



## TRIO VALVE



### CATALOGUE NUMBERS

Model	Catalogue Number
Trio Valve 15 mm Female BSP	BVNRIS501
Trio Valve 20 mm Female BSP	BVNRIS701

### DESCRIPTION

HYDROBOSS Trio Valves combine the mandatory functions of isolating valve and non-return valve for the installation of pressurized water heaters, with the additional protection of an integral strainer.

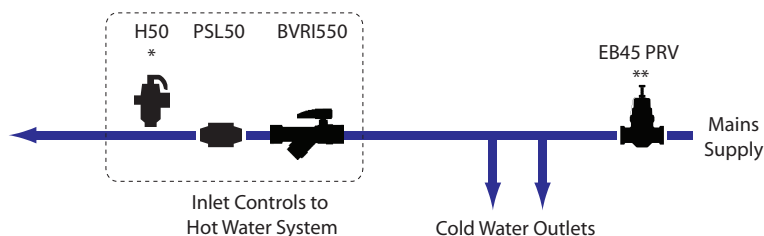
HYDROBOSS Trio Valves prevent the backflow of water from a water heater to the mains line. This serves the dual purpose of protecting the mains supply from contamination and the loss of water that has already been heated. The isolating valve component, in the form of a ball valve, is useful as a means of controlling inlet water supply to unvented storage water heaters. The integrated strainer provides additional protection to the valve components and other valves and devices in the system.

HYDROBOSS Trio Valves are available in 15 mm and 20mm configurations.

### APPLICATION

HYDROBOSS Trio Valves offer non-return and isolating functions with integrated strainer protection in a single valve. HYDROBOSS Trio Valves are suitable for use on water heater systems or wherever these three combined function are required.

### HYDROBOSS Trio Valve Installation (As part of an Inlet Control Group)



\* Drain line must comply with AS3500

\*\* Some states mandate pressure reduction at the mains supply to a domestic installation. Check with your local water authority to ensure compliance.

### FEATURES

- Integral construction of non-return valve, isolating valve and strainer
- One piece unit for tidy, simple and economical installation
- No intermediary joins or fittings
- Less opportunity for leaks and faults
- Tamper-proof non-return valve offers non-return protection for the life of the valve
- Separate service access for the strainer
- Quick cleaning and servicing of the strainer
- Ball valve construction of the isolating function
- Smooth and secure action when isolating water supply
- Dezincification resistant
- Meets Australian Standard for potable water supply
- Suitable for horizontal or vertical installation
- Valve designed to work effectively in either orientation

Non Return Isolating  
Ball Valves

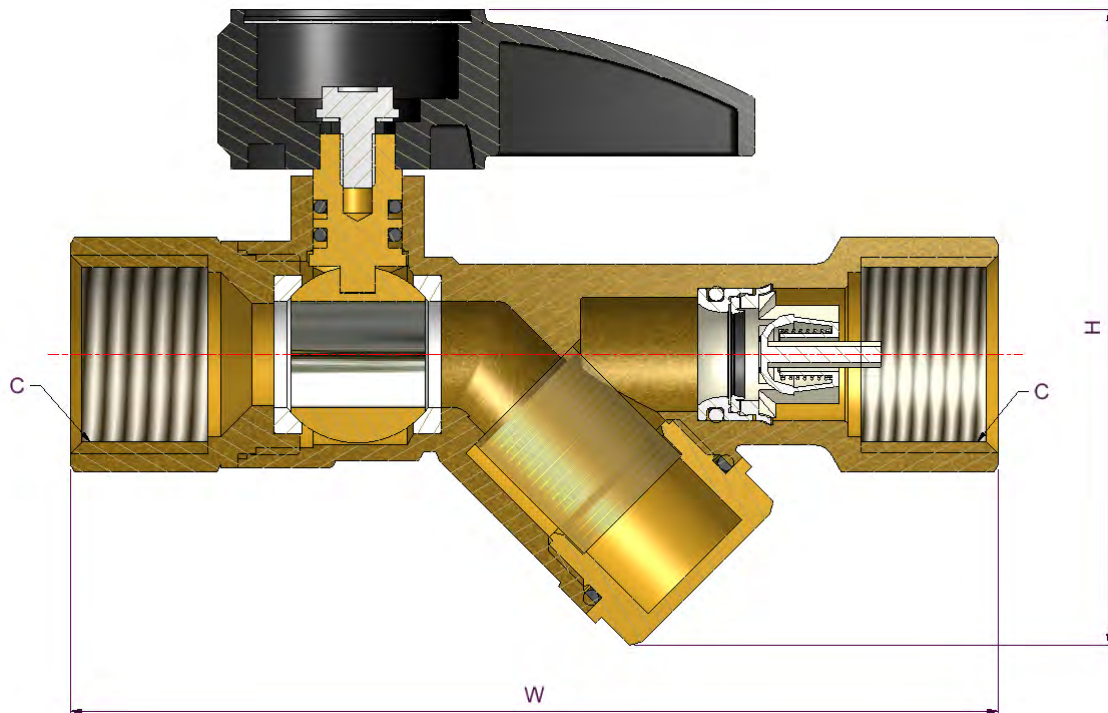
# TRIO VALVE

## MATERIALS

Body:	Forged Brass
Ball Seat:	PTFE
Ball and Stem:	Brass
O-ring:	Nitrile
Check Valve:	Acetal
Strainer:	Stainless Steel
Handle:	UV Stabilised Glass- fiber Reinforced Nylon

## PRODUCT SPECIFICATIONS

Maximum Supply Pressure:	1400kPa
Maximum Supply Temperature: (Peak Temperature)	93 °C
Continuous Service Temperature:	65 °C
Fluid Medium:	Water only



Model	Width (W)	Height (H)	Connection (C)
Trio Valve 15 mm Female BSP	105	72	Rp 1/2
Trio Valve 20 mm Female BSP	126	87	Rp 3/4

## DUO VALVE



### CATALOGUE NUMBERS

Model	Catalogue Number
Duo Valve 15mm Female BSP	BVNI501
Duo Valve 15mm Internal Flare	BVNIA501
Duo Valve 15mm Male Compression	BVNIC501
Duo Valve 20mm Female BSP	BVNI701
Duo Valve 20mm Male Compression	BVNIC701

### DESCRIPTION

HYDRBOSS Duo Valves combine the mandatory functions of isolating valve and non-return valves for the installation of pressurised water heaters.

HYDRBOSS Duo valves prevent the backflow of water from a water heater to the mains line. This serves the dual purpose of protecting the mains supply from contamination, and the loss of water that has already been heated. The isolating valve component is useful as a means of controlling inlet water supply to unvented storage water heaters.

HYDRBOSS Duo valves are available in 15 mm and 20 mm configurations.

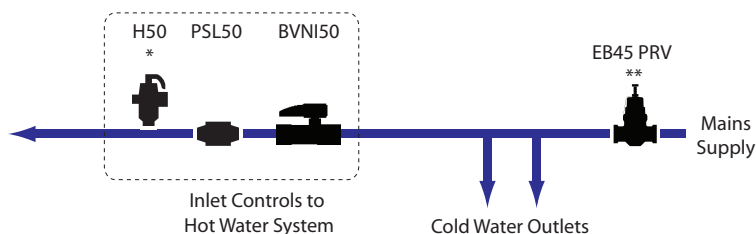
### APPLICATION

HYDRBOSS Duo Valves offer both non-return and isolating functions in a single valve. HYDRBOSS Duo Valves are suitable for use on water heater systems or wherever both non-return and isolating functions are required.

### FEATURES

- Integral construction of non-return valve and isolating valve
- One piece unit for tidy, simple and economical installation
- No intermediate joins or fittings
- Less opportunity for leaks and faults
- Tamper-proof non-return valve
- Offers non-return protection for the life of the valve
- Optional in-line strainer
- Smooth and secure action when isolating water supply
- Ball valve construction of the isolating function
- Dezincification resistant
- Meets Australian Standard for potable water supply
- Suitable for horizontal or vertical installation
- Valve designed to work effectively in either orientation

### HYDRBOSS Duo Valve Installation (As part of an Inlet Control Group)



\* Drain line must comply with AS3500

\*\* Some states mandate pressure reduction at the mains supply to a domestic installation. Check with your local water authority to ensure compliance.

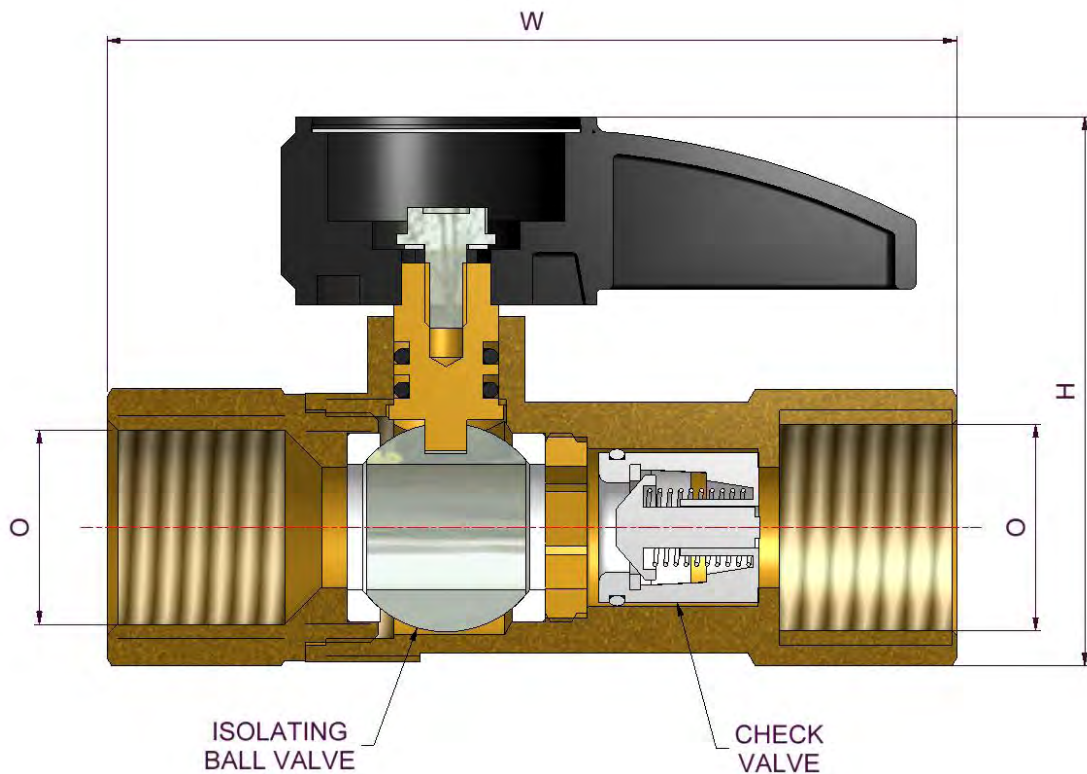
# DUO VALVE

## MATERIALS

Body:	Forged Brass
Ball Seat:	PTFE
Ball and Stem:	Brass
O-ring:	Nitrile
Check Valve:	Acetal
Handle:	UV Stabilised Glass-fiber Reinforced Nylon

## PRODUCT SPECIFICATIONS

Maximum Supply Pressure:	1400kPa
Maximum Supply Temperature: (Peak Temperature)	93 °C
Continuous Service Temperature:	65 °C
Fluid Medium:	Water only



Model	Width (W)	Height (H)	Connection (C)
Duo Valve 15mm Female Pipe Thread	81	52	Rp1/2
Duo Valve 15mm Internal Flare	95	52	DN15Cn Flared
Duo Valve 15mm Male Compression	102	52	DN15Cn
Duo Valve 20mm Female Pipe Thread	96	60	Rp3/4
Duo Valve 20mm Male Compression	107	60	DN20Cn

# HYDROBOSS

## TEMPERING VALVE SOLAR SIZES 15MM - 20MM

### PRODUCT CODES

TV15S DN15 HYDROBOSS Temp Valve Solar

TV20S DN20 HYDROBOSS Temp Valve Solar



### DESCRIPTION

The HYDROBOSS Solar Tempering Valve has been especially designed for installation in residential or commercial premises fitted with a solar hot water system. Outlet temperature is factory set at 50°C and is fully adjustable from 40°C to 50°C. The HYDROBOSS Solar Tempering Valve incorporates an anti-scald thermal shut off system designed to shut the outlet water flow should the cold water supply be interrupted.

### OPERATION

The outlet water temperature may be adjusted by removing the plastic cap and, with the special tool provided, turning the adjustment screw. A loss of the cold inlet supply results in a shut down of the outlet flow to minimise the risk of scalding.

Flow control valves, such as taps, must be installed downstream of the tempering valve to allow on/off operation of fixtures, ie. showers etc.

### SPECIFICATION STATEMENT

*HYDROBOSS Solar Tempering Valve shall be approved to AS4032.2, incorporate hot and cold inlet check valves, and be installed in accordance with the manufacturer's instructions.*

### FEATURES

- Easily retro fitted.
- Adjustable outlet temperature.
- High outlet flow rate.
- Anti-scald thermal shut off system.
- Direct connection to plumbing system.
- Built-in non-return valves on hot & cold inlets.
- Approved to AS4032.2.

### APPLICATION

HYDROBOSS Solar Tempering Valves are ideal for use in applications where a reduction of hot water temperature at specific fixtures is required.

HYDROBOSS Solar Tempering Valves are suitable to use with continuous flow hot water systems.



# TEMPERING VALVE SOLAR

## SIZES 15MM - 20MM

### MATERIALS

- Body** Forged DR brass
- Seals** Viton
- Strainers** 60 mesh, stainless steel

### FITTINGS

- Union nuts** DR brass, BSP thread
- Olives** Copper

### TECHNICAL DATA

#### Ratio of hot & cold supply pressures

- Ideal 1:1
- Maximum 2:1 (either supply)

#### Inlet Pressure Variation

10% (from commissioning)

#### Maximum hot & cold supply pressure

- Static 1600kPa
- Dynamic 500kPa

#### Inlet temperature range

- Cold 5°C - 30°C
- Hot 60°C - 99°C

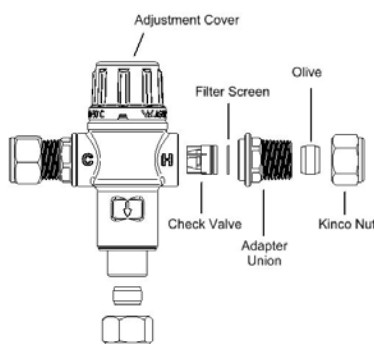
#### Outlet temperature range

- Adjustable 40°C - 50°C
- Factory set 50°C max

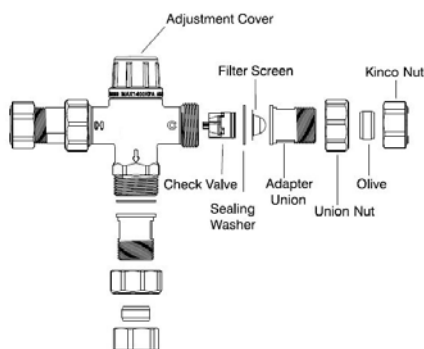
#### Minimum temperature difference between hot inlet & tempered outlet 10°C

Minimum flow rate 4 l/min

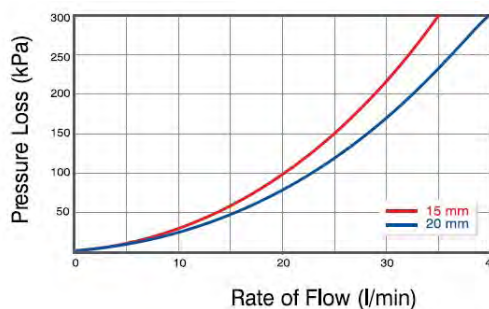
### 15mm Connections



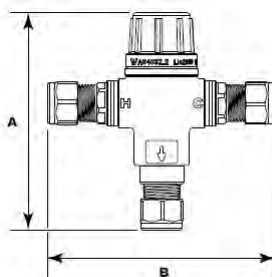
### 20mm Connections



### PERFORMANCE FLOW CHART- HYDROBOSS 15mm and 20mm VALVES



### DIMENSIONS



	A	B
TV15S	126	132
TV20S	151	193

\* Dimensions are indicative only

# HYDROBOSS

## TEMPERING VALVE SIZES 15MM - 20MM

### PRODUCT CODES

TV15 DN15 HYDROBOSS Temp Valve Standard  
TV20 DN20 HYDROBOSS Temp Valve Standard



### DESCRIPTION

The HYDROBOSS Tempering Valve has been especially designed for installation in residential or commercial premises where the hot water supply to bathroom facilities must be maintained at a temperature appropriate for bathing. Outlet temperature is factory set at 50°C and is fully adjustable from 40°C to 50°C. The HYDROBOSS Tempering Valve incorporates an anti-scald thermal shut off system designed to shut the outlet water flow should the cold water supply be interrupted.

### OPERATION

The outlet water temperature may be adjusted by removing the plastic cap and with the special tool provided, turning the adjustment screw. A loss of the cold inlet supply results in a shut down of the outlet flow to minimise the risk of scalding.

Flow control valves, such as taps, must be installed downstream of the tempering valve to allow on/off operation of fixtures, ie. showers etc.

### SPECIFICATION STATEMENT

*HYDROBOSS Tempering Valve, shall be approved to AS4032.2, incorporate hot and cold inlet check valves, and be installed in accordance with the manufacturer's instructions.*

### FEATURES

- Choice of inlet fittings.
- Easily retro fitted.
- Adjustable outlet temperature.
- High outlet flow rate.
- Anti-scald thermal shut off system.
- Direct connection to plumbing system.
- Built-in non-return valves on hot & cold inlets.
- Approved to AS4032.2.

### APPLICATION

HYDROBOSS Tempering Valves are ideal for use in applications where a reduction of hot water temperature at specific fixtures is required.

HYDROBOSS Tempering Valves are suitable to use with all mains pressure hot water storage units.

# TEMPERING VALVE

## SIZES 15MM - 20MM

### MATERIALS

- Body** Forged DR brass
- Seals** Viton
- Strainers** 60 mesh, stainless steel

### FITTINGS

- Union nuts** DR brass, BSP thread
- Olives** Copper

### TECHNICAL DATA

#### Ratio of hot & cold supply pressures

- Ideal 1:1
- Maximum 2:1 (either supply)

#### Inlet Pressure Variation

10% (from commissioning)

#### Maximum hot & cold supply pressure

- Static 1600kPa
- Dynamic 500kPa

#### Inlet temperature range

- Cold 5°C - 30°C
- Hot 60°C - 90°C

#### Outlet temperature range

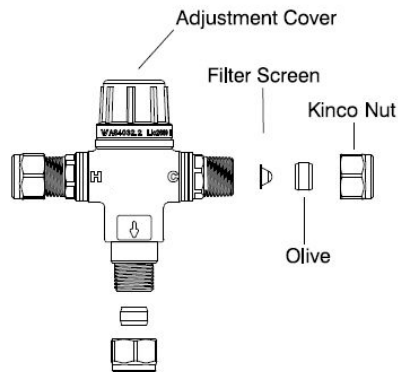
- Adjustable 40°C - 50°C
- Factory set 50°C max

#### Minimum temperature difference between hot inlet & tempered outlet

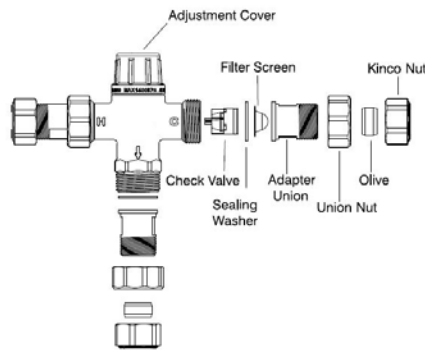
15°C

Minimum flow rate 4/min

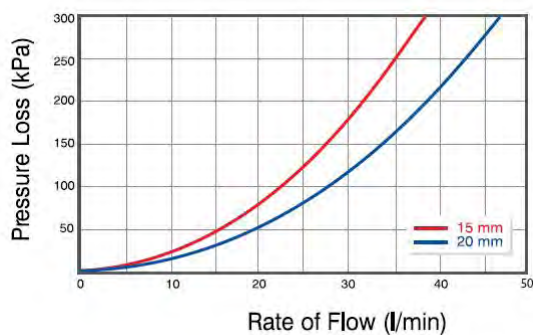
### 15mm Connections



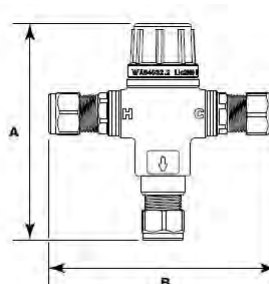
### 20mm Connections



### PERFORMANCE FLOW CHART- HYDROBOSS 15mm and 20mm VALVES



### DIMENSIONS



	A	B
TV15	120	132
TV20	151	193

\* Dimensions are indicative only