AIR PRESSURE REGULATION BENCH

Non contractual photo

SERVICE : REQUIRES 4 BAR COMPRESSED AIR SUPPLY (NOT INCLUDED) 220 V SINGLE PHASE -50 HZ COMPUTER FOR USING THE SOFTWARE
DIMENSIONS : 1200 X 600 X 1700 MM

REFERENCE : MP114

This pressure regulation bench identifies the elements constituting a control loop (measurement, actuator, regulator) and perform control tests on air pressure.

Educational Objectives :

- Study of the pressure regulation.
- Study of a closed loop.
- Setting an analog PID controller.
- Compensation of the pressure of a tank subjected to disturbances by air injection via a proportional solenoid valve.

Technical specifications :

- A pressure tank, with pressure relief valve
- An electric proportional solenoid valve
- A pressure gauge,
- A leakage valve with micrometric adjustment,
- A pointel adjustment valve
- A digital regulator
- Universal Input: TC, Pt100, ?T, mA, mV, V, Hz
- 4-20 mA control output
- Triple display output / setpoint
- Regulatory algorithm: P, PI, PID, self-adaptive
- RS485 communication card
- A pressure sensor, output 4 - 20 mA, 0 - 10 bar.
- An electrical cabinet including:
- The lockable disconnector
- The X5 PID controller
- Emergency stop, power indicator
- Regulator input and output signals brought back to secure double-well terminals
- Module mounted on aluminum stainless steel chassis
- User Manual

OPTIONS :

Acquisition module. This module is composed of: - RS485 / RS232 converter for PC acquisition - Windows operating software for reading PID parameters, drawing of curves, configuration of the remote controller and archiving of values.