



Series

T2AxxxxEB1: 2-way, 1/2", threaded unions, NPT

T2BxxxxEB1: 2-way, 3/4", threaded unions, NPT

T2CxxxxEB1: 2-way, 1", threaded unions, NPT

Features

- 2-way valves available in 1/2", 3/4" and 1"
- Small dimensions allow for easier installation
- Low Zinc anti-dezincification bronze
- Field replaceable and interchangeable internal cartridges with a wide selection of Cv (Kv) values
- Packings with burnished mirror finish stainless steel stems
- Micro machined accurate parabolic, characterized plugs
- Available with NPT threads
- Made in Canada

Models

| Cv | Kv | 1/2" NPT | 3/4" NPT | 1" NPT |
|------|-------|------------|------------|------------|
| 0.5 | 0.43 | T2A0005EB1 | - | - |
| 1.0 | 0.86 | T2A0010EB1 | T2B0010EB1 | - |
| 1.5 | 1.30 | T2A0015EB1 | T2B0015EB1 | - |
| 2.0 | 1.72 | T2A0020EB1 | T2B0020EB1 | - |
| 2.5* | 2.15* | T2A0025EB1 | T2B0025EB1 | - |
| 3.0 | 2.58 | T2A0030EB1 | T2B0030EB1 | - |
| 3.5* | 3.00* | T2A0035EB1 | T2B0035EB1 | - |
| 4.5* | 3.87* | - | T2B0045EB1 | - |
| 6.0 | 5.16 | - | - | T2C0060EB1 |
| 6.4* | 5.50* | - | - | T2C0064EB1 |
| 8.0 | 6.90 | - | - | T2C0080EB1 |
| 9.0* | 7.75* | - | - | T2C0090EB1 |

***Note:** These Cv/Kv values are linear flow. All other cartridges are Equal% flow.



Union Connection on Both Ports



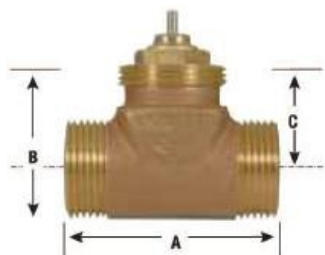
EB: Balanced



Technical Data

| Specification | | All Models |
|----------------------------|--------------------|--|
| Actuator Compatibility | | All Neptronic® VM and VT series actuators |
| Connection | | Female Threaded Ports In & Out |
| Thread Type | | NPT |
| Maximum test pressure | | 1200 PSI [8275 kPa] |
| Maximum Close-off pressure | | 100 PSI [690 kPa] |
| Differential pressure | | 50 PSI [345 kPa] can be exceeded, but with possible water noise |
| Nominal Stroke | | 5/32" (4mm) |
| Stem position | | Up = valve open (default position); Down = valve closed |
| Rangeability | | 100:1 |
| Media | | Hot water (rated @ 250°F [120°C]) – Chilled water – Water with antifreeze agent (glycol) max. 50% |
| Pressure class | | ANSI Class 250 (PN25) |
| Materials | Body | Low zinc bronze, alloy C84400 Contains less than 10% Zinc, which prevents dezincification. Dezincification can cause pores to form in the alloy and results in leakage over time. |
| | Stem | "Mirror – maker" burnished stainless steel |
| | Internal Cartridge | Seat: integral bronze; Disc./plunger: EPDM/brass; Spring: stainless steel; Packing: double EPDM |
| Country of fabrication | | Made in Canada |

Dimensions & Weight



| Size & Weight | 1/2" | 3/4" | 1" |
|---------------|-----------------|-----------------|-----------------|
| A | 2.29" (58.17mm) | 2.70" (68.58mm) | 3.88" (98.50mm) |
| B | 1.60" (40.64mm) | 2.20" (55.88mm) | 2.84" (71.10mm) |
| C | 1.09" (27.69mm) | 1.09" (27.69mm) | 1.80" (45.70mm) |
| Weight | 8.5oz (240g) | 12.7oz (360g) | 33.2oz (940g) |

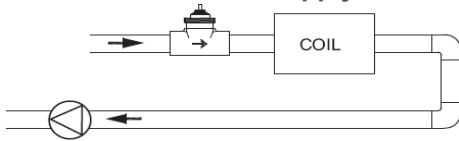


Mechanical Installation

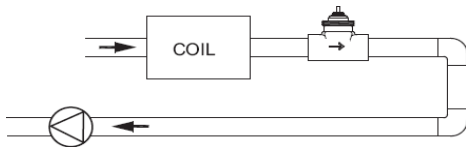
Valve Body

Install the valve body on the supply side or return side of the coil according to the direction indicated on the valve's body cavity. The terminal unit bodies are normally set to OPEN. The open and close status is dependent on the position of the stem.

Valve installed on the supply side of the coil



Valve installed on the return side of the coil

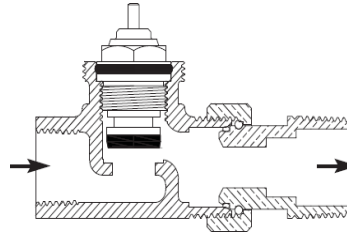


Stem Position

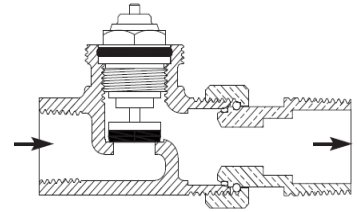
The position of the stem indicates the status of the valve. If the stem is up, it indicates that the valve is open. If the stem is down, it indicates that the valve is closed.

If the terminal unit body is used with direct acting actuators, the valve functions as a normally open valve assembly. If the terminal unit body is used with reverse acting actuators, the valve functions as a normally closed valve assembly.

Stem Up = Valve Open

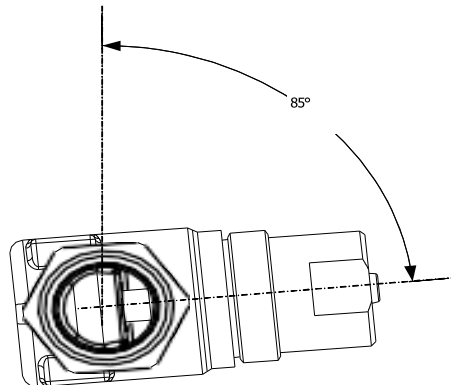


Stem Down = Valve Close



Orientation

Maximum 85 °



Caution:

Risk of leakage. Do not install valve at an angle of more than 85° from a horizontal position.

Risk of damage to the valve. Install a strainer upstream from the valve to prevent damage.

EB Type Cartridge



All valve body assemblies are service and maintenance free. They possess interchangeable internals such as replaceable cartridges for specific applications with variations of parabolic or linear characterized globe plungers. The Cv (Kv) values can be changed by changing just the cartridge. It does not require removing the valve from the line.

The capability of close-off pressure increases with an increase in the actual differential pressure across the valve. The higher the ΔP , the higher the close-off pressure. Theoretically, the close-off pressure is known to increase to the limit of the valve body rating.



Recycling at end of life: please return this product to your Neptronic local distributor for recycling. If you need to find the nearest Neptronic authorized distributor, please consult www.neptronic.com.