

Control several flow rates simultaneously

Festo Motion Terminal with new app for flow control precisely regulates compressed air and gases

The Festo Motion Terminal VTEM combines digitalisation and pneumatics. Quickly activated Motion Apps are revolutionising pneumatics by increasing flexibility and energy efficiency, and accelerating production processes. Thanks to the new Motion App “Flow control”, the VTEM now makes filling containers such as bottles with nitrogen or other gases more profitable and economical.

Digitised pneumatics marks the start of a new age of automation technology. Motion Apps control one piezo valve for almost all pneumatic tasks. Only one piece of hardware is needed for this: the Festo Motion Terminal. The different functions are controlled using Motion Apps. Festo is gradually developing new Motion Apps that are making the Festo Motion Terminal more and more flexible. This reduces complexity and time to market. Digitised pneumatics intelligently connects the mechanical system, electronics and software, and ensures better overall equipment effectiveness (OEE) with lower energy consumption.

Digitised flow control

An application example: nowadays containers for products are often rinsed and filled with gases like nitrogen. With the Motion App “Flow control”, users control the flow rate of compressed air and gases at up to 600 l/min digitally – simultaneously on up to eight independent channels. For precise dosing, the integrated sensors can simply be combined with external flow sensors. This saves energy and costly gases.

Controlling the flow in litres per minute using the app allows the gas to be precisely dosed. The more precisely the filling quantity is defined, the more accurate the filling will be since the percentage deviation from the target quantity can be optimally detected. This flexible, digitised nitrogen control is tamper-proof.

In addition, the app “Selectable pressure level” moves the filling nozzles to the bottles quickly and accurately, and the flexible parameterisation shortens the cycle times. After filling, the filling nozzles are retracted with reduced pressure to save energy.

Software instead of hardware

Thanks to the fast activation of new functions via Motion Apps, machine developers can create a basic machine type using the Festo Motion Terminal and then select the relevant Motion

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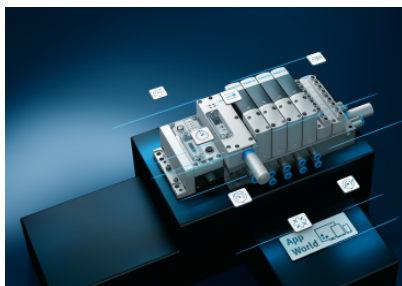


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Apps to equip it with different functions and features as per the customer requirements. The ability to copy and transfer parameter sets makes planning easier and saves time. Assigning functions via software has the added benefit of preventing tampering and protecting know-how, since it's not possible to tell from the outside which functions the valves are executing.

By additionally using the Motion App “Leakage diagnostics” in the application, maintenance is simplified as it automatically monitors for leaks. Malfunctions can thus be detected and pinpointed to a specific actuator using diagnostic cycles and defined threshold values – the reliable basis for predictive maintenance.

Persfoto's



Festo Motion Terminal VTEM

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VTEM App “Flow control”

Controlling several flow rates with just one piece of hardware is now possible with the app “Flow control” of the Festo Motion Terminal.