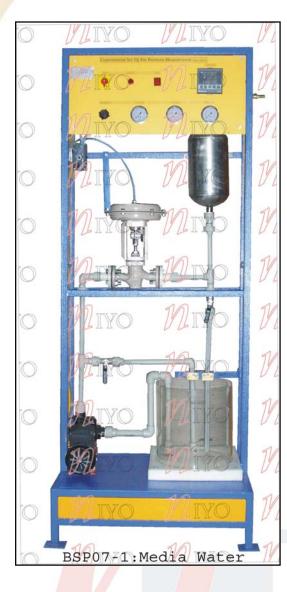


BSP07.exl Revision No: 06 Date: April 24, 2021

# PRESSURE CONTROL SYSTEM

# MODEL: BSP07



# INSTRUCTION MANUAL

Self -explanatory operating manuals are provided with each system. Detailed theory as well 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.



as



#### LIST OF EXPERIMENT

- 1. Manual two step control
- 2. Study of P, PI, PD, PID Control NOTE
- 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	BSP07-2
-	Qty (Nos)	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
Pre <mark>ssure ga</mark> uge	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**

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- (1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice
- (2) Photographs are indicative only.