

## PRESSURE CONTROL SYSTEM

MODEL: BSP07



BSP07-1: Media Water

### INSTRUCTION MANUAL

Self-explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual

### FEATURES

- Compact and sturdy construction
- Easy and versatile operation
- Self contained system
- Incorporates standard industrial components
- Comprehensive instrumentation

### DESCRIPTION

Pressure control system is designed to demonstrate various aspects of control engineering using a system to control pressure in a tank. The system incorporates the standard industrial components.

Either compressed air or water is used as media depending on the model selected. Water is used as media for BSP07-1 whereas air is used as media for BSP07-2.



BSP07-2: Media Air

as

## LIST OF EXPERIMENT

1. Manual two step control
2. Study of P, PI, PD, PID Control <sup>NOTE</sup>
3. Study of sensors
4. Study of Control valves
5. Study of feedback control system
6. Study of E/P Converter

*NOTE: If Pneumatic PI controller is ordered supplied in place of electronic PID controller, only PI action can be viewed*

## COMPONENTS

Components	BSP07-1 Qty (Nos)	BSP07-2 Qty (Nos)
Process tank	1	1
Pressure regulator	1	1
Pressure sensor/transmitter	1	1
Control panel	1	1
Control valve	1	1
I/P Converter	1	1
Pipes and fittings	1	1
Sump Tank	1	--
Compressor	Optional	1
Pressure gauge	1	1
PID Controller (See model selection below)	1	1

## OPTIONAL ADDITIONAL

1. PC
2. Compressor For BSP07-1 model only

## SERVICES REQUIRED

1. Electric supply
2. Compressed Air For BSP07-1 model only

## MODEL

BSP07-X-A: Pressure control system using *only Electronic* PID Controller

BSP07-X-B: Pressure control system using *only PC based* operation of the system

BSP07-X-C: Pressure control system using *only Pneumatic* PID Controller

BSP07-X-D: Pressure control system using *both Electronic* PID Controller as well as *PC based* operation of the system

BSP07-X-E: Pressure control system using *both Electronic* PID Controller as well as *Pneumatic* PID Controller

BSP07-X-F: Pressure control system using *both Pneumatic* PID Controller as well as *PC based* operation of the system

BSP07-X-G: Pressure control system using *all Electronic* PID Controller, *Pneumatic* PID Controller *as well as PC based* operation.

Dimension	Weight
600 (W) X 575 (B) X 1700 (H)	100 Kg

## NiYo Engineers

Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029  
INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051  
e-mail- [sales@niyoindia.com](mailto:sales@niyoindia.com) Web: [www.niyoindia.com](http://www.niyoindia.com)



ISO9001:2015