

Positive-Displacement Pumps Training System - add-on

8180037 (46107-30)

FESTO

LabVolt Series

Datasheet



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General Description

The Positive-Displacement Pumps package is an add-on to the Pump Performance package. It consists of an external gear pump, two pressure relief valves and the required accessories.

Through practical tasks and projects, learners will be introduced to these pumping circuits to develop installation, operation, maintenance, and troubleshooting skills.

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:

- Mounting base of pump allows easy installation and alignment.
- Choice of fittings makes it impossible for students to forget the pressure relief valves in their setups.
- Two pressure relief valves are included to ensure safety and prevent equipment damage in case of overpressure.
- 5S-type storage for all components in lockable drawers to keep the workspace tidy and organized.

Learning outcomes:

- Explain the basic operating principles of an external gear pump, and its main parts.
- Set up an external gear pump circuit and start it.
- Draw the pumps curve of an external gear pump under various conditions.
- Perform the inspection, lubrication, and maintenance of an external gear pump.
- Disassemble and re-assemble an external gear pump.

List of Equipment

Qty	Description	Model number
1	Positive-Displacement Pump Accessories _____	8180055 (47430-00)
1	External Gear Pump _____	8180056 (47431-00)

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ¹

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ²

¹ Not needed with an LX subscription.

² Not needed with an LX subscription.

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ³

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ⁴

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ⁵

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ⁶

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ⁷

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ⁸

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Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ¹⁰

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Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ¹¹

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ¹²

Additional Equipment Required to Perform the Exercises (Purchased separately)

Qty	Description	Model number
1	Campus Licence, Positive-Displacement Pumps _____	8193210 ¹³

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²³ Not needed with an LX subscription.

²⁴ Not needed with an LX subscription.

²⁵ Not needed with an LX subscription.

Equipment Description

Positive-Displacement Pump Accessories 8180055 (47430-00)



This model, included in the Positive-Displacement pumps Package, contains the accessories needed to connect the External Gear Pump.

Features:

- Choice of fittings makes it impossible for students to forget the pressure relief valves in their setups.
- Two pressure relief valves are included to ensure safety and prevent equipment damage in case of overpressure.

External Gear Pump 8180056 (47431-00)



This model, included in the Positive-Displacement Pumps package, contains and external gear pump and its mounting base.

Features:

- Mounting base allows easy installation and alignment.
- Choice of fittings makes it impossible for students to forget the pressure relief valves in their setups.

Optional Equipment Description

Campus Licence, Positive-Displacement Pumps (Optional) 8193210

List of Manuals

Description	Manual number
External Gear Pumps (Workbook (Instructor)) _____	8190917
External Gear Pumps (Workbook) _____	8190919
External Gear Pumps (Workbook (Instructor)) _____	8198521
External Gear Pumps (Workbook) _____	8198523

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