

ONLY ORIGINAL WITH THE DIAMOND®



Fittings-, drive and
mixing technology





Fittings-, drive and mixing technology

Through uncompromising high quality standards, coupled with the numerous applications of our products, we are able to offer our customers an optimal solution for almost any application. Our products are used in heating and solar technology. Every day, the research and development department is working on new, innovative solutions to make everyday life easier for specialist trades.





50 YEARS PUMPS AND FITTINGS



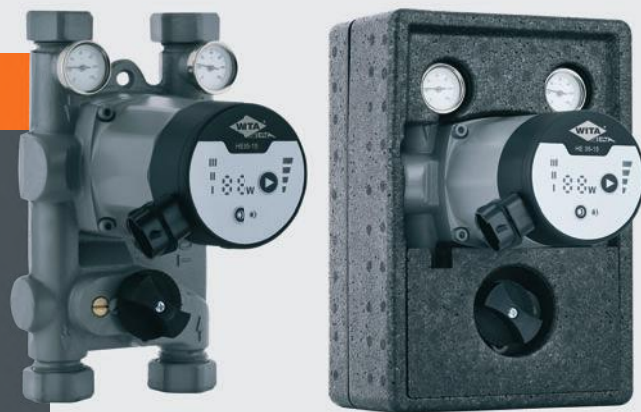
List

WITA-Bloc T08	4
WITA-Bloc T20	5
WITA-Bloc T60	6
WITA-Bloc T60-32	7
WITA-Bloc T60 R	8
Manifold VM	9
Manifold VM 90	9
WITA UNI-Compact Heating circuit group	10
WITA UNI-Compact – Return temperature increase	11
WITA Boiler combination unit WMB/R	12
WITA Mixing and pumping unit WMB	13
WITA Solar station	14
WITA Servomotors SM W05/W10	15
WITA SM 3	17
WITA SM 4	18
WITA SM 4.10 FR	19
WITA SM 44	20
WITA SM 44 FR H	21
WITA Adapters	22
WITA Minimix Maximix	23
WITA Minimix E	24
Available mixing valves	25
WITA Type "H" mixing valve	26
Available mixing valves	27

WITA-Bloc T08

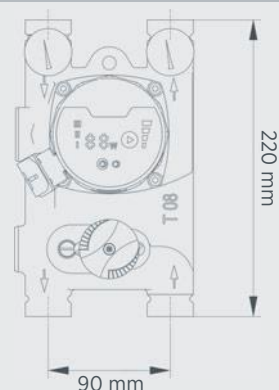
Product description

The WITA-Bloc T08 is a compact fitting made of grey cast iron. It combines a circulation pump, mixer and a flow/return thermometer in a single housing. It is mainly used in small to medium-sized hot-water heating systems. The direction of flow is to the right. This is due to the pump's direction of rotation.



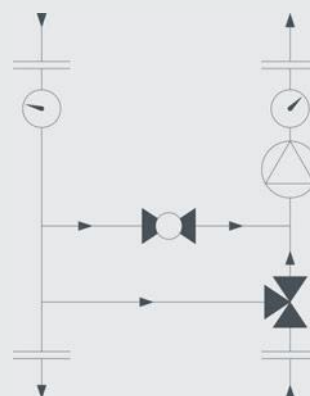
Technical equipment

- Energy-efficient WITA circulating pump motor Delta HE
- 3-way mixing valve with elastic mixer insert (insert and cover made from brass, sealed with double O-ring)
- Bypass for underfloor heating
- Flow and return thermometers
- Parallel connections with 1" thread
- 4 union nuts and 4 seals
- Incl. EPP insulation



Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 15
Mixing valve [Kvs]	6 m ³ /h
Fitting [Kvs]	7 m ³ /h
Center to center distance	90 mm
Connection	1" M
Seal	EPDM
Suitable accessories	<ul style="list-style-type: none"> • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H • Manifold basic module VM 90 • Manifold extension module VM 90



Bypass function

The unit is equipped with a bypass flap for more efficient performance in low-temperature (floor) heating systems. The flap is placed between the supply and the return. Thanks to the complete use of mixing valve setting range (angle adjusted to 90°) you can easily control supply temperature in a low-temperature system.



WITA-Bloc T20

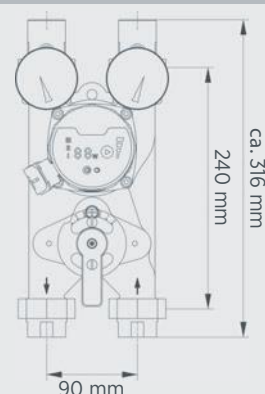
Product description

The WITA-Bloc T20 is a compact fitting made of grey cast iron. It combines a circulation pump and mixer in a single housing. It is mainly used in small to medium-sized hot-water heating systems. The direction of flow is to the right. This is due to the pump's direction of rotation.



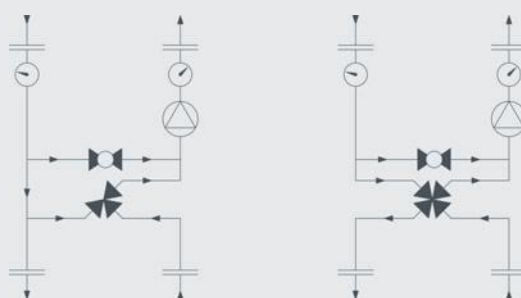
Technical equipment

- Energy-efficient WITA circulating pump motor Delta HE
- 4-way or (upon request) 3-way mixing valve (insert and cover made from brass, sealed with double O-ring)
- Bypass for underfloor heating
- Flow and return thermometers
- Parallel connections with 1 1/2" thread
- 4 x 1 1/2" union nuts, 4 x 1" inserts and 4 seals
- Incl. EPP insulation



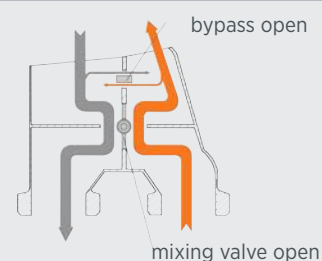
Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Mixing valve [Kvs]	7 m³/h
Center to center distance	90 mm
Connection	1 1/2" M
Seal	EPDM
Suitable accessories	<ul style="list-style-type: none"> • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H



Bypass function

The unit is equipped with a bypass flap for more efficient performance in low-temperature (floor) heating systems. The flap is placed between the supply and the return. Thanks to the complete use of mixing valve setting range (angle adjusted to 90°) you can easily control supply temperature in a low-temperature system.



WITA-Bloc T60

Product description

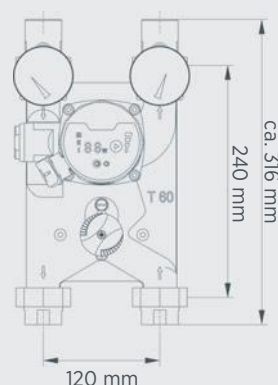
The WITA-Bloc T60 is a compact fitting made of grey cast iron. It combines a circulation pump and mixer in a single housing. It is mainly used in small to medium-sized hot-water heating systems.

The direction of flow is to the right. This is due to the pump's direction of rotation.



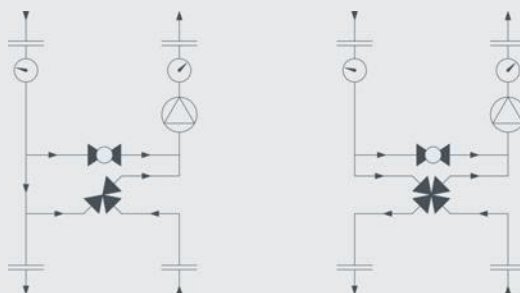
Technical equipment

- Energy-efficient WITA circulating pump motor Delta HE
- 4-way or (upon request) 3-way mixing valve (insert and cover made from brass, sealed with double O-ring)
- Bypass for underfloor heating
- Flow and return thermometers
- Parallel connections with 1 1/2" thread
- 4 x 1 1/2" union nuts, 4 x 1" inserts and 4 seals
- Incl. EPP insulation



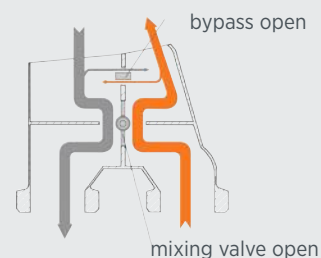
Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Mixing valve [Kvs]	6 m³/h
Fitting [Kvs]	7 m³/h
Center to center distance	120 mm
Connection	1 1/2" M
Seal	EPDM
Suitable accessories	<ul style="list-style-type: none"> • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H • Manifold basic module VM 120 • Manifold extension module VM 120



Bypass function

The unit is equipped with a bypass flap for more efficient performance in low-temperature (floor) heating systems. The flap is placed between the supply and the return. Thanks to the complete use of mixing valve setting range (angle adjusted to 90°) you can easily control supply temperature in a low-temperature system.



WITA-Bloc T60-32

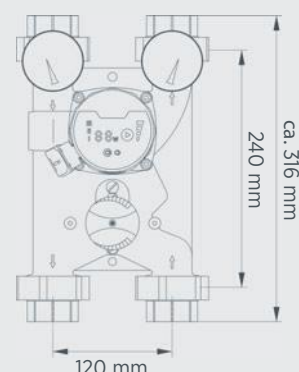
Product description

The WITA-Bloc T60-32 is a compact fitting made of grey cast iron. It combines a circulation pump and mixer in a single housing. It is mainly used in medium-sized to large hot-water heating systems. The direction of flow is to the right. This is due to the pump's direction of rotation.



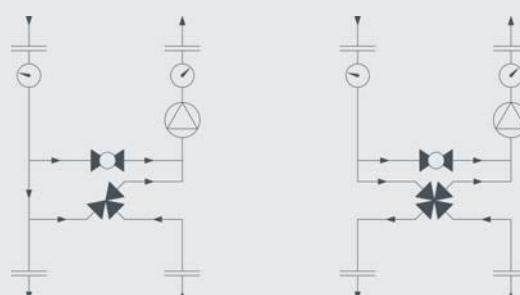
Technical equipment

- Energy-efficient WITA circulating pump motor Delta HE
- 4-way or (upon request) 3-way mixing valve (insert and cover made from brass, sealed with double O-ring)
- Bypass for underfloor heating
- Flow and return thermometers
- Parallel connections with 2" thread
- 4 x 2" union nuts, 4 x 1 1/4" inserts and 4 seals
- Incl. EPP insulation



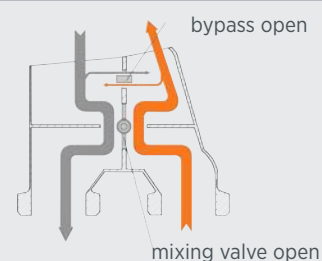
Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 32
Mixing valve [Kvs]	9 m³/h
Fitting [Kvs]	10 m³/h
Center to center distance	120 mm
Connection	2" M
Seal	EPDM
Suitable accessories	<ul style="list-style-type: none"> • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H • Manifold basic module VM 120 • Manifold extension module VM 120



Bypass function

The unit is equipped with a bypass flap for more efficient performance in low-temperature (floor) heating systems. The flap is placed between the supply and the return. Thanks to the complete use of mixing valve setting range (angle adjusted to 90°) you can easily control supply temperature in a low-temperature system.



WITA-Bloc T60 R

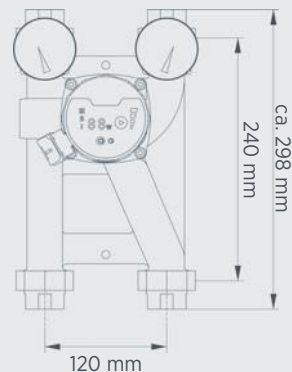
Product description

The WITA-Bloc T60 R is a compact fitting made of grey cast iron. It combines a circulation pump and a flow/return thermometer in a single housing. It is mainly used in small to medium sized hot-water heating systems. The direction of flow is to the right. This is due to the pump's direction of rotation.



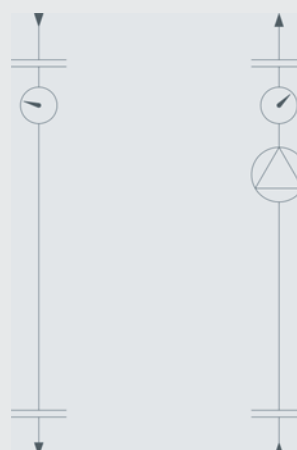
Technical equipment

- Energy-efficient WITA circulating pump motor Delta HE
- Flow and return thermometers
- Parallel connections with 1 1/2" thread
- 4 x 1 1/2" union nuts, 4 x 1" inserts and 4 seals
- Incl. EPP insulation



Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Mixing valve [Kvs]	10 m ³ /h
Center to center distance	120 mm
Connection	1 1/2" M
Seal	EPDM
Suitable accessories	<ul style="list-style-type: none"> • Manifold basic module VM 120 • Manifold extension module VM 120

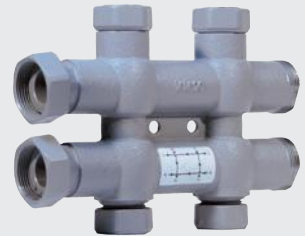


Manifold VM

Suitable for WITA- H mixing valves,
WITA-Bloc T60, T60-32, T60 R,
WITA UNI-Compact heating circuit group and
WMB mixing and pumping unit /
boiler combination unit



Basic module



Extension module

Technical equipment

- Can be expanded up to 4 x size using modular system
- Centre distance 120 mm or 125 mm
- Material: Grey cast iron
- Nominal diameter: DN 25, DN 32
- With insulation upon request
- Side connection possible (safety group)



Manifold VM 90

Suitable for WITA-Bloc T08



Basic module



Extension module

Technical equipment

- Can be expanded up to 3 x size using modular system
- Centre distance 90 mm
- Material: Grey cast iron
- Nominal diameter: DN 15
- With insulation upon request
- Side connection possible (safety group)

WITA UNI-Compact Heating circuit group

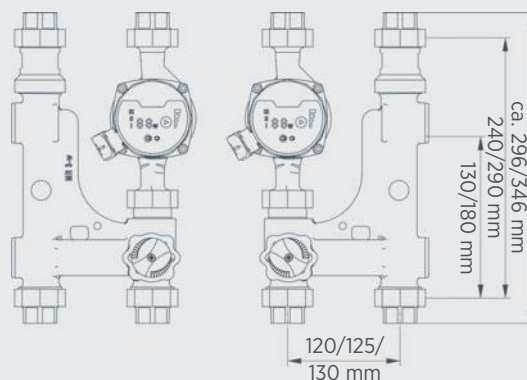
Product description

The WITA UNI-Compact fitting is a heating fitting made of grey cast iron. It can be used to control either the flow or return flow temperature. Its intelligent design allows it to be used with almost all threaded heating circulation pumps on the market with lengths of 130 mm to 180 mm. A maintenance-free brass mixing head, sealed with two O-rings and virtually 100 % airtight, allows flows from all directions. The fitting can be automated using the SM 4 and SM 44 series of WITA servomotors or other models with the appropriate assembly kit. Centre distances of 120-125 mm are available upon request, as are left or right flow and return flow directions and 1 ½" or 2" connection threads.



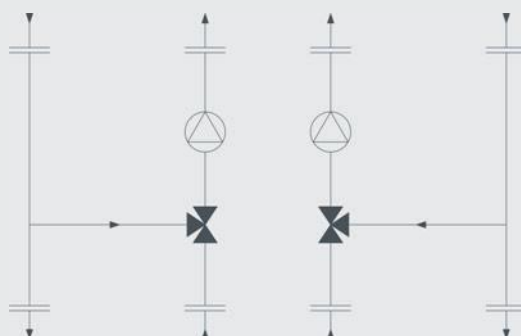
Technical equipment

- 3-way mixing valve with elastic insert (insert and cover made from brass, sealed with double O-ring)
- Parallel connections with 1 ½" or 2" thread
- Incl. EPP insulation



Technical data

Max. operating pressure	10 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25 DN 32
Mixing valve [Kvs]	7,0 m³/h 12 m³/h
Center to center distance	120 mm 125 mm
Connection	1 ½" M 2" M
Seal	EPDM / NBR
Suitable accessories	<ul style="list-style-type: none"> • Energy-efficient WITA circulating pump motor Delta HE • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H • Manifold basic module VM 120 / 125 • Manifold extension module VM 120 / 125

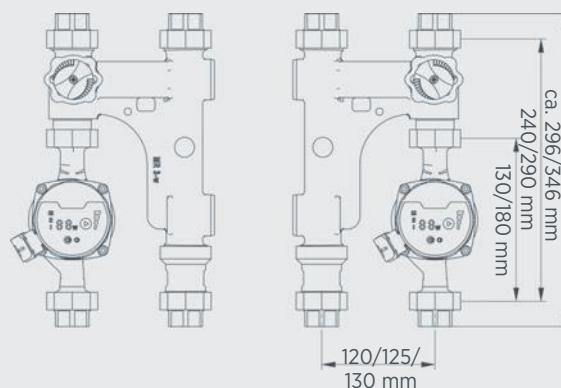


WITA UNI-Compact – Return temperature increase



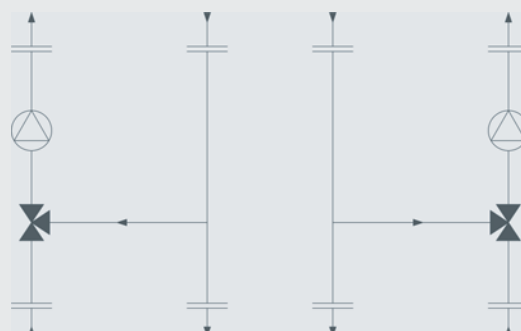
Technical equipment

- 3-way mixing valve with elastic insert (insert and cover made from brass, sealed with double O-ring)
- Parallel connections with 1 ½" or 2" thread
- Incl. EPP insulation



Technical data

Max. operating pressure	10 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25 DN 32
Mixing valve [Kvs]	7,0 m³/h 12 m³/h
Center to center distance	120 mm 125 mm
Connection	1 ½" M 2" M
Seal	EPDM / NBR
Suitable accessories	<ul style="list-style-type: none"> • Energy-efficient WITA circulating pump motor Delta HE • Servomotor SM 4, SM 44 • Fixed setpoint controller SM 4.10 FR-H



WITA Boiler combination unit WMB/R

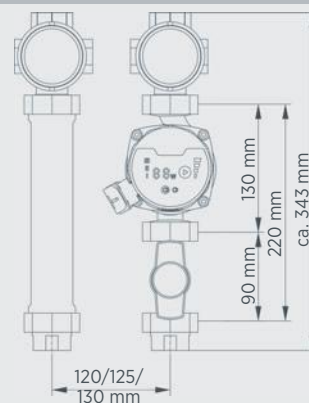
Product description

The combination group WMB / R is suitable for small and medium hot water central heating systems. The spacer D 90 is provided with a pump flange. Commercially available pumps with a length of 130 mm and a connection thread of 1 1/2" can be mounted in this group.



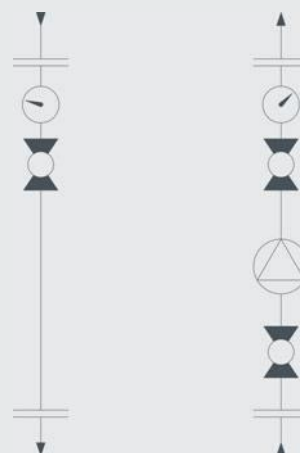
Technical equipment

- 1 x Pump ball valve 222 ST
- 1 x Spacer 90 ST
- 2 x Ball valve with a thermometer 0 - 120°C
- 2 x Nut with a 1" Ms insert
- 2 x Seal
- Incl. EPP insulation



Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Center to center distance	120 mm 125 mm
Seal	EPDM / PTFE Special Compound
Suitable accessories	<ul style="list-style-type: none"> • WITA Delta HE circulating pump • Manifold basic module VM 120 / 125 • Manifold extension module VM 120 / 125



WITA Mixing and pumping unit WMB

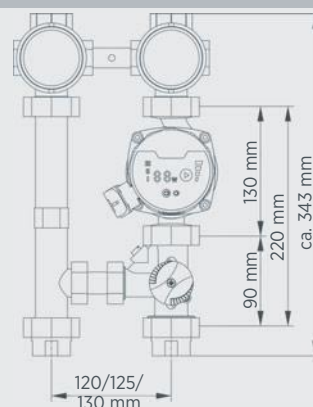
Product description

This 3-way mixing and pumping unit has been designed for small and medium central heating systems, and can be operated manually or set automatically. Additionally, together with an SM4 actuator they form a compact unit. Profiled outlet holes influence the linear characteristic of a temperature. The shaft is sealed with a double EPDM O-ring. Because of the outlet mixing valve with a thread flange, commercially available pumps with a length of 130 mm and a connection thread of 1 1/2" can be mounted in this unit.



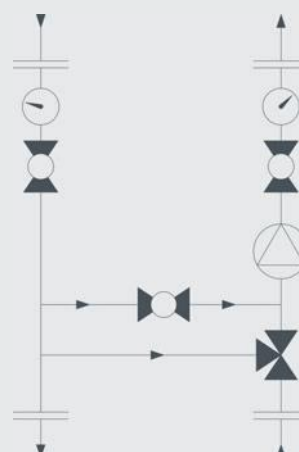
Technical equipment

- 1 x 3-way mixing valve with a bypass
- 1 x spacer with a return circuit connection
- 1 x pipe union set
- 2 x ball valve with a thermometer 0 - 120°C
- 2 x nut with a 1" Ms insert
- 2 x seal
- Incl. EPP insulation



Technical data

Max. operating pressure	6 bar
Max. supply temperature	110 °C
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Center to center distance	120 mm 125 mm
Seal	EPDM / PTFE Special Compound
Suitable accessories	WITA Delta HE circulating pump Servomotor SM 4, SM 44 Fixed setpoint controller SM 4.10 FR-H Manifold basic module VM 120 / 125 Manifold extension module VM 120 / 125



WITA Solar station

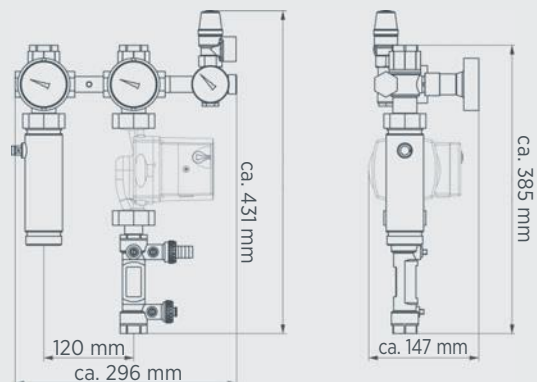
Product description

The WiTa solar station is designed as a two-circuitsystem. The solar station includes all fittings and equipment required for trouble-free operation in solar heating systems, such as one or two gravity brakes, safety devices and complete insulation. Thanks to shut-off valves in front of and behind the pump, the unit can be replaced without having to drain the system.



Technical equipment

- Two 4-way ball valves with manual gravity brake in flow and return, two thermometers
- integrated in the ball valve (display range 0 ° C - 120 ° C)
- Safety group with safety valve, manometer and
- Connection possibility for an expansion tank
- Ventilation unit with manual bleeder
- Rinsing, filling and emptying device with integrated
- Flow rate limiter and
- Volume flow display
- Incl. EPP insulation



Technical data

Max. operating pressure	6 bar
Max. supply temperature	max. 110°C, 130°C possible for short periods
Medium	Water (Max. percentage of glycol: 50%)
Nominal diameter	DN 25
Center to center distance	120 mm
Connections	1 x 3/4" internal thread, 3 x 1" internal thread 3/4" external thread for expansion vessel
Seal	EPDM / PTFE Special Compound

WITA Servomotors SM W05/10

Product description

The WITA servomotors series "W05" and "W10" are used to drive rotary mixers, valves and ball valves. Their modern construction and the top quality of the used materials ensure reliable and silent operation.

Assembly and disassembly can be done without use of tools by pressing the mounting button.

By pressing the release button for hand-shift each position can be manually adjusted. During the operation the direction will be signalized by a LED-display.



Technical equipment

- Torque 5 Nm, 10 Nm or 15 Nm
- rotation angle 90 °
- Rotational speed 2 min / 90 <° (option 15 sec, 30 sec, 1 min, 4 min and 8 min / 90 <°)
- Additional switch possible as an option
- 2-point, 3-point or proportional mode
- suitable for the construction of rotary mixers
- Display of the current valve position
- Direction of rotation indication by LEDs
- no damage to the servomotor when the valve is blocked
- Possibility of manual adjustment of the mixer in a possible position by permanent coupling
- silent and reliable operation
- Maintenance free
- easy and quick installation without tools

Technical data

	5 Nm	10 Nm	15 Nm
Torque:			
Rotation angle:	90 <°		
Turning speed:	2 min / 90<° (15 Sek 90<°, 30 Sek / 90<°, 1 Min / 90<°, 4 Min / 90<°, 8 Min / 90<°)		
Operating mode:	2-point (230 V~, 50 Hz / 24 V~, 50 Hz) 3-point (230 V~, 50 Hz / 24 V~, 50 Hz) Proportional 0 (2) - 10V (24 V ac/dc) / 0 (4) - 20mA (24 V ac/dc)		
Additional switch:	adjustable 0-90<° (250 V~, 3 A)		
Temperature range:	0-50 °C		
Rated power:	2,5-4 VA		
Protection:	Protection class II, protection class IP42		
Dimensions (W × L × H):	84 × 102 × 91 mm		
Weight:	390-630 g	600-860 g	600-860 g
Color / Material:	dark gray / PC		

WITA Servomotors SM W05/10

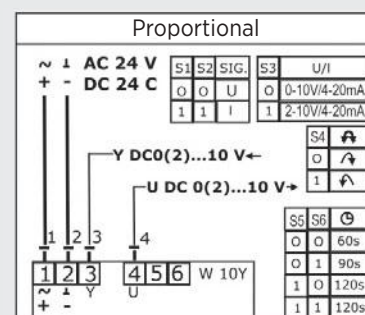
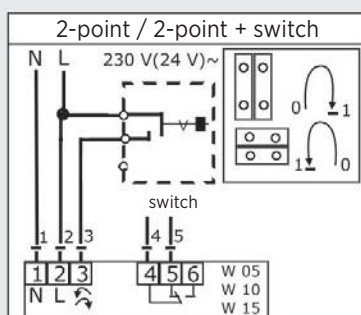
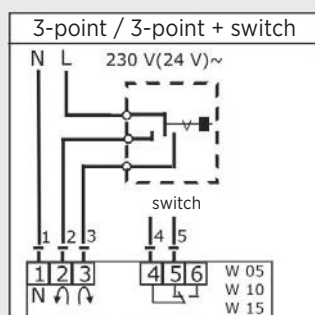
Variants mounting kits

- Esbe, Seltron, Somatherm, Hora, PAW, WITA, Acaso, BRV, IMIT, Ivar, Hoval, Olymp
- Siemens VBI, VBF
- Meibes
- Esbe VRG
- PAW K32, K33, K34
- Danfoss HRB3

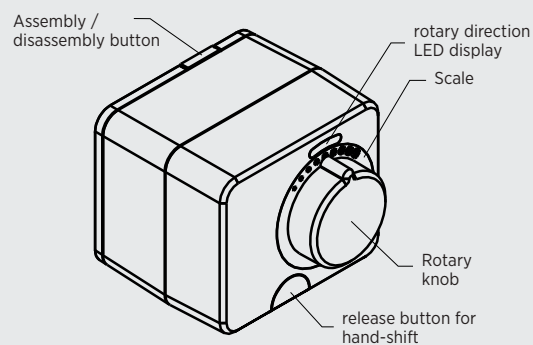
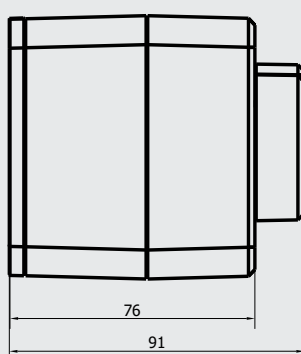
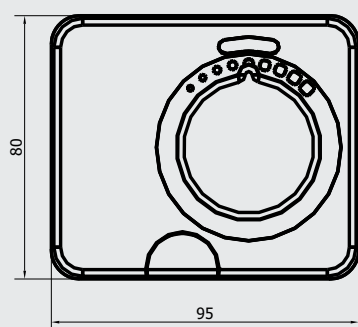
- Ball valve ISO5211, F03, L (9 mm)
- Ball valve ISO5211, F03, L (11 mm)
- Ball valve Belimo R2..xx-S., F04, L (10 mm)
- Herz MV3P, MV4P
- Honeywell V544-543

Mounting kits for other valves on request.

Electrical connection



Dimensions



Compliance with guidelines and standards

The servomotors comply with the following guidelines and standards:

- LVD: Low Voltage Directive 2014/35 / EU,
- EMC: Electromagnetic Compatibility Directive 2014/30 / EU,
- RoHS: Directive on electrical and electronic scrap, banned substances 2011/65 / EU.

PRODUCT DESCRIPTION: Servo motors for mixing valves

APPLIED STANDARDS: EN60730-1, EN60730-2-14

WITA SM 3

Product description

The servomotors of the SM 3 series are suitable for the use in heating and air conditioning technology. they can be controlled through a three-position controller or switch-contact.

Designed with anti-blocking (240h) metal wheelset the design is compact and robust.

The both deliverable torque variants 15 Nm and 30 Nm are designed for mixers with the nominal widths DN 40, DN 50 (15 Nm) and DN 65, DN 100 (30 Nm).

Both versions does have a drive shaft with adjustable claw driver.

The universal console allows the easy installation by various mounting kits on various mixers.

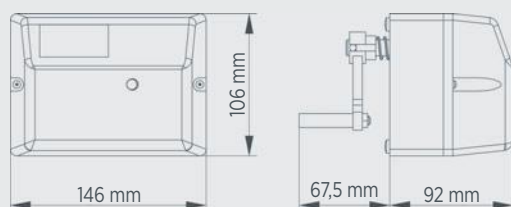
By pressing the release button for manual adjustment each position can be adjusted by hand.

If the manual adjustment is not any longer necessary, the normal mode automatically will be resumed. On request, the motors can be supplied with pre-mounted potential-free limit switch.



Technical data

Operating voltage	230V AC/ 50 Hz 24V AC/ 50 Hz +/-10% (DIN IEC 600038)
Torque	15 Nm 30 Nm
Angle of rotation	90° (factory set) can be adjusted from 15° to 345°
Running time	150 sec/90°
IP protection class	I
Protection type	IP 40
Ambient temperature	0 °C - 50 °C
Storage temperature	-20 °C - 60 °C



Servomotor type	Torque	Versions
SM 3.15	15 Nm	Can be used with a 3-point controller or switch contact for motoric adjustment of mixers
SM 3.30	30 Nm	

WITA SM 4

Product description

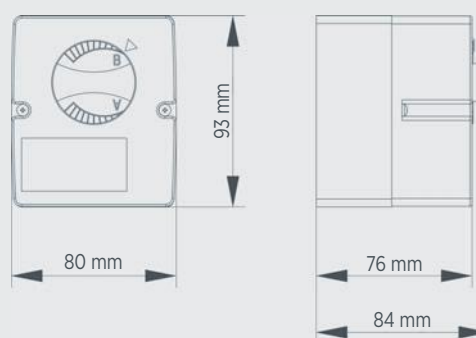
The servomotors of the SM 4 series with hollow drive shaft are available with the torque 6 Nm and 10 Nm. SM 4.6 (6 Nm) with a non-blocking (240h) plastic wheelset can be used for mixers of nominal sizes DN 15 - DN 32. Available in the positioning time 150sec / 210sec / 90 °. SM 4.10 (10 Nm) with a non-blocking (240h) metal wheelset can be used for mixers with nominal widths from DN 40 - DN 50. Available in the operating time 150sec / 210sec / 90 °. Simple centric mounting on different mixers is possible because of various available mounting kits.

The position of the mixer is indicated by the scale on the manual adjustment. This is characterised by a simple handling in emergency purposes. If the manual operation is no longer necessary, the standard mode will take place



Technical data

Operating voltage	230V AC/ 50 Hz 24V AC/ 50 Hz +/-10% (DIN IEC 600038)
Torque	6 Nm / 10 Nm
Angle of rotation	90° (factory set)
Running time	150 sec/ 90°
Running time	210 sec/ 90°
IP protection class	II
Protection type	IP 40
Ambient temperature	0 °C - 50 °C
Storage temperature	-20 °C - 60 °C



Servomotor type	Torque	Versions
SM 4.6	6 Nm	Can be used with a 3-point controller for systems with motor-driven mixing valves.
SM 4.10	10 Nm	
SM 4.6C	6 Nm	Can be used with a 3-point controller (with a solid state output) for systems with motor-driven mixing
SM 4.10C	10 Nm	
SM 4.6R	6 Nm	Can be used in environments where the mixing valve functions as a valve. The operating voltage can be switched on with a thermostat ON/OFF switch or a 2-point controller.
SM 4.10R	10 Nm	

WITA SM 4.10 FR

Product description

SM 4.10 FR actuator with a built-in constant temperature controller has the same components as the SM 4.10 model. Its main functions include maintaining constant return temperature, controlling small areas or areas where it is necessary to maintain temperature at a constant level.

The temperature is selected by a potentiometer placed next to the scale.

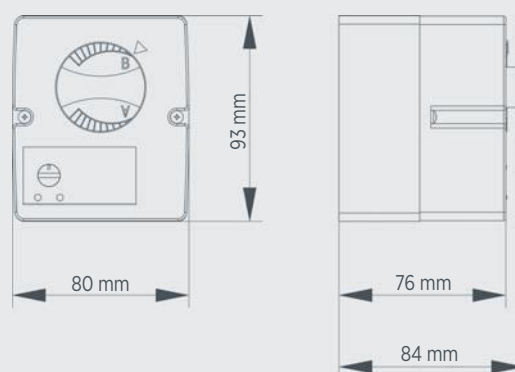
Two LEDs indicate the actuator operating direction.

You can select an operating mode by pressing a switch placed under the actuator casing. Furthermore, you can add remote control and room temperature measurement functions.



Technical data

operating voltage	230V AC/ 50 Hz +/-10% (DIN IEC 600038)
Torque	10 Nm
Angle of rotation	90° (factory set)
Running time	150 sec/90°
IP protection class	II
Protection type	IP 40
Ambient temperature	0 °C - 50 °C
Storage temperature	-20 °C - 60 °C



Fixed setpoint controller type

Versions

SM 4.10 FR H

Motor-driven set-point controller designed to control mixing valve with temperature records in heating systems; with remote control function and temperature log.

Motor-driven set-point controller designed to control mixing valve operation while increasing the return temperature or maintaining supply temperature at a constant level in heating systems.



WITA SM 44

Product description

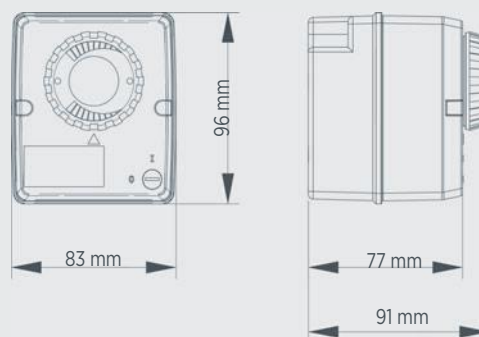
SM 44 actuators are equipped with a quill drive shaft, as well as EASY-Clip function, and are available in two versions, with a torque of 6 Nm or 10 Nm. SM 44.6 (6 Nm) is equipped with plastic non-blocking toothed wheels (240 h) designed for DN15 to DN32 mixing valves. SM 44.10 (10 Nm) version is equipped with metal non-blocking toothed wheels designed for DN40 to DN50 mixing valves.

You can achieve the best fit by using the actuator with Minimix and Maximix. As a matter of fact any WITA mixing valve, or mixing valve of another manufacturer, can be equipped with EASY-Clip components, so that you can fully profit from it. Actuator components include cams adjustable by 15° (range: 15°-345°) and manual adjustment at the front (can be locked). The angle of rotation is factory set to 90°. Optionally, SM 44 model can be delivered with a preassembled potential free limit switch. C series actuators can be used with controllers with solid state outputs. Dimensions are the same for all versions, therefore you can use SM 4 adapters.



Technical data

Operating voltage	230V AC/ 50 Hz 24V AC/ 50 Hz +/-10% (DIN IEC 600038)
Torque	6 Nm / 10 Nm
Angle of rotation	90° (factory set)
Running time	60 sec/ 90°
Running time	150 sec/90°
IP protection class	II
Protection type	IP 40
Ambient temperature	0 °C - 50 °C
Storage temperature	-20 °C - 60 °C



Fixed setpoint controller type	Torque	Versions
SM 44.6	6 Nm	Can be used with a 3-point controller for systems with motor-driven mixing valves.
SM 44.10	10 Nm	
SM 44.6C	6 Nm	Can be used with a 3-point controller (with a solid state output) for systems with motor-driven mixing valves.
SM 44.10C	10 Nm	

WITA SM 44 FR H

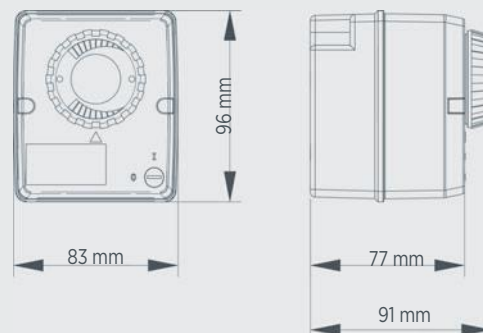
Product description

The fixed-value controller SM 44 FR H has the task of keeping a predetermined temperature value in the flow of a heating system constant by controls a 3 or 4-way mixer via the integrated mixer motor. The controller / mixer motor combination can be combined with suitable adapters with WITA 3 or 4-way mixers and mixers from co-suppliers. The direction of action of the mixer motor (right or left rotation) and the activation of the flow temperature limitation can be set via an internal DIP switch. 2 LEDs in the front of the controller provide information about the current mixer module signal (open / closed). Likewise, sensor errors and a possibly existing temperature limit are displayed via the LEDs.



Technical data

Operating voltage	230V AC/ 50 Hz 24V AC/ 50 Hz +/-10% (DIN IEC 600038)
Torque	6 Nm / 10 Nm
Angle of rotation	90° (factory set)
Running time	60 sec/ 90°
Running time	150 sec/90°
IP protection class	II
Protection type	IP 40
Ambient temperature	0 °C - 50 °C
Storage temperature	-20 °C - 60 °C



Fixed setpoint controller type	Torque	Versions
SM 44.6 FR H	6 Nm	Motor-driven set-point controller designed to control mixing valve with temperature records in heating systems; with remote control function and temperature log.
SM 44.10 FR H	10 Nm	Motor- driven set- point controller designed to control mixing valve operation while increasing the return temperature or maintaining supply temperature at a constant level in heating systems.



WITA Adapters



Adapters SM 3

Item	Mixing valve type
BS 1	WITA Type "H" mixing valve, WITA BLOC T20, T40, T60, Holter, R+S, Viessmann (DN32-50), universal adapter
BS 3A	Centra-Compakt mixing valve, WILO-Mix RS 25/80
BS 4	AXA old, Viessmann (DN15-25)
BS 5A	ESBE, PAW, ACASO, MUT
BS 9	WITA, GFM, Vailant VRM, Honeywell Centra ZR-DR ZA-DA
BS 10	WITA Minimix and Maximix mixing valve
BS 11	Honeywell Centra DRU

Adapters SM 4

Item	Mixing valve type
BS 41A	WITA Minimix mixing valve (6Nm), Maximix (10Nm), WITA Type "H"/WITA BLOC T20, T40, T60 (T60-32 10Nm), UNI-Kompakt
BS 42	Holter 3- and 4-way BR, Kromschröder G3C+G4, Ewers GG+KG-RD DN 20-25
BS EURO	ESBE MG mixing valve (DN15-32) G+F (DN20-40), T+TM (DN20-32) BIV (DN20-25), ESBE HG +H (DN 20-50), ACASO/Thermomix H3+H5 (DN 25) DxxS+CxxS (DN15-32) DxxAG (Dn20-40, DxxK+CxxK (DN40-50) 10 Nm, PAW MS-H mixing valve, modular circuit: K32-38 (Dn25), K32-38 (DN32 10 Nm) MUT VMX (DN25/VM3000 (DN20-32)/Vexve AMV 3- and 4-way
BS 45	L&G, L&S VBI G(31) (DN20-40) VFB21 (DN40-50 10 Nm)
BS 46	Honeywell Corona V_A (DN20-32) – (DN40-50 10Nm), Junkers DWM+VWM (DN20-32)-(DN40-50 10Nm)
BS 413	Honeywell Centra 4-way ZRK (DN 20-40)
BS 414	Honeywell Centra (muff coupling) ZR- DrxxxA DRxxG (DN 15-32 10 Nm)
BS 415	Honeywell Centra 3-way DRU DN 20-25 10 Nm
BS 419	ESBE VRB/VRG
BS 420	Viessmann 3- and 4-way DN 15-50 Dn 10 Nm
BS 422	PAW mixing valves MS-H Modul circuit K 32-38 (DN 25) Modul circuit K 32-38 (DN 32. 10 Nm)

Adapters SM 44

Item	Mixing valve type
BS 441	WITA Minimix mixing valve (6Nm), Maximix (10Nm), WITA Type "H"/WITA BLOC T20, T40, T60 (T60-32 10Nm), UNI-Kompakt
BS EU EC	ESBE MG mixing valve (DN15-32) G+F (DN20-40), T+TM (DN20-32) BIV (DN20-25), ESBE HG +H (DN 20-50), ACASO/Thermomix H3+H5 (DN 25) DxxS+CxxS (DN15-32) DxxAG (Dn20-40, DxxK+CxxK (DN40-50) 10 Nm, PAW MS-H mixing valve, modular circuit: K32-38 (Dn25), K32-38 (DN32 10 Nm), MUT VMX (DN25/VM3000 (DN20-32)/Vexve AMV 3- and 4-way

Accessories SM3, SM4, SM4R, SM44

Item	Mixing valve type
4x0.75 mm ² power supply cable; length: 2 m	SM3
3x0.75 mm ² power supply cable; length: 2 m	(delivered with SM4, SM4R, SM44)
4x0.75 mm ² power supply cable; length: 2 m;	SM3, SM4.10, SM 4.10R, SM 44
limit switch	
2x0.75 mm ² power supply cable; length: 2 m;	
limit switch	
Pre-assembled potential free limit switch (2A)	SM3, SM4.10, SM 4.10R, SM 44
Adjustable by 15°	
Pre-assembled on the mixing valve	

WITA Minimix | Maximix

Product description

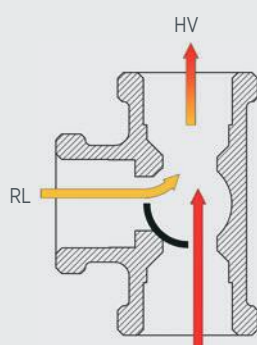
Compact Minimix 3-way and 4-way mixing valves are designed for small and medium central heating systems, whereas Maximix valves are intended for medium and big systems. Valves can be operated manually or set automatically. Together with SM 4.6 actuator (or SM 4.10 actuator) they form a compact unit.

Body, bonnet, shaft and cone are made of brass. The linear characteristic of a temperature is obtained

using profiled outlet holes. Two EPDM O-rings seal the shaft. The 4-way mixing valve can be mounted on any side. When mounting a valve with a distributor, you can adjust it by 45°. The boiler supply is factory set on the left. 3-way mixing valves are intended for straight-through flow paths. Return connection can be placed either on the right or the left side and is factory set on the left.



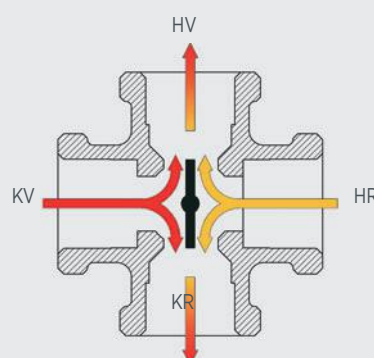
3-way mixing valve performance diagram



3-way mixing valve is intended for a straight-through flow path, and it can also be used for mixing the media or controlling the flow. Return connection can be placed on either side and is factory set on the left.



4-way mixing valve performance diagram



4-way mixing valve can be connected on either side. While operating in the heating circuit, the flow and boiler return are mixed with hot water, consequently the boiler return temperature increases. This is to protect the boiler against corrosion. When mounting the valve with distributors, you can adjust it by 45°. The boiler supply is factory set on the left.

WITA Minimix E

Product description

Minimix E is a compact 3-way mixing valve designed for small and medium central heating systems. It can be operated manually or set automatically. Together with SM44.6 actuator they form a compact unit. Body, bonnet, shaft and cone are made of brass.

The linear characteristic of a temperature is obtained using profiled outlet holes.

Two EPDM O-rings seal the shaft. Mounting SM 44 actuator has never been easier, thanks to the Easy-Clip function.



3-way brass mixing valve

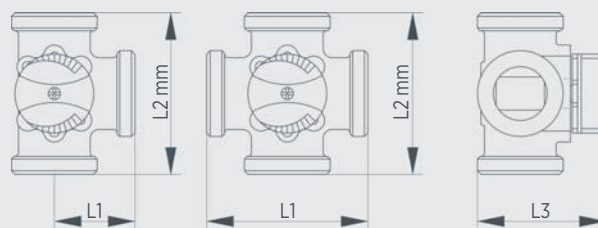
- E = Exceptionally flexible cone. It significantly minimizes leakage, uniformes the flow and considerably prevents the cone from clogging.
- E = Easy-Clip function allows you to mount SM 44 actuator on the mixing valve without using any special adapters or tools.
- E = Energy-saving. Minimized leakage prevents the water from mixing with the hot boiler water when the valve is closed








Available mixing valves

Technical data

Body	58 brass
Seal two	O-rings
Torque	Minimix 0.3 Nm
Torque	Maximix 0.4 Nm
Adjustment range	90°
Max. operating pressure	10 bar
Max. operating temperature	110°C
Medium Water (Max. percentage of glycol: 50%)	

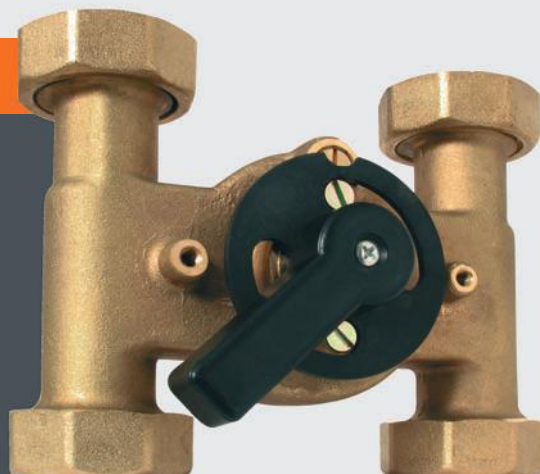


Minimix	Mixing valve type	Connection thread	Nominal diameter	L1 x L2 x L3	Kvs
	3-way 1/2"	1/2" F	DN 15	45 x 90 x 75	4 m³/h
	3-way 3/4"	3/4" F	DN 20	45 x 90 x 75	7 m³/h
	3-way 1"	1" M	DN 20	45 x 90 x 75	7 m³/h
	3-way 1"	1" F x 1 1/2" M	DN 25	45 x 90 x 75	10 m³/h
	3-way 1 1/4"	1 1/4" F	DN 32	45 x 90 x 75	15 m³/h
	3-way 1 1/4"	1 1/2" M	DN 32	45 x 90 x 75	15 m³/h
	4-way 1/2"	1/2" F	DN 15	90 x 90 x 75	4 m³/h
	4-way 3/4"	3/4" F	DN 20	90 x 90 x 75	7 m³/h
	4-way 1"	1" M	DN 20	90 x 90 x 75	7 m³/h
	4-way 1"	1" F x 1 1/2" M	DN 25	90 x 90 x 75	10 m³/h
	4-way 1 1/4"	1 1/4" F	DN 32	90 x 90 x 75	15 m³/h
	4-way 1 1/4"	1 1/2" M	DN 32	90 x 90 x 75	15 m³/h
Maximix	Mischer-Typ	Anschlussgewinde	Nennweite	L1 x L2 x L3	Kvs
	3-way 1 1/2"	1 1/2" F	DN 40	110 x 55 x 85	25 m³/h
	3-way 2"	2" F	DN 50	120 x 60 x 92	40 m³/h
	4-way 1 1/2"	1 1/2" F	DN 40	110 x 110 x 85	25 m³/h
	4-way 2"	2" F	DN 50	120 x 120 x 92	40 m³/h
Minimix E	Mischer-Typ	Anschlussgewinde	Nennweite	L1 x L2 x L3	Kvs
	3-way 1"	1" F	DN 25	45 x 90 x 75	10 m³/h
	3-way 1 1/4"	1 1/4" F	DN 32	45 x 90 x 75	15 m³/h

WITA Type "H" mixing valve

Product description

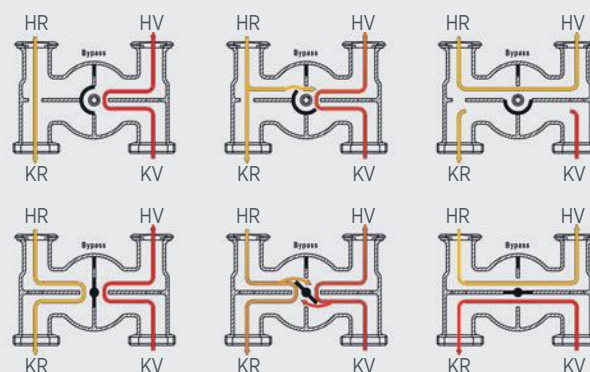
Type "H" mixing valves are designed for small and medium central heating systems. They are 3-way or 4-way valves, which can be operated manually or set automatically. Center to center distance varies depending on the type, and it ranges from 120 mm to 125 mm. The body can be cast iron or brass, whereas the bonnet, shaft and cone are made of brass. H 6 and H 10 mixing valves are equipped with parallel supply/return connections (top – the heating side with flange; bottom – boiler side with a 1 1/2" thread). The supply and return can be used interchangeably. The boiler supply is factory set on the left. The linear characteristic of a temperature is obtained using profiled inlet/outlet holes. Centric placement of the fixing points considerably facilitates mounting. For a better functioning in a low-temperature heating system, the valves have been equipped with a bypass damper with progressive setting.



Bypass function

For a better functioning in a low-temperature (floor) heating system, H 6 and H 10 valves have been equipped with a bypass damper, which is located between the supply and the installation return.

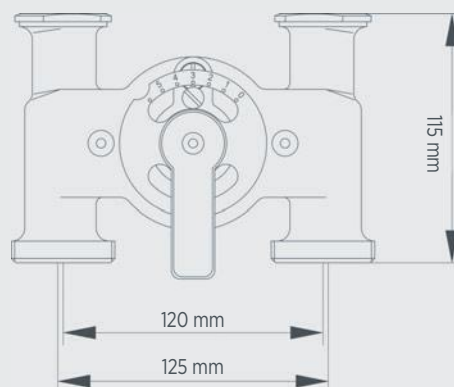
An optimal flow temperature control is ensured even at low temperature heating systems through the full utilization of the mixer control range of 90 ° setting angle.





Available mixing valves

Technical data

Boiler side connection	1 ½" M
Installation side connection	pump flange
Seal	two O-rings
Kvs	8.5 m³/h
Torque	0.3 Nm
Adjustment range	90°
Max. operating pressure	10 bar
Max. operating temperature	110°C
Medium water and glycol solution,	
Max. percentage of glycol:	50%



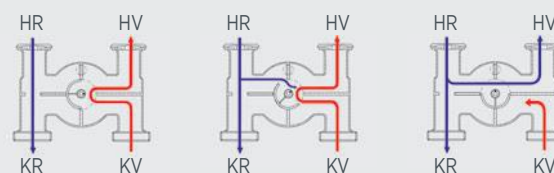
H 6 Mixing valve	Mixing valve type	Bypass	Height	Center to center distance
	H 6, 3-way 1" Ms	x	115 mm	120 mm
	H 6, 4-way 1" Ms	x	115 mm	120 mm
	H 6, 3-way 1" Ms	x	115 mm	125 mm
	H 6, 4-way 1" Ms	x	115 mm	125 mm

H 10 Mixing valve	Mixing valve type	Bypass	Height	Center to center distance
	H 10, 3-way 1" Ms	x	90 mm	125 mm
	H 10, 4-way 1" Ms	x	90 mm	125 mm

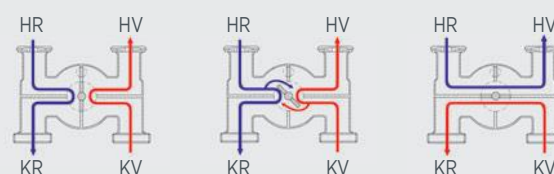
Performance

The hot water from boiler supply is mixed with colder water from the installation return inside WITA H 6 and H 10 mixing valves. Their mixing ratio as well as the cone adjustment influence the supply temperature.

3 - way mixing valves



4 - way mixing valves



ONLY ORIGINAL WITH THE DIAMOND®



WITA® - Wilhelm Taake GmbH

Böllingshöfen 85 | D-32549 Bad Oeynhausen
phone: +49 5734 512380 | fax: +49 5734 1752
www.wita.de | info@wita.de