

# ELECTRO-PNEUMATIC UNIT

## SERIES AEPN

### ▶ PRODUCT ADVANTAGES



#### ▶ **Lightweight and powerful**

The compact design allows the unit to be positioned very close to the consumers and achieves the fastest opening and closing times.

#### ▶ **Multiple pressure ranges selectable**

Two different pressure ranges can be set to meet application-specific requirements with the lowest possible energy input.

#### ▶ **Integrated query**

Integrated sensing reliably regulates and maintains pressures.

#### ▶ **Control**

Different process sequences can be implemented thanks to two independently controllable valves.

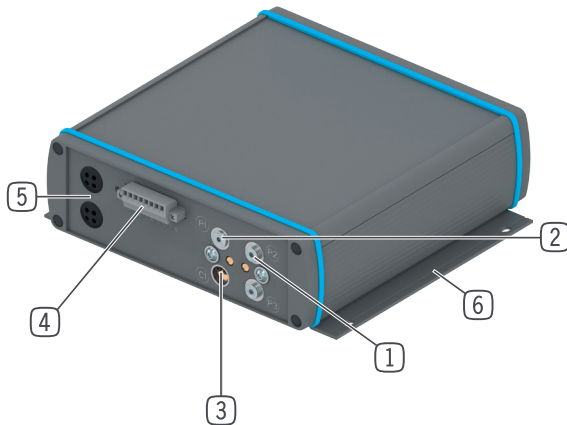
#### ▶ **Independent**

Thanks to the simple control and the 24V technology, the electro-pneumatic unit is predestined for mobile units with battery supply, such as driverless transport systems.

### ▶ SERIES CHARACTERISTICS

|   |   |
|---|---|
|  <b>Integrated sensing</b>           | ● |
|  <b>Integrated valve technology</b>  | ● |
|  <b>Digital I/O</b>                  | ● |
|  <b>Multiple independent control</b> | ● |
|  <b>Design included</b>              | ● |

## ► BENEFITS IN DETAIL



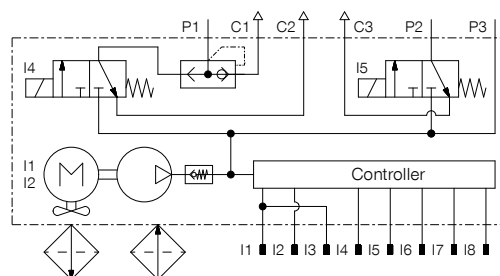
- ① Air connection P2
- ② Air connection P1
- ③ Quick exhaust valve
- ④ Energy + control
- ⑤ Ventilation/air intake
- ⑥ Fixing

## ► TECHNICAL DATA

| Installation Size | Operation | Delivery rate<br>[NI/min] | Pressure range 1<br>[bar] | Pressure range 2<br>[bar] |
|-------------------|-----------|---------------------------|---------------------------|---------------------------|
| <b>AEPN1100</b>   | electric  | 16                        | 4.5 ... 5.5               | 5.5 ... 6.5               |

## ► CONNECTION DIAGRAM

| I: | Male                      |
|----|---------------------------|
| 1  | (+) 24 V DC IN            |
| 2  | (-) 0 V DC / GND          |
| 3  | (+) 24 V DC               |
| 4  | DI pressure set (24 V DC) |
| 5  | DI P1 (24 V DC)           |
| 6  | DI P2 (24 V DC)           |
| 7  | AO pressure (0 - 10 V DC) |
| 8  | DO status (24 V DC)       |



- P1 Pneumatic output
- P2 Pneumatic output
- P3 Optional pressure accumulator
- C1 Quick exhaust "P1"
- C2 Venting "P1"
- C3 Venting "P2"
- I Electrical connection

## ► PRODUCT SPECIFICATIONS

The product enables pneumatic pressure to be generated and maintained.

Depending on the operating pressure of the consumer, you can choose between two preset pressure ranges.

The consumer connected to the valve to be controlled is pressurized by a corresponding control signal.

In the event of a pressure drop, e.g. due to leakage, the product automatically readjusts the pressure when a defined lower limit is reached until the upper limit is reached. This maintains the required operating pressure.

The product can be used to vent pneumatic consumers. A quick exhaust valve is provided to expel the condensate produced.

In the event of a voltage drop, all valves and thus the entire system are vented.

The runtime limitation and temperature sensors switch the product off in the event of an overload to prevent the product from overheating.

Various statuses and the existing system pressure can be read out via pins 7 and 8.

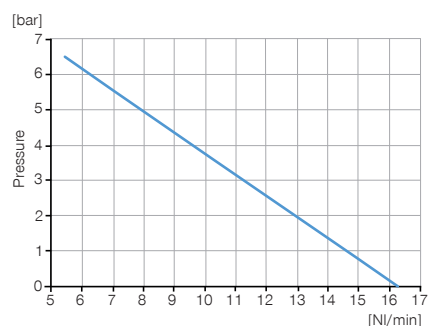
# ELECTRO-PNEUMATIC UNIT

## INSTALLATION SIZE AEPN1100

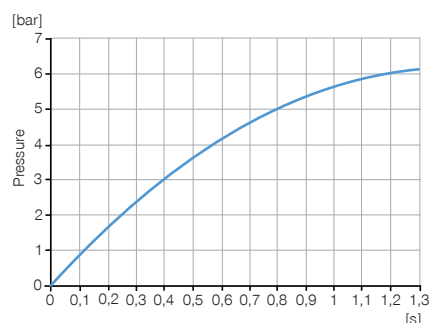
### ▶ PRODUCT SPECIFICATIONS



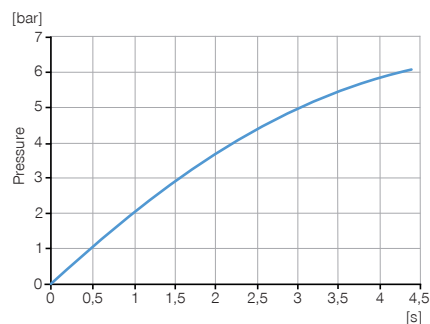
#### ▶ Flow rate



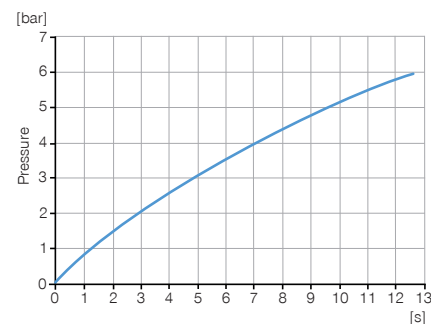
#### ▶ Pumping time for clamping element MKS25



#### ▶ Pumping time for 100 ml



#### ▶ Pumping time for 400 ml



### ▶ RECOMMENDED ACCESSORIES



#### ENERGY SUPPLY



**GVM5**  
Straight Fittings - Quick Connect Style



**WVM5**  
Angled Fittings - Quick Connect Style



#### CONNECTIONS / OTHER



**CVST0050P**  
Dummy plug

| Order no.                        | ▶ Technical data     |
|----------------------------------|----------------------|
|                                  | <b>AEPN1100-00-A</b> |
| Operation                        | electric             |
| Nominal current [A]              | 3                    |
| Current consumption max. [A]     | 5                    |
| Standby power consumption [W]    | 1.0                  |
| Nominal operating pressure [bar] | 6                    |
| Delivery rate [NI/min]           | 16                   |
| Pressure range 1 [bar]           | 4.5 ... 5.5          |
| Pressure range 2 [bar]           | 5.5 ... 6.5          |
| On-time                          | 15% ED S3 3min       |
| Valve state [s]                  | Passive (NC)         |
| Valve opening time [s]           | 0.010                |
| Valve closing time [s]           | 0.010                |
| Noise level [db(A)]              | <70                  |
| Operating temperature [°C]       | 5 ... +50            |
| Weight [kg]                      | 3.5                  |

