

ELECTROPNEUMATIC TRAINER KIT

MODEL: PNE13



R Model: Sliding type component mounting.
 With storage facility & with table

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. The trainer emphasizes this concept which is widely used in today's industry in the automation of machines and machining related process.

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

Fundamentals of Pneumatics	Safety aspects of pneumatics
Study of symbols, schematic diagrams, standards and ratings	Study of sequencing and pressure dependent controls
Functions and use of various electro- pneumatic components	Fundamentals of electricity, electronic switches and sensors
Study of transmission and distribution of air	Study of pneumatic fluid conditioning accessories
Study of manual and stroke dependent controls	Pressure measurement and control
Flow measurement and control	Use of sensors for creating control circuits
Study of Pneumatic logic circuits	Trouble shooting in pneumatic circuits
Study of an air compressor	Study of logic circuits using electro- pneumatics

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



COMPONENTS

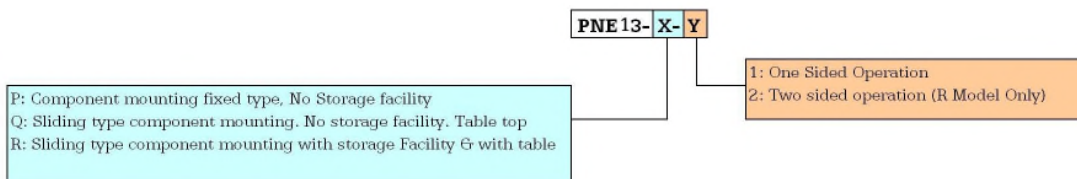
Components	PNE13P, PNE13Q PNE13R1	PNE13R- 2	Components	PNE13P, PNE13Q PNE13R1	PNE13R-2
5/2-way Pilot Operated Spring Return Valve	1	42	3/2-way Roller lever left actuated valve	1	2
3/2-way Pilot Operated Spring Return valve	1	42	5/2-way Hand lever Operated Valve	1	2
3/2-way Roller lever right actuated Valve	21	2	3/2-way DC Valve (with push button)	2	4
5/2-way Solenoid Operated Spring Return Valve	21	2	5/2-way Double Solenoid Valve	21	22
5/2-way Double pilot Valve (with manual override)	31	32	Quick Exhaust Valve	1	2
OR Function shuttle valve	21	2	AND Function shuttle valve	21	2
Uni-directional Flow Control Valve	21	42	Manifold Distributor block	1	2
Double Acting Cylinder, Bore 25 mm X stroke 200 mm	2	4	Single Acting Cylinder, Bore 25 mm X stroke 100mm	1	2
Proximity Sensor	2	4	Limit Switch, Electrical	1	2
I/O Card	1	2	Relay Card	1	2
Pressure Switch (Pressure to Electric Converter)	1	42	Power Supply	1	42
Patch Chord	1 Set	42 sets	Pneumatic Reflex nozzle with Pneumatic amplifier	1	42
Pressure Gauge	1	42	Service Unit with Filter Pressure Regulator, Gauge and Lubricator	1	42
T-Piece with Fittings for Tubing	1 Set	2 Sets	Tubing	1 Set	2 Sets

OPTIONAL ADDITIONAL

- Timer
- Transparent Pneumatic components
- Components cut away models
- Air compressor
- Computer based training software
- An interface device for interface of trainer with simulation software



MODELS



Model No.	Dimension	Weight
PNE13-P	800 (W) X 500 (B) X 1200 (H)	165 Kg
PNE 13-Q	800 (W) X 600 (B) X 900 (H)	150 Kg
PNE13R-1	800 (W) X 600 (B) X 1700 (H)	180 Kg
PNE13R-2	800 (W) X 600 (B) X 1700 (H)	200 Kg

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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.