



# Elora

**Pneumapole**

**Festo VTUG**

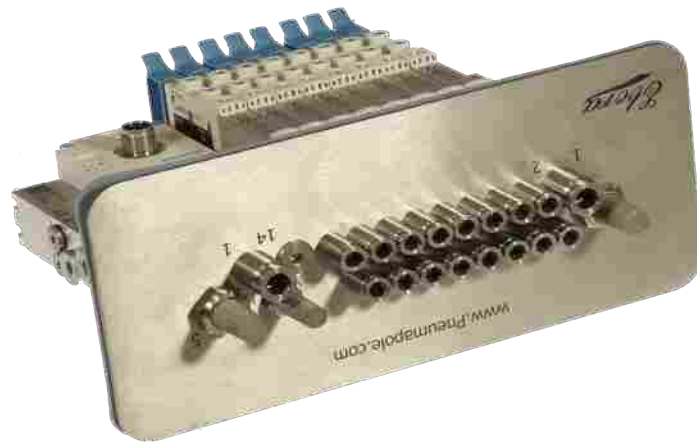


# Pneumapole

Ebora Process Automation, together with Festo, developed the so-called Pneumapole for pneumatic valve islands in the hygienic industry. The Pneumapole is a stainless steel feed-through plate that allows the valve island to be hygienically integrated from the outside of the control cabinet. The electrical connections of the valve island are inside the cabinet, while the pneumatic connections and hoses are outside the cabinet.

The Pneumapole is thus also the solution for the discussion regarding the Machinery Directive, which requires that pneumatic and electrical components must be separated.





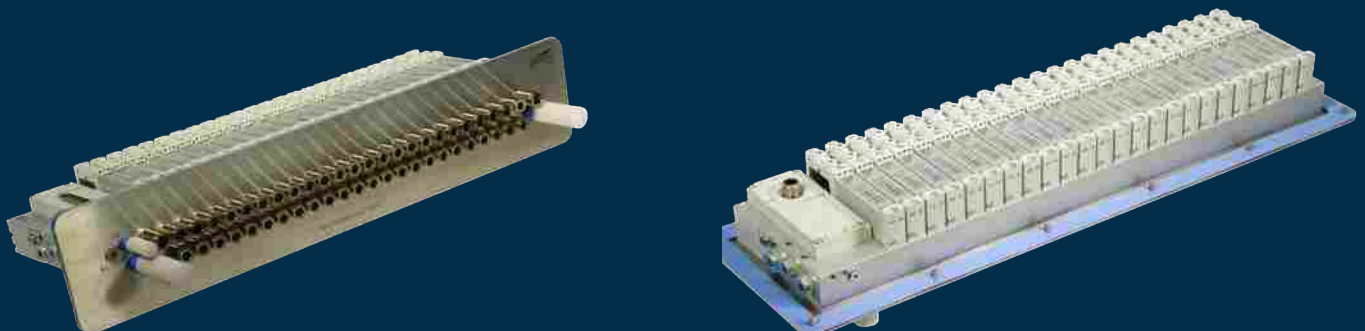
The Pneumapole is equipped with a blue 'food approved' seal, allowing for an IP rating of IPx9 (old IP69k) and IP66 to be achieved. This corresponds to the protection class of standard 'Hygienic Design' cabinets. Additionally, the Pneumapole plates are constructed in such a way that they cover the entire hole in the cabinet, thus preventing rust formation and keeping dirt out. Dirt that accumulates against the Pneumapole is easily visible, making it easy to remove.

## Variants

To generate solutions for various issues, the Pneumapole is available in different variants.

## Pneumapole-S and Pneumapole-L

The first variant is the Pneumapole-S, where the S stands for 'Standing,' with the valves standing upright and the LEDs being most visible. The second variant is the Pneumapole-L, where the L stands for 'Lying.' Both variants consist of a fully assembled and tested valve island with a Pneumapole feed-through plate, couplings, and dampers.





# Pneumapole-E

A special feed-through plate for both electrical cabling and air hoses that does not use cable glands or bulkhead fittings. The rubber used for the seal gives the plate an IP rating of IP67, which is maintained up to approximately ten times of inserting and removing the cable. Additionally, the blue feed-through also functions as strain relief. Pneumapole-E feed-through plates, which are available in several standard versions from stock, make designing a control cabinet in the engineering phase easier. The unused feed-throughs remain sealed and are IP67. Special versions are also possible starting from as few as 5 units.

Ebora has its own panel building for pneumatic cabinets. For this and for sales, we have some common Hygienic Design control cabinets from Rittal in stock, equipped with cut-outs for our Pneumapoles. This allows us to quickly and efficiently build a pneumatic cabinet.

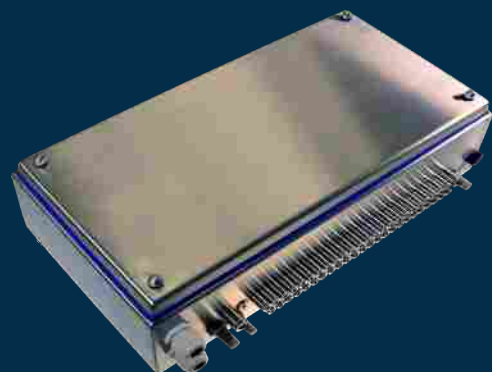


# Pneumapole-K

The Pneumapole-K has been developed to simplify the modularity of machines and processes. It is a pneumatic cabinet where the valve island is directly built into the wall of a Hygienic Design terminal box from Rittal. Like the regular Pneumapole, the Pneumapole-K is usually available from stock. Based on the number of valves and blanking plates you need, the Pneumapole is assembled and tested at Ebora. The Pneumapole-K is available with a VTUG valve island and offers 4, 8, 12, 16, or 24 valve positions as desired; with a maximum of 24 x 5/2-way or 48 x 3/2-way.

## Electrical and pneumatic

With the Pneumapole-K, you can choose from standard options such as conventional with multipin or IO-Link, Festo AP-I, or the common fieldbus connections, and they are always equipped with stainless steel couplings and dampers.



# Pneumapole “The Concept”

The Pneumapole has become a concept for simplifying panel construction. The series of Pneumapole solutions, consisting of valve islands, electrical feed-through plates, and blanking plates, is currently extensive enough to build pneumatic cabinets like a kind of kit and to limit the mechanical operations in simple electrical control cabinets. The Pneumapole-K is the “off-the-shelf” pneumatic cabinet that makes modular and flexible construction even easier for machine builders and panel builders.



## Specifications at a glance

The Pneumapole is available as:

- VTUG10 (lying and standing version) 380 l/min (3, 4, and 6\* mm push-in, nickel-plated brass or stainless steel 316)
- VTUG14 (lying and standing version) 700 l/min (4, 6, and 8\* mm push-in, nickel-plated brass or stainless steel 316)
- VTUG18 (lying version) 1300 l/min (6, 8, and 10\* mm push-in, nickel-plated brass or stainless steel 316)

\* Standard

- Electrical connection: 24 VDC

## Other specifications

- Vacuum and pressure valves in one valve island
- Various pressure zones in one valve island
- Suitable for low-pressure applications with external pilot air
- Suitable for up to 10 bar and 60 °C
- Energy-efficient due to reduced holding current
- 360° status LED

## Available electrical connections

- Multipin
- IO-link
- Festo AP
- Fieldbuses
- Profinet
- Profibus
- CanOpen
- DeviceNet
- EtherCat
- CC-Link
- AS-Interface
- Ethernet/IP
- CPI interface



*Ebora*

**Ebora Process Automation**

Pneumatics, Instrumentation and Valves

+31(0)26 - 3706830 | [info@ebora.nl](mailto:info@ebora.nl) | [www.ebora.nl](http://www.ebora.nl)