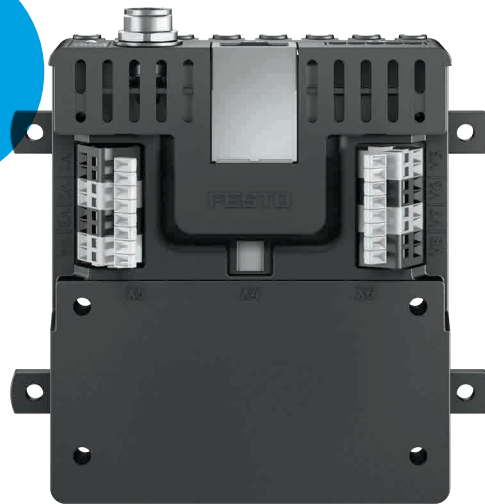


VAEM valve control module

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, RS232 or Ethernet
- 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 time 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

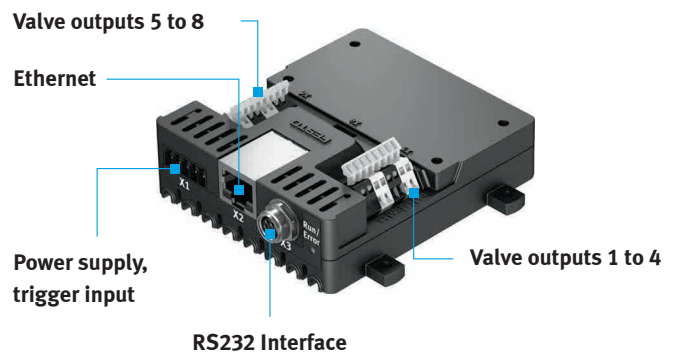
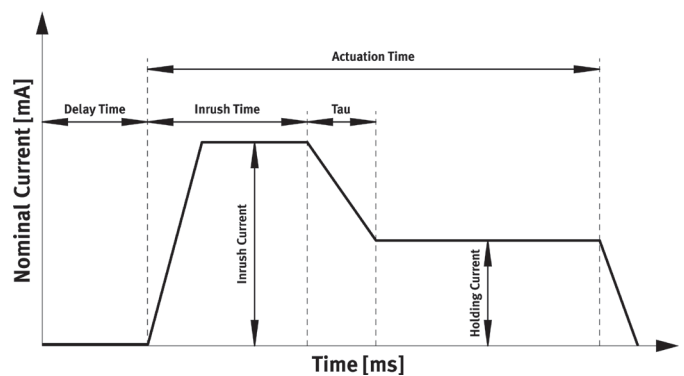
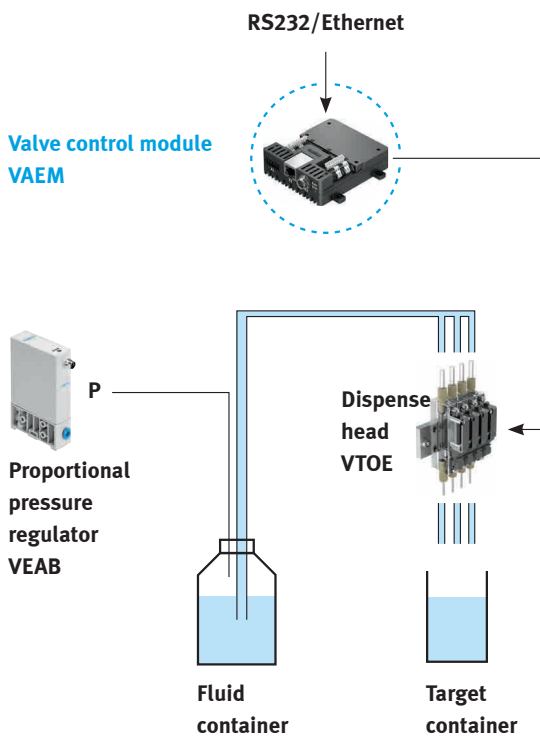
VAEM is ideally suited for high-precision control of dispensing valves. A time resolution of only 0.2 ms enables extremely small dosing volumes. The valves are controlled by current – not voltage – which ensures repro-

ducible 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, Ethernet, a 24 V trig-

ger 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 and Ethernet

Electrical specifications

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