

# NA005022



Engineering
GREAT Solutions

Control valves for general applications

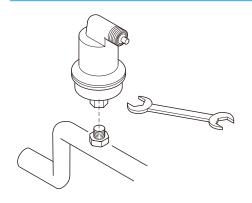


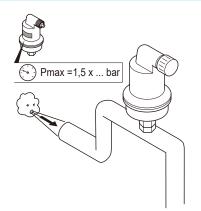
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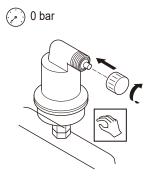
### **Concept of Vent Valves**

Air and other gases collect at the highest point within a system. However, a system will often have several highest points. Trapped air can obstruct the flow at these points or even stop it altogether. If gases are not removed, or are not removed sufficiently, it can lead to commissioning problems, frequent manual venting, deteriorating pump performance and so on. Eventually, this will cause damage to expensive system components and lead to system and process malfunctions or even total failure, things which can be avoided if tackled individually but which need to be followed up immediately











Standard design

Neptune automatic air vents are designed to remove free air and trapped air bubbles quickly and effectively. If a system has to be drained, the Neptune ensures fast and reliable venting.

The Neptune is the reliable and worry-free solution ideal for:

- filling and venting systems;
- making and keeping the high in pipe systems air-free;
- preventing air pocktes from forming.

High-pressure/hightemperature design

### **Benefits**

The combination of the characteristics listed below ensures that the automatic Neptune will not leak during its very long life:

- The special valve construction means that the valve closes completely.
- The special valve seat has a very long life expectancy.
- The robust floats are made of solid plastic so cannot rupture.
- The significant gap between the valve and the water (at least 40 mm) prevents valve contamination which is one of the main causes of leaks.
- The 1/2" connection prevents the pipette effect.
- A complete range, suitable for various pressures and temperatures.
- Three-year guarantee.

### Total solutions

Neptune offers an extensive range of total solutions for HVAC and process systems: accessories, additives and advice to ensure optimum efficiency and guarantee the quality of the system fluid. These products and services reduce faults, wear and maintenance as well as improve system performance and lower energy consumption. And what is more, these total solutions provide major benefits and save time during the design, installation, start-up and commissioning of systems.



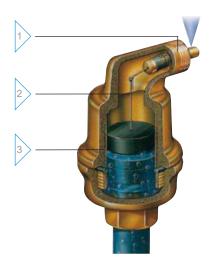
Stainless steel design

The valves designed and manufactured by Neptune provide ideal and correct solutions in the recommended application fields at the lowest purchasing and maintenance cost, able to meet and exceed the specified standards developed through years of experience, researches and laboratory testing.



### **Applications**

The Vent valves should be mounted at the highest point of the system and at any points where air pockets may occur. The vent valve is to be installed vertically with the connection at the bottom.



TYPE	d	Material	Float material	Max. opera- ting pressure	Max. temperature	Article number
	G½	Brass	PP	10 bar	110°C	NA00500
Neptune	G1/2	Brass	TPX	10 bar	180°C	NA00500T
Neptune HT	G½	Brass	AISI 304	10 bar	180°C	NA00501T
Neptune Solar	G1/2	Brass	TPX	10 bar	180°C	NA00500S
Neptune HT/HP	G½	Brass	TPX	25 bar	150°C	NA005011
Neptune HP	G½	Brass	PP	16 bar	110°C	NA00502P
Neptune HT	NPT1/2	AISI 304	TPX	10 bar	200°C	NA00502T
Neptune HT SST	G½	AISI 304	TPX	10 bar	180°C	NA00502S
Neptune HTP SST	G½	AISI 304	TPX	25 bar	200°C	NA005022
Neptune HT SST	G½	AISI 304	AISI 304	10 bar	180°C	NA00503S
Neptune Solar SST	G½	AISI 304	TPX	10 bar	180°C	NA00503



- Other materials, pressures and temperatures are available on request.
- 1. The automatic air vent is guaranteed not to leak and cannot be closed. The N comes with a thread for connecting a vent pipe as standard.
- 2. Specially constructed air chamber prevents floating dirt from reaching the valve and provides sufficient volume to absorb pressure fluctuations.
- 3. The solid construction guarantees a very long life.

For a completely air-free system, you need to install Neptune Vent deaerators or vacuum degassers as well as Neptune air vents.

Neptune air vents are suitable for water and water/glycol mixtures (max. 50%). They can be used in combination with locally approved chemical additives and inhibitors that are compatible with the materials applied within the system. Not suitable for drinking water installations.

The standard Air-Park is suitable for a temperature range of 0 to 110 °C and for an operating pressure of 0 to 10 bar. The Air-Park housing is made of brass. The connection is a 1/2" female thread. Other materials, pressures and temperatures are available on request.





#### Custom-made solutions and OEM applications

Neptune offers not only standard products. If necessary, we work with customers to produce custom-made solutions. These are based on users' specific requirements. If desired, these can also be supplied as OEM products.

#### Solar applications

Neptune also offers an extensive range of air vents and deaerators for solar applications.



#### Digital support

Product data sheets, standard specification texts, line drawings, CAD symbols, project descriptions, etc. are available via our website.





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<sup>\*</sup> For any data errors or questions, please contact the manufacturer.
\* Neptune reserves the right to change drawings, content, modifying or data updating herein without further notice.