

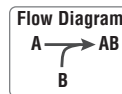
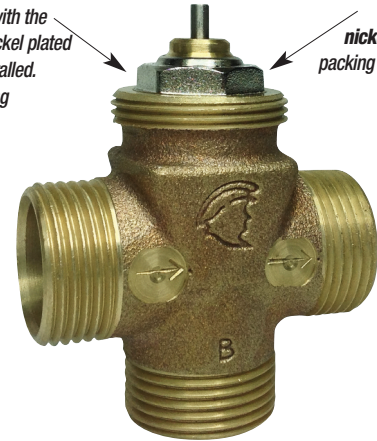
LIFETIME WARRANTY
ON VALVE BODIES
SPARTAN PERIPHERAL DEVICES

5 YEAR WARRANTY
ON CARTRIDGES
SPARTAN PERIPHERAL DEVICES

V321 Series 3 Way Mixing Union Valve Body with Union Connections on all ports

Spartan Peripheral Devices 3 way V321 mixing valve body cavities, will accept Spartan 1/2" or 3/4", male NPT or solder type unions, on all ports. They are designed for hot or chilled water and 50% glycol with a standard inline replaceable EX type cartridge. *For specifications see Spartan cartridges data sheet.* They are compatible and interchangeable with the complete line of Spartan control valve actuators (wireless, electric, electronic and pneumatic). *For specifications see Spartan actuators data sheet.* The commercial application globe valve bodies utilize low zinc anti dezincification bronze and are guaranteed for the life of the building.

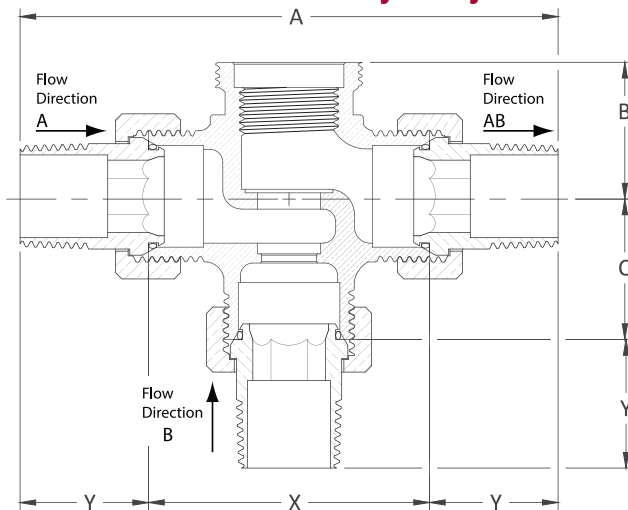
Mixing valve shown with the removable EX type nickel plated packing cartridge installed. To remove use packing wrench AV08. *EX type nickel plated packing cartridge*



General Specifications

Body Material	Low zinc bronze, alloy C84400
Pressure Rating	ANSI 250 (400 PSI at 32°F to 150°F, 250 PSI at 250° F) PN25
Max. Test Pressure	1200 PSI (81 bar)
Max. ΔPressure	50 PSI (3.5 bar) can be exceeded but with possible water noise
Valve Stem	"Mirror-maker" burnished 303 stainless steel stems
Rangeability	100:1
Stem Travel	5/32" (4mm)
Stem Position	UP = flow from bottom port B to common side port
CV	Select EX cartridge with CV 2.0, 3.0

Dimensions: V321 Valve Body Cavity



Select to include with standard nipple:
V321-12N for 1/2" threaded union. V321-34N for 3/4" threaded union.
Select Spartan alternative union types from dimensional table.
You can mix union's size or type on the same valve body.

DIMENSIONS FOR 1/2" ASSEMBLY (inches)

Standard V321-12N assembly with 1/2" threaded union					
A	x	y	B	C	UNION TYPE
4-1/4	2-1/4	1	1-1/8	1-1/8	AV6112
For different sized union, order V24020 cavity & union below					
5-1/4	2-1/4	1-1/2	1-1/8	1-1/8	AV6112D
5-3/4	2-1/4	1-3/4	1-1/8	1-1/8	AV6112E
6-1/4	2-1/4	2	1-1/8	1-1/8	AV6112F
6-3/4	2-1/4	2-1/4	1-1/8	1-1/8	AV6112G
7-1/4	2-1/4	2-1/2	1-1/8	1-1/8	AV6112H

Standard V321-12S assembly with 1/2" solder union (3/8" pipe)					
A	x	y	B	C	UNION TYPE
4-1/4	2-1/4	1	1-1/8	1-1/8	AV6312

DIMENSIONS FOR 3/4" ASSEMBLY (inches)

Standard V321-34N assembly with 3/4" threaded union					
A	x	y	B	C	UNION TYPE
5-1/4	2-3/4	1-1/4	1-1/8	1-1/8	AV6134
Standard V321-34S assembly with 3/4" solder union (3/4" pipe)					
6-3/4	2-3/4	2	1-1/8	1-1/8	AV6334

Weight: 8.5oz (240g)

Installation and Flow Direction

IMPORTANT: When installing it is essential that the flow follows the arrow that is embedded into the valve body casting.

Stem up position - the flow is from the bottom port B to a common side port AB.

Stem down position - the flow is from the side port A to a common side port AB. The packing, plunger and cartridge can be easily replaced by using the AV08 Packing Wrench (except for older models with EM type packing cartridge (plain bronze) which are not inline removable).

HOW TO ORDER

- Choose your valve body.
- Choose an internal cartridge according to your application and CV.
See Spartan cartridges data sheet.
- Choose an actuator.

For a complete overview, see our Zone Valve Selection Guide.



Actuator Type - see Data Sheets

Cv Value 2.0, 3.0

Cartridge Type - see Data Sheet

N = threaded union, S = solder union, □ = no union (order optional union separately)

Union Size - 12 = 1/2", 34 = 3/4"

Valve Body Type - 3 way union all 3 ports

Valve Assembly Type - Select E for Electric, P for Pneumatic, or T for Thermostatic