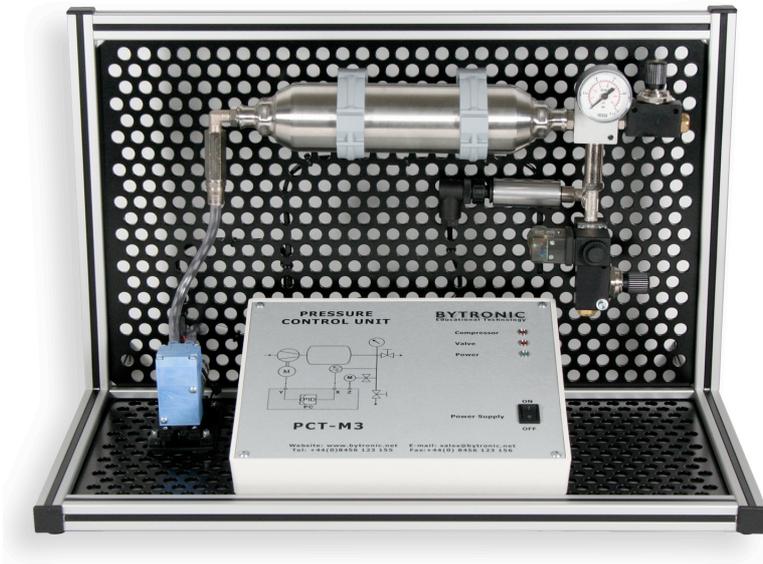
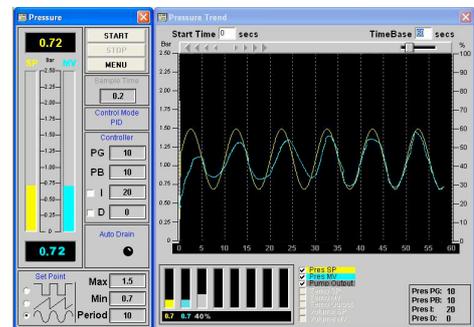


Process Control Technology Pressure Module PCT-M3



Key Features:

- Control and measurement of pressure
- PID control PC SCADA type software with control and data monitoring
- Complete self-contained unit
- Connection to PC through USB
- Air used for the process
- Gauge pressure sensor
- Manual valve to generate disturbances
- User manual
- Safe low pressure operation



The PCT-M3 Pressure control trainer system enables the study of the principles in pressure control and monitoring in a pressurised system. The system is self-contained and only requires connection to a PC through a USB. The control module is contained on the unit and has a mimic of the systems and LED indication. The PCT-M3 can be controlled through the graphical based software supplied with the unit providing PID control.

The systems comprises a compressor connected to a reservoir tank, a regulator valve, a pressure sensor, a needle valve to add a disturbance and a pressure gauge to indicate the pressure in the system. The built in compressor provides for a safe working environment and removes the need for connection to an airline or additional compressor.

Curriculum Coverage

- Introduction
- Software installation
- Software manual pressure control
- Software PID pressure control
- Principles of pressure measurement
- Types of pressure measurements
- Pressure transducer characteristics
- Physics of pressure
- Understanding and selecting a suitable pressure transducer
- Control Methods
- Modern control theory
- Topics in control theory
- Main control strategies
- Closed loop control
- Basic control principles
- 1st. order systems
- PID controllers

Labworks

- Proportional Control
- Proportional and Integral Control

Process Module

Reservoir tank	Volume \pm 10% 0.4 Litres
Pump/Compressor type	Brush motor 24v diaphragm pump
Performance	Maximum PSIG 24 Continuous PSIG 8.0
Air flow rate	Maximum 6 litres per minute
Control elements	1 x Control valve 24V dc 2 x Manually adjustable needle valves
Pressure transducer	0 to 2 bar Gauge

Control Console

Front of console	Graphical representation of process module
Connections	1 x Power connector 1 x USB connection
Number of LED	3 x Power on, pump on, valve open
Number of switches	1 x Power switch
Power supply voltage	100-250V AC @ 50/60Hz.

Software

Windows based graphical software with SCADA type interface with control and data monitoring.

Weights and Dimensions

Un-Packed		Packed	
Approximate Dimensions (mm)	500W x 320H x 300D	Approximate Dimensions (mm)	580W x 420D x 420H
Approximate Weights	6Kg	Approximate Weights	9Kg

Required:

A PC with Minimum; Pentium processor, 1GB RAM, 20GB HDD, CDROM Drive, USB 2 interface and Windows XP or above.

Ordering Information

Model Number:	PCT-M3
<i>Consists of:</i>	1 x Pressure control process module with controller 1 x 24v d.c. power supply 1 x USB connector cable 1 x User manual 1 x CD with Windows based graphical type software

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