

Multiple-Pump Systems - add-on 8180036 (46107-20)

FESTO

LabVolt Series

Datasheet



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General Description

The Multiple-Pump Systems is an add-on to the Single-Pump Systems. It consists of a motor, a centrifugal pump, a check valve, and accessories. These components are required to understand pressure losses, and the characteristics of pumps installed in series or in parallel.

The project-based pedagogical approach makes it possible to contextualize the tasks performed by the learner. The exercises develop fundamental skills required for workers interacting with any industrial process involving pumps.

Features:

- Pump mounts directly on the motor shaft and does not require alignment
- Quick connect cam lever couplings for easy hose and pipe connections
- Industrial-grade components for a realistic learning experience
- Single tool to secure components on the worksurface for quick assembly
- 5S-type storage for all components in lockable drawers to keep the workspace tidy and organized

Learning outcomes:

- Measure pressure losses and understand their causes and consequences.
- Install pumps in parallel and compare their pressure and flow characteristics to a Single-Pump setup.
- Install pumps in series and compare their pressure and flow characteristics to a Single-Pump setup.
- Learn to choose a pump for a specific application.
- Present solutions for a tank replacement and identify the consequences on an existing pumping circuit

List of Equipment

Qty	Description	Model number
1	Motor and Pump Assembly (Multiple-Pump) _____	8180051 (47421-00)
2	Check Valve Assembly _____	8180053 (47423-00)
1	Multiple-Pump Systems Accessories _____	8180054 (47429-00)

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Multiple-Pump Systems _____	8195946

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Equipment Description

Motor and Pump Assembly (Multiple-Pump) 8180051 (47421-00)



The Motor and Pump Assembly (Multiple-Pump) consists of a mounting base, a motor, and a centrifugal pump directly mounted to the motor frame. The assembly is designed to be secured to the perforated worksurface.

Features:

- Quick installation of mounting base to worksurface with single rotating knob
- Pump has quick disconnect cam lever couplings for easy hose and pipe connections

Check Valve Assembly 8180053 (47423-00)



The Check Valve Assembly is used to allow water flow in one direction and block it in the other.

Features:

- Quick connect cam lever couplings for easy hose and pipe connections
- Quick connect push-in fitting for easy pneumatic tubing connections

Multiple-Pump Systems Accessories
8180054 (47429-00)



The Multiple-Pump Systems Accessories consists of components required to assemble and interconnect the components of the piping circuits for the Multiple-Pump Systems.

Optional Equipment Description

Campus Licence, Multiple-Pump Systems (Optional)
8195946

List of Manuals

Description	Manual number
Multiple Pump Systems (Workbook (Instructor)) _____	8185505
Multiple Pump Systems (Workbook) _____	8190491
Multiple Pump Systems (Workbook (Instructor)) _____	8195762
Multiple Pump Systems (Workbook) _____	8195764

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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