work. As a result, the outlet temperature may be above the controllable temperature range and may be approximately the same as the hot water inlet temperature.

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ACCESSORIES



INSULATION BOX

Order no.	DN
296.2328.000	25



CONNECTION SET FOR THREADED PIPE

Order no.	DN	G x R
210.6633.000	25	1 1/4" x 1"



CONNECTION SET FOR THREADED PIPE WITH CHECK VALVE

Order no.	DN	G x R
296.5205.003	25	1 1/4" x 1"



PRECISION THERMOMETER, QUICK RESPONSE

Fits in 1/2" T-piece, Indication range: 0 – 80 °C (accuracy class 2,5 within the range 40 – 60 °C), Sensor tube stainless steel, Sensor length: 39 mm

Order no.	R
296.5212.003	1/2"

SPARE PARTS



REGULATING PISTON WITH THERMOSTATIC ELEMENT

Order no.
298.5268.000