

**Product Name :**  
Computerized Level Control Trainer**Product Code :**  
MLE0003**Description :**

Computerized Level Control Trainer

**Technical Specification :**

The Trainer provides a comprehensive experimental introduction to the fundamentals of control engineering using an example of level control.

A pump delivers water from a storage tank to the transparent level-controlled tank.

The liquid level is measured by a pressure transducer installed at the base of the level-controlled tank.

The controller used is a state-of-the-art digital industrial controller.

The actuator in the control loop is a pneumatically operated control valve with an electro-pneumatic positioner.

A ball valve in the outlet line enables defined disturbance variables to be generated.

The controlled variable X and the manipulating variable Y are plotted directly on an integrated 2-channel line recorder.

Alternatively, the variables can be tapped as analogue signals at lab jacks on the switch cabinet.

This enables external recording equipment, such as an oscilloscope or a flatbed plotter, to be connected.

Process control software is optionally available.

**FEATURES:**

Experimental introduction to control engineering using an example of level control

Construction of the system with components commonly used in industry

Digital controller with freely selectable parameters: P, I, D and all combinations

Level measurement by pressure sensor

**SPECIFICATION:**

Storage tank: 30L

Centrifugal pump :

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Power consumption: 250W  
Flow rate: 150L/min  
Head: 7m  
Speed: 2800min<sup>-1</sup>  
Level-controlled tank :  
7L  
Level: 0...0,6m  
Pressure sensor: 0...100mbar  
Pneumatically operated control valve DN 20  
Kvs: 4,0m<sup>3</sup>/h  
Reference variable: 4...20mA  
Nominal stroke: 15mm  
Characteristic curve equal-percentage  
Line recorder :  
2x 4...20mA  
Feed rate: 0...7200mm/h, stepped  
Controller :  
Process variables X, Y as analogue signals: 4...20mA  
Power required for operation :  
230V, 50Hz, 1 phase  
230V, 60Hz, 1 phase

 **LAB ENGINEERING**

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