



BORNIC

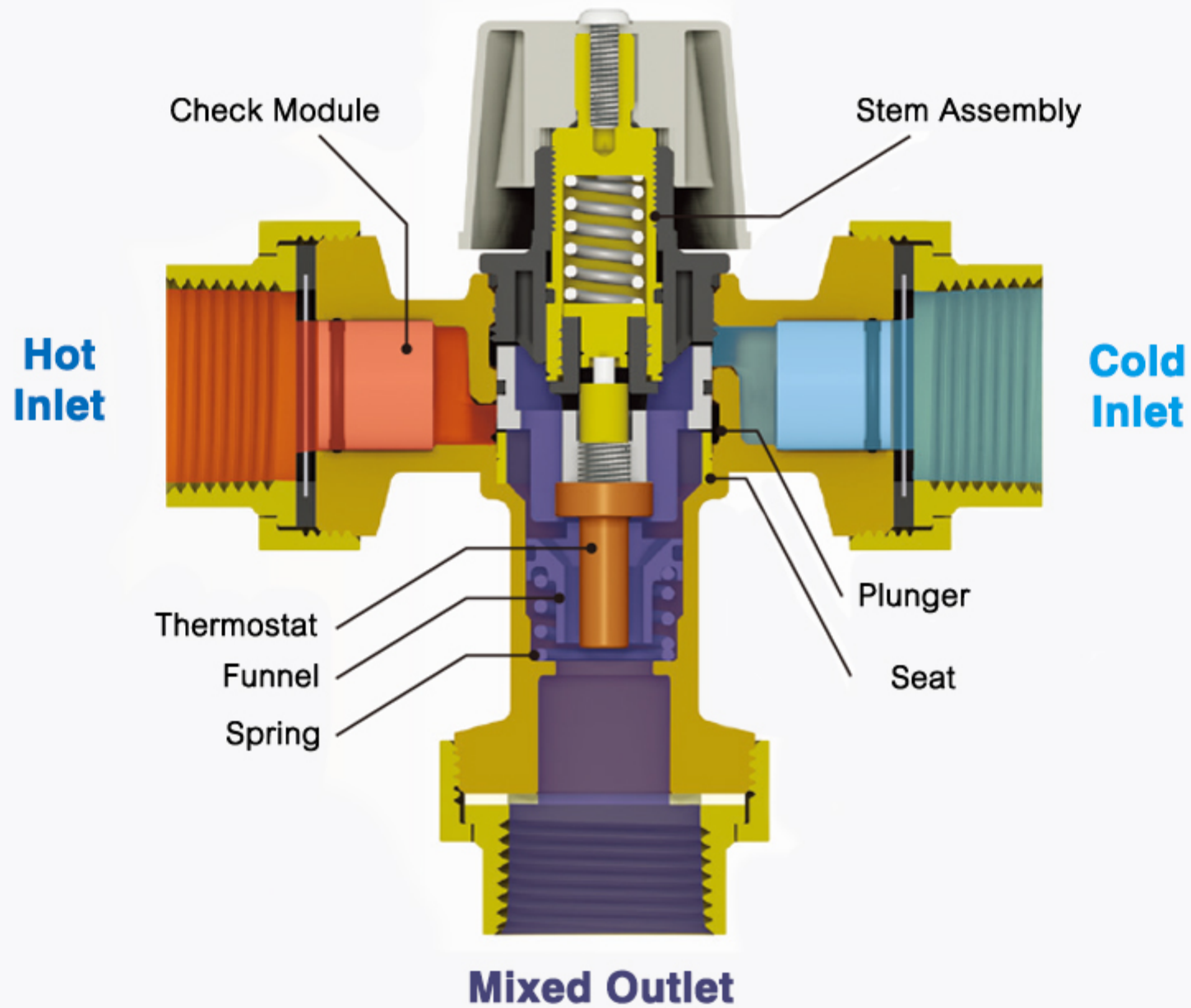
ZTN-03

SERIES



THERMOSTATIC
MIXING VALVE

ZTN-03 SERIES



Brass Valves: Visual Index

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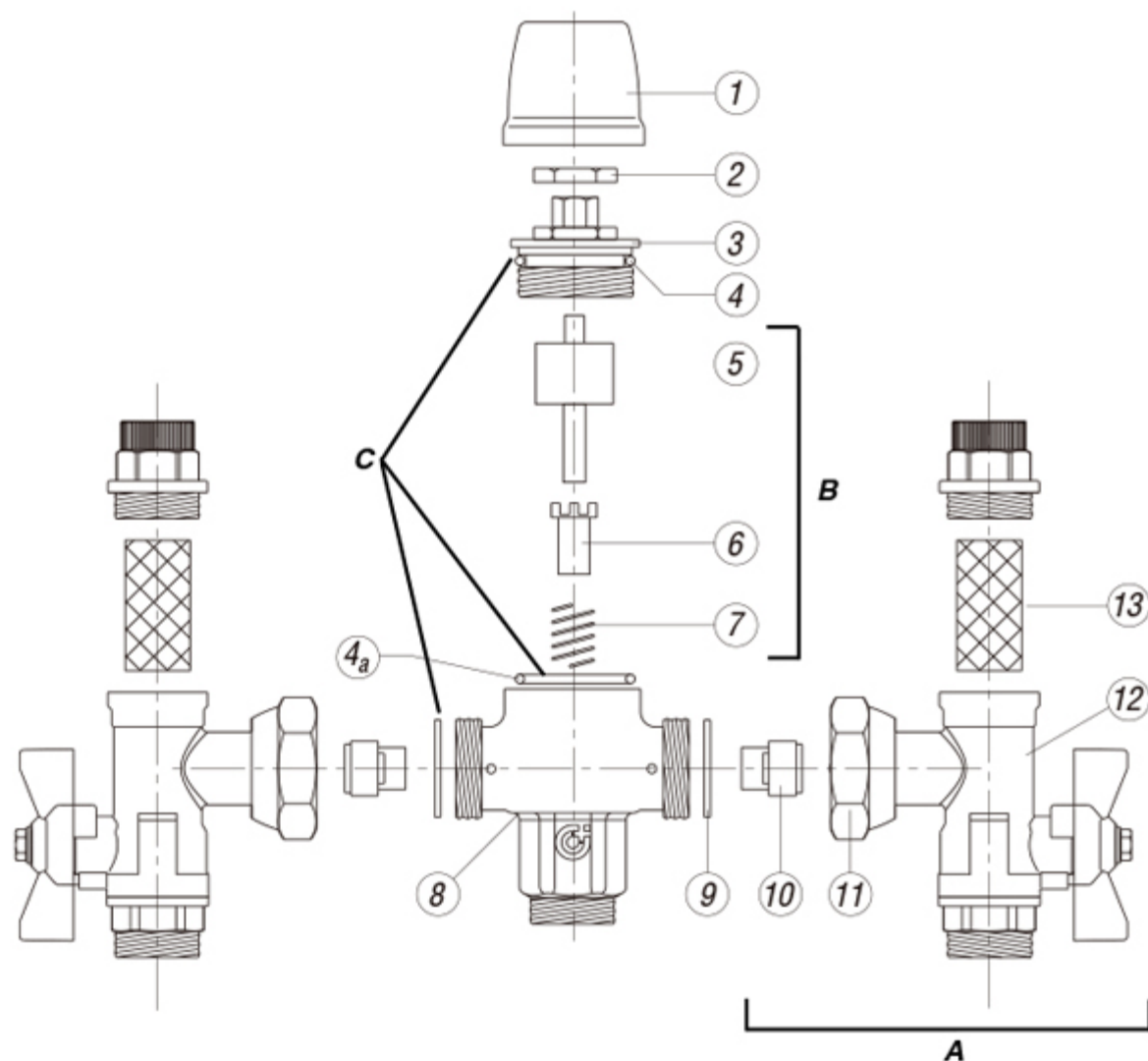
Supports customization of brass, bronze, stainless steel and other materials,
with multiple European product certificates

ABOUT US.....H11



THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



Exploded diagram

- 1.PROTECTIVE CAP
- 2.TEMPERATURE SPINDLE LOCKING NUT
- 3.UPPER BODY
- 4.'O' RING SEAL
- 4a.'O' RING SEAL
- 5.THERMOSTATIC ELEMENT
- 6.FLOW CONVEYOR
- 7.UNDER SPRING
- 8.VALVE BODY
- 9.SEAL
- 10.INSERT CHECK VALVE
- 11.UNION NUT
- 12.ISOLATING VALVE
- 13.INSERT STRAINER



ZTN-03028

Body:dezincification resistant alloy

EN 1982 CB752S

EN 12165 CW724R (DN 20)

Obturator:PPSG40 PSU (DN20)

Springs:stainless steel (AISI 302)

Seal elements:EPDM

Medium:water

Adjustment range:35–65°C

Accuracy:±2°C

Maximum working pressure (static): 14 bar

Maximum hot water inlet temperature: 90°C

Minimum temperature difference between

inlet hot water and outlet mixed water

to ensure optimal performance: 15°C



ZTN-03029

Materials: -Valve body: DZR alloy UNI EN 12165 CW602N

Regulating spindle: DZR alloy UNI EN 12164 CW602N

Internal shutter: PPO

Sealing elements: EPDM

Cover: ABS

Isolating valve: DZR alloy UNI EN 12165 CW602N

Strainer: stainless steel

Maximum hot inlet temperature: 85°C

Maximum working pressure (static): 14 bar

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



ZTN-03030

NPT male union: ½", ¾", 1"
 sweat union: ½", ¾", 1"
 press union: ½", ¾", 1"
 lay length-hot to cold inlet
 (press connections):
 size ½ inch: 3 ⅝"
 size ¾ inch: 3 ⅝"
 size 1 inch: 4 ⅛"
 Body: low-lead brass (<0.25% Lead content)
 Shutter, seats and slide guides: PPO
 Springs: stainless steel
 Seals: Peroxide-cured EPDM
 Suitable fluids: water, glycol solution
 Max. working pressure: 200 psi (14 bar)
 Max. hot water inlet temperature: 200° F (93° C)



ZTN-03031

Sizes: 3/8" (10mm)
 Lead Free4 brass body construction
 Installs easily between the stop valves and faucet
 Includes tamper-resistant locking nut to prevent accidental mis-adjustment
 Built-in check valves prevent migration of hot water to cold and cold water to hot water piping
 Provided with cap for three-port application
 Integral strainer with 40 mesh stainless steel screens to filter out debris
 ASSE 1070, cUPC approved



ZTN-03032

Sizes: 1/2" - 1" (15 – 25mm)
 Solid wax hydraulic principle thermostat ensures dependable mixing of hot and cold water
 Thermostat controls both hot and cold water
 Solder, threaded, PEX or CPVC, Quick-Connect end connection models available
 Adjustment cap with locking feature
 ASSE 1017, 1069, 1070 listed
 IAPMO cUPC listed
 Integral filter washers and check v alves

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



ZTN-03033

Sizes: 1/2" - 1" (15 – 25mm)

Solid wax hydraulic principle thermostat ensures dependable mixing of hot and cold water

Thermostat controls both hot and cold water

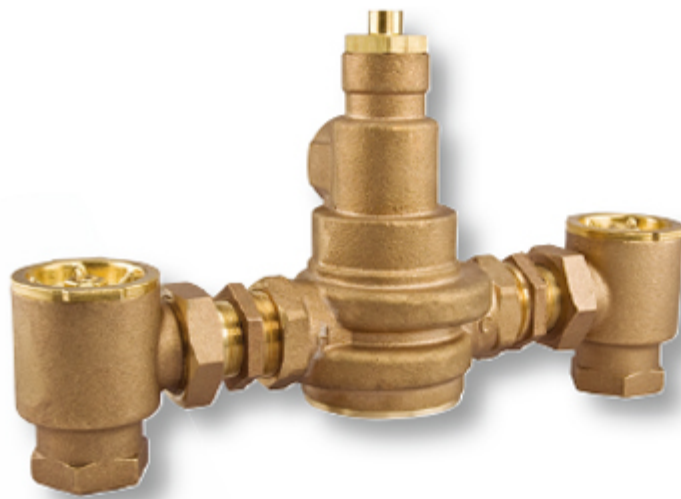
Models available with solder, thread, PEX, Quick-Connect or CPVC end connections

Integral filter washers and check valves

Adjustment cap with locking feature

CSA B125 Certified

ASSE 1017 listed5 and IAPMO UPC



ZTN-03034

Sizes: 3/4" - 2" (20 – 50mm)

Lead Free6 cast copper silicon alloy

Paraffin-based thermostat to sense and adjust outlet temperature

Dirt and lime resistant poppet and seat design

Virtual shutoff if supply pressure fails

Vandal-resistant locking mechanism to secure temperature setting

Available with or without checkstops

ASSE 1017 listed5, cUPC approved



ZTN-03035

Sizes: 1/2" - 3/4" (15 – 20mm)

Hydraulically operated thermostat that opens a spring-loaded check in cold water inlet

Simple maintenance thermostat assembly is easily removed and replaceable as a unit

"Finger Tip" Dial adjustment cap

Sweat or threaded connections

Stainless steel springs

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



ZTN-03036

Sizes: 1/2" - 3/4" (15 – 20mm)

Hydraulically operated thermostat that opens a spring-loaded check in cold water inlet

Simple maintenance thermostat assembly is easily removed and replaceable as a unit

"Finger Tip" Dial adjustment cap

Sweat or threaded connections

Stainless steel springs



ZTN-03037

Rapid failsafe on either hot or cold supply failure

Provides stable mixed water temperature

Tamperproof cap

Part G and D08 compliant

Flat faced union connections for ease of maintenance



ZTN-03038

Rapid failsafe on either hot or cold supply failure

Provides stable mixed water temperature

Tamperproof cap

Part G and D08 compliant

Flat faced union connections for ease of maintenance

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



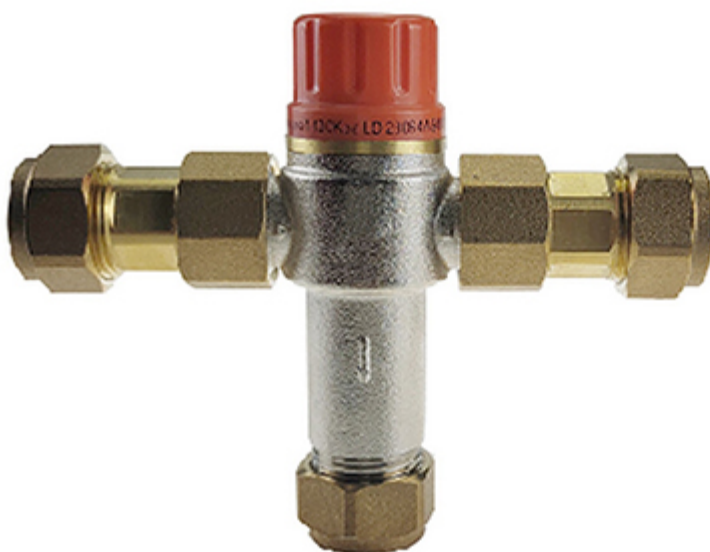
ZTN-03039

- L pattern valve is simple to install and service
- Rapid failsafe on either hot or cold supply failure
- Provides stable mixed water temperature
- Tamperproof setting adjustment
- Protection against dirty systems via integral strainers
- Protection against cross flow via check valves
- HEAT 260 500-15mm Heatguard LS2



ZTN-03040

- Cold water supply temperature: 5°C ~ 20°C
- Hot water supply temperature: 56°C ~ 65°C
- Temperature adjustment range: 30°C ~ 46°C
- The thermostatic controller is supplied factory pre set at 42°C.
- Accuracy of outlet temperature: ±2°C
- Minimum temperature differential: 12°C (between hot supply and outlet temperature)
- Supply pressure,static: 10bar
- Supply pressure,dynamic: 5bar
- Supply pressure imbalance dynamic: 2:1
- Flow rate minimum: 4litres/min
- Valve Specifications: 15mm & 22mm
- Finish:polish and chrome plated or brass color Conform to TMV2 TMV3 and WRAS standard



ZTN-03041

- It allows to dissociate the temperature of the stored hot water from the temperature of the water that is distributed.
- Save the hot water
- Increases the volume of distributed hot water.
- Safety in accordance with regulations.
- Longevity of the installation.
- Thermostatic element on the outlet shaft of mixed water that allows for greater sensitivity/precision ratio.
- Cutting the hot water circuit in case of breakage of the cold water circuit.
- Low pressure drop, allowing high yields.
- Head with locking system.

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



ZTN-03042

Fluids: Water or glycol solutions
 Max. glycole: 30%
 Max. working temp.: 85°C
 Max. working pressure: 10 bar
 Mixed water range: 27°C – 55°C
 Min cold inlet water temp.: 4°C
 Max hot inlet water temp.: 85°C
 Anti-legionella mixed temp. activation: >50°C (set max opening)
 Temp. stability: +/- 3°C
 Kv: 1,1
 Body: Brass CW617N
 Thermostatic cartridge: Plastic
 Strainer: Stainless steel – 450micron
 Gaskets: EPDM
 Knob: ABS (white)



ZTN-03043

Accurate temperature control, even under varying supply conditions
 Every valve has integral checks on the inlets and outlets
 Unique, purpose designed temperature adjusting tool
 Total flow shut off if cold water supply fails
 Certified ASSE 1069 and 1070; CSA B125.3
 Adjustable outlet temperature range: 95-120° F
 Hot supply temperature: 120-180° F
 Cold supply temperature: 39-80° F
 Minimum flow rate: 0.34 GPM; Maximum flow rate: 11.0 GPM
 Maximum pressure: 145 psi



ZTN-03044

Material: Brass main body
 Material Analysis: Cu >= 59%
 Work pressure: 0.05Mpa—1Mpa
 Ideal pressure: 0.1Mpa—0.5Mpa. Installation pressure release valve when exceed ideal pressure.
 Standard pressure: Dynamic pressure 0.3±0.02Mpa.
 Water Pressure Testing: 1.6MPA
 Air Pressure Testing: 0.6MPA
 Cold water supply temperature: 4-29°C
 Hot water supply temperature: 55-85°C
 Proposed water supply temperature: 55-70°C
 Out water temperature range: 20-55°C
 The safety temperature: 38°C
 Safety characteristic: If cold water supply fails, flow rate will be reduced to virtually shut off which avoid the risk of scalding.
 Temperature accuracy: Kept constant ±2°C for the setting.

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



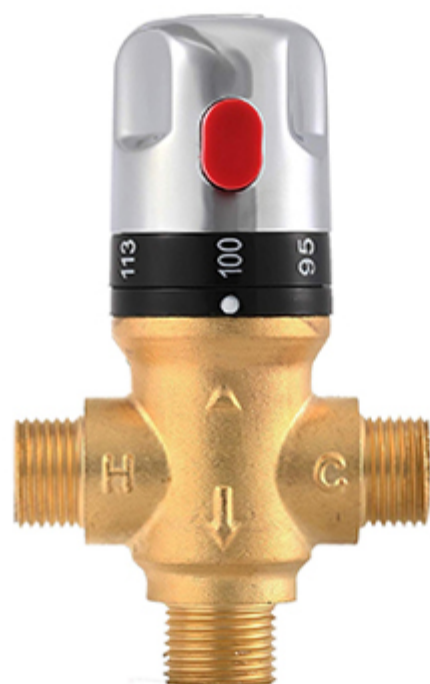
ZTN-03045

Body Material: Solid Brass
 Cartridge: Shape Memory Alloy (SMA)
 Connection: 1/2"NPT tapered threads, American plumbing standards
 Inlet cold Water Temperature Requirement: 34-84°F/1-29°C
 Inlet Hot Water Temperature Requirement: 113-210°F/45-99°C
 Outlet Water Temperature: 68-122°F/20-50°C
 Notice: press red knob and adjust temperature
 Package Includes
 1x Thermostatic Mixing Valve, 3x G1/2 to 1/2NPT adapters



ZTN-03046

Pression de service: 0,05 Mpa - 1 MPa
 Pression idéale: 0,1 Mpa - 0,5 Mpa, plus de 0,5 MPa pour installer un clapet de réduction de pression
 Pression standard: Pression dynamique 0.3±0,02 Mpa
 Température d'alimentation en eau froide: 4-29°C, température d'alimentation en eau chaude : 50-95°C, la température normale d'utilisation recommandée est de 60-70°C
 Plage de température de sortie constante: 20 °C
 Réglez la température du bouton de sécurité: 38°C
 Sécurité et anti-brûlure En cas de perte accidentelle d'eau froide, le débit d'eau mélangée est rapidement réduit à la fermeture
 Température précise Réglez d'abord la température requise, dans les 5 s après que l'eau a atteint la température requise, la température de l'eau fluctue à ±1 °C près



ZTN-03047

This thermostatic mixing valve is easy to install. The thermostat on the valve can be set to 38°C with a safety switch that can be increased to its maximum value, 42°C .
 Ideal for using in the bathroom, washroom, kitchen, wash and etc.
 Usage: Pipe Water Valve, Use for Wash Basin, Bidet, Shower
 Water Pressure: Working Pressure: 0.03-1.0Mpa, Recommend Pressure: 0.1-0.5Mpa
 Temperature: Inlet Cold Water: 5-29°C , Inlet Hot Water: 50-95°C , Mixing Water: 35-45°C ,
 Adjustment Accuracy: ±2°C
 Flow Rate: 11.67L/min in 1 Bar Water Pressure
 Size: G1 / 2" DN15°C

THERMOSTATIC MIXING VALVE

ZNT-03 SERIES



ZTN-03048

the inlet temperature of hot 50 ~ 80 degrees, the cold inlet temperature of 4 ~ 29 degrees
the output temperature 35 ~ 55 degrees

Temperature tolerance: +/- 2 degrees

1/2 inch = DN15, 3/4 inch = DN20, 1 inch = DN25, 1 1/4 inch = DN32, 1 1/2 inch = DN40

Ideal working pressure: 0.1 ~ 0.5 Mpa

Flow rate/pressure/1 kg: 1/2 inch (11.67 L/min); 3/4 inch (26.67 L/min); 1 inch (38.3 L/min)
1-1/4 inch (66.67 L/min); 1-1/2 inch (133.3L/min)



ZTN-03049

Pression de service: 0,05 Mpa - 1 MPa

Pression idéale: 0,1 Mpa - 0,5 Mpa, plus de 0,5 MPa pour installer
un clapet de réduction de pression

Pression standard: Pression dynamique 0.3±0,02 Mpa

Température d'alimentation en eau froide: 4-29°C, température d'alimentation
en eau chaude : 50-95°C, la température normale d'utilisation recommandée
est de 60-70°C

Plage de température de sortie constante: 20 °C

Réglez la température du bouton de sécurité: 38°C

Sécurité et anti-brûlure En cas de perte accidentelle d'eau froide, le débit d'eau mélangée
est rapidement réduit à la fermeture

Température précise Réglez d'abord la température requise, dans les 5 s après que l'eau
a atteint la température requise, la température de l'eau fluctue à ±1 °C près



ZTN-03050

the inlet temperature of hot 50 ~ 80 degrees, the cold inlet temperature of 4 ~ 29 degrees
the output temperature 35 ~ 55 degrees

Temperature tolerance: +/- 2 degrees

1/2 inch = DN15, 3/4 inch = DN20, 1 inch = DN25, 1 1/4 inch = DN32, 1 1/2 inch = DN40

Ideal working pressure: 0.1 ~ 0.5 Mpa

Flow rate/pressure/1 kg: 1/2 inch (11.67 L/min); 3/4 inch (26.67 L/min); 1 inch (38.3 L/min)
1-1/4 inch (66.67 L/min); 1-1/2 inch (133.3L/min)

Bornic Family of Brands

BORNIC(zhejiang Bornic Fluid Control Co.,Ltd.)was established in 2005 in Yuhuan City,zhejiang Province. With 50 employees boasting nearly 20 years of industrial experience,our 5000-square-meter facility strictly adheres to Iso quality management systems.

Our products hold EU CE,ACs,WARs,and CUPC certifications,ensuring quality and safety. With an annual output value of \$ 5 million USD, our insured products cater to global markets, adhering to European and other standards with customized services available.Specializing in premium brass fittings and valves,our innovative approach has garnered support in over 50 countries.



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