## AQTWV

## **Frequently Asked Questions**

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## TWO-WAY VALVES



1) Does Two-Way valve work for many years inside I.G. unit? If yes, how long?

Two-way valve works once nominal pressure difference between inside and outside insulating glass is reached: about 80 mbar. Life cycle must be calculated by the glass designer, because once I.G. unit is installed, it is rarely subjected to pressure differences. In any case, please refer to EN 13474-3.

2) Which altitude does Two-Way valve start "working" at?

Two-Way valve working is connected with mbar difference between inside and outside insulating glass. As a matter of fact, pressure varies according to altitude (about 10 mbar every 100 m) and weather.

3) Does Two-Way valve suit any existing pressure? What does the actual pressure of Two-Way valve "80 mbar +/- 10 mbar" refer to? Does it come from practical results in I.G. field?

80 mbar corresponds to the difference in pressure between inside and outside insulating glass, which makes the valve open and work. Such value has a tolerance of +/- 10 mbar. The insulating glass must be always calculated as per point no. 16 listed hereunder and EN 13474-3.

4) Must Two-Way valve tube be cut once I.G. unit is sealed?

Yes, it must be cut at secondary seal (generally polysulphide).

5) Must Two-Way valve tube be closed once I.G. unit is sealed? If so, how?

Two-Way valve tube closure depends on the design made by the customer and/or the insulating glass designer, who have for sure considered life cycle, installation, functionality, etc. of insulating glass. Valve tube can be closed by the supplied **plugs**. However, we remind you that if you close the tube, the valve does not work any longer (it does not adjust pressure differences any longer).

- 6) If Two-Way valve is not closed, may air (and consequently humidity) come in and molecular sieves become saturated?

  Once insulating glass is sealed, the valve is normally closed, unless insulating glass is subjected to pressure changes (e.g. further transport of insulating glass set inside house-hold appliance).
- 7) What kind of spacer bars can Two-Way valve be installed in?

It can be installed in all kinds of spacer bars. Please, read assembling instructions.

8) What is the spacer minimum width where Two-Way valve can be installed in?

Two-Way valve can be installed in spacers of 9,5 mm minimum width.

9) And what about the maximum one?

There are no limits for maximum width.

10) Can Two-Way valve be indifferently installed horizontally or vertically in I.G. unit?

<u>THE TWO-WAY VALVE WORKS IN VERTICAL POSITION ONLY</u> (in all stages: installation in I.G. unit, transport of I.G. unit, final application of I.G. unit at destination, etc.), which means it does not work if installed in inclined or parallel to ground I.G. units or when I.G. units are transported to &/or assembled at destination horizontally.

11) Where exactly (up or down)?

No matter where, but ALWAYS VERTICALLY and never in inclined or parallel to ground glasses.

- 12) Is Two-Way valve visible from the outside of I.G. unit? Yes, it is.
- 13) Can glue or silicone be used to fix Two-Way valve?

**Absolutely NOT.** 

14) Is it possible to install Two-Way valve in a I.G. unit with a secondary seal of silicone? Do you have any statement concerning the compatibility with silicones?

The valve is equipped with a silicone tube. We do not actually know what kind of sealing silicone you would like to use; therefore, we cannot guarantee any compatibility between the silicone of the valve tube and that one you are using to seal. Before application, we suggest to check if your sealing silicone is compatible with other plastic materials.

15) Can Two-Way valve be set in TRIPLE-GLAZED UNITS?

ALWAYS CONSIDER THE PEAK PRESSURE RESULTING FROM PRESSURE COUPLING OF SINGLE CAVITIES. USE ONE TWO-WAY VALVE PER CAVITY.

16) Can Two-Way valve be set in I.G. units filled with argon?

Yes, it can, but it is <u>NOT</u> possible to put in or take out argon by the two-way valve. In any case, it is recommended to define life cycle of I.G. unit first.

17) Must glass thickness be calculated before installing Two-Way valve?

Yes, it must, because Two-Way valve serves the only purpose of adjusting pressure inside insulating glass. As a matter of fact, Two-Way valve does not exempt from making correct calculation of glass thickness or from using the related safety coefficients linked to final application.