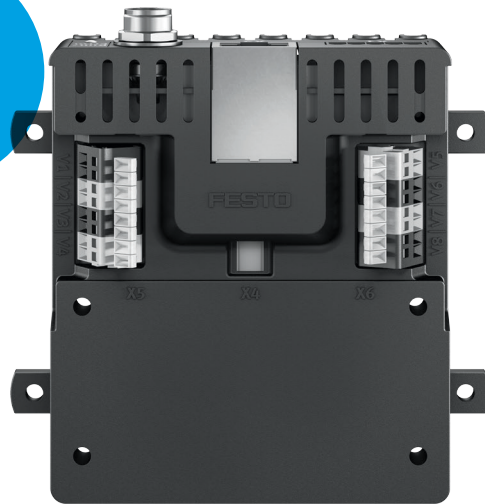


# Valve control module VAEM

FESTO

Precise  
and  
fast



## Hit-and-hold actuation!

### Highlights

- 8 channels, can be individually controlled
- Extremely high precision
- Very fast valve control with a time resolution down to 0.2 ms
- Very simple parameterisation of solenoid valves
- Control and diagnostics via GUI or RS232
- Small and easy to integrate: reduces costs

The valve control module VAEM makes precise switching of solenoid valves easier than ever. Up to 8 channels can be parameterised individually. A temporary resolution of only 0.2 ms and the control of the valves via current – not voltage – enable extremely high precision, e.g. for dispensing applications. The holding current reduction saves energy and minimises heat input.

### Ideal for many applications

VAEM can actuate any solenoid valve with up to 1.0 A / 0.4 A for inrush / holding current. Its compact form makes it ideally suited for bench-top devices in laboratory automation but also for use in the pharmaceutical and food industries.

### Extremely energy-efficient, low heat generation

The integrated holding current reduction minimises heat dissipation and protects critical media.

### Perfect interaction

The VAEM is ideal for controlling the dispense head VTOE. Each channel can be controlled individually. This allows you to calibrate even the smallest manufacturing tolerances or viscosity differences and achieve an excellent tip-to-tip coefficient of variation.

### Simple

VAEM replaces many complicated and laborious individual solutions. Parameterizing and controlling valves becomes easier and more reliable.

# Valve control module VAEM

## Highest dosing precision built in

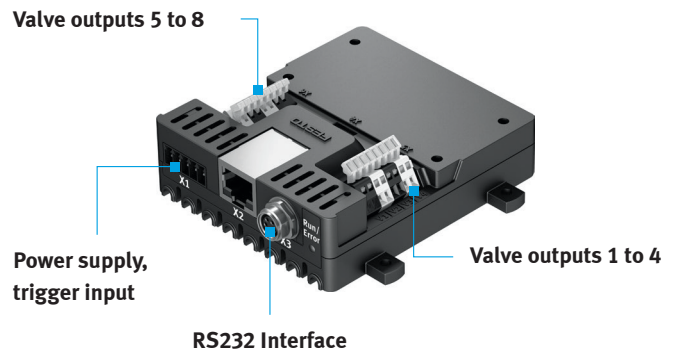
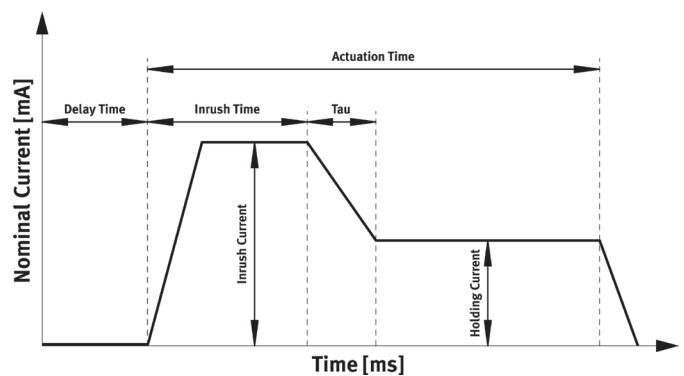
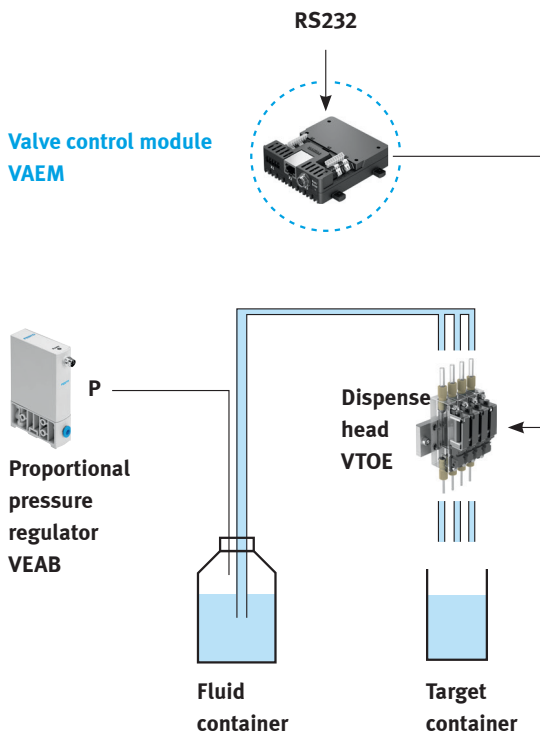
VAEM is ideally suited for high-precision control of dispensing valves. A temporary resolution of only 0.2 ms enables extremely small dosing volumes. The valves are controlled by current – not voltage – which

ensures reproducible switching behaviour independent of the valve temperature. Each channel can be individually controlled to compensate for different production tolerances of the dosing channels.

## Hit-and-hold actuation: the working principle

The parameterisation of each of the 8 individually controllable channels is extremely simple: you set the inrush current, the holding current and the actuation times – done! Communication is via RS232, a 24 V trigger input or

a graphic user interface (GUI). This enables to pre-calibrate the dispense head VTOE and to save the control parameters for stand-alone operation.



## Technical data

### Overview

- Suitable for 2/2- and 3/2-way valves
- External 24 V trigger input for synchronisation with other systems
- Dimensions: 92 x 100 x 28 mm
- Resolution: 0.2 ms
- Weight: 98 g
- GUI available
- Communication via RS232

### Electrical specifications

- Power supply 24 VDC ( $\pm 15\%$ )
- 8 individual current curves for 1 to 8 valves:
  - $\leq 1.0$  A per valve for inrush current  $\leq 100$  ms ( $\leq 4.0$  A accumulated for multi-channel operation  $\leq 100$  ms)
  - $\leq 0.4$  A per valve for holding current ( $\leq 1.8$  A cumulative for multi-channel operation)
- Valve power supply: 8 to 24 V (PWM)
- Current-controlled for improved reproducibility