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# **PNEUMATIC TRAINER**

# MODEL: PNE21



#### **FEATURES**

- Compact, comprehensive, sturdy design
- Smooth and silent operation
- Study of Pneumatic Circuits

#### DESCRIPTION

This trainer explains the physical principles of pneumatics apart from describing the basic components along with their constructions and functions. It also gives advanced theories and comparatively complicated circuits.

Pneumatically driven devices can be regulated by electrical controls very efficiently. Due to this electro-pneumatics is widely used in all industries for a variety of applications. This combination of electrical and pneumatic control is very effective tool in automation.

Optionally, sliding arrangement for in-use component mounting can be provided along with component storage facility.

## INSTRUCTION MANUAL

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



#### LIST OF EXPERIMENT

- 1. Fundamentals of pneumatics
- 2. Safety aspects of pneumatics
- 3. Study of symbols, schematic diagrams, standards and ratings
- 4. Study of transmission and distribution of air
- 5. Trouble shooting in pneumatic circuits
- 6. Study of pneumatic actuators
- 7. Study of pneumatic fluid conditioning accessories
- 8. Study of an air compressor
- 9. Study of various Pneumatic circuits

\* List of experiment may vary depending on model selected. Some of the experiments are theoretical only.

# PNEUMATIC TRAINER KIT, EACH CONSISTING OF THE FOLLOWING COMPONENTS AND ACCESSORIES, MODEL: PNE21-1

- 1) Single acting cylinder, 1 no.
- 2) Double acting cylinder, 1 no.
- 3) 3/2-way valve, manually-actuated, Normally Closed, 2 nos
- 4) 3/2-way valve, pneumatically-actuated, spring return, 1 no.
- 5) One-way flow control valve, 2 nos
- 6) 5/2-way valve with manually-operated switch, 1 no
- 7) 5/2-way valve pneumatically-actuated, spring return, 1 no
- 8) 5/2-way pneumatic actuated valve double pilot, 1 no
- 9) 3/2-way roller lever valve direct actuation Normally Closed, 2 nos
- 10) Shuttle valve (OR), 1 no
- 11) Two-pressure valve (AND), 1 no
- 12) Pressure gauge, 1 no
- 13) Manifold with self-closing NRV, 6-way
- 14) Pushbutton station, 1 no
- 15) Relay station, 1 no
- 16) 3/2-way single solenoid valve, 1 no
- 17) 5/2-way single solenoid valve, 1 no
- 18) 5/2-way double solenoid valve, 1 no
- 19) Power supply unit, 1 no
- 20) Profile plate, Anodised Aluminium, 1 no



#### PNEUMATIC WORKSTATION, MODEL: PNE21-2A

With 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual locks, on full panel drawer slide. Wooden drawer.

#### PNEUMATIC WORKSTATION, MODEL: PNE21-2B

With 40 square mm aluminium profile legs, wooden work surface, and one pedestal drawer unit having 5 drawers, each with handles and individual locks, on full panel drawer slide. Metallic drawer.

## CARRIER FOR MOUNTING COMPONENTS, MODEL: PNE21-3

Electrical mounting frame to mount electrical push button and relay boxes, it is mounted on profile plate mounting frame - 1 No

#### CUT SECTION MODEL FOR PNEUMATIC COMPONENTS, MODEL: PNE21-4

• As per the list attached in the offer

## Compressor UNIT, MODEL: PNE21-5

Suitable for Pressure: 8 bar, Delivery: 50 lpm (or more), Reservoir capacity: 24 Litres (or more), 230V, 50 Hz, with pressure regulator and water separator

#### **SERVICES REQUIRED**

#### WEIGHT

• 92 Kg





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