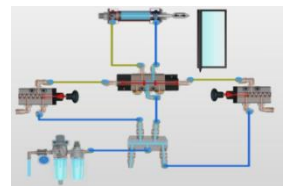
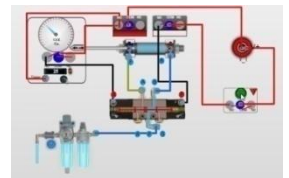
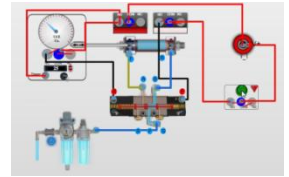
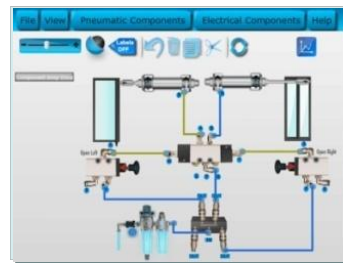


Pneumatics and Electro-Pneumatics Training Set

YESC-6000EP



Main system



s/w practice sample (Option)

Benefit

- Physical principles of pneumatic control system
- Production and distribution of compressed air
- Structure and characteristics of pneumatic cylinders
- Function and use of pneumatic control valves
- Recognizing and drawing of pneumatic symbols
- Drawing of pneumatic circuit diagrams according to standard
- Regulation and measurement of pressure
- Direct and indirect actuation
- Speed control circuits: Meter-in, Meter-out
- Use of quick exhaust valves
- Pneumatic logic controls
- Representation of motion sequences and operating status
- Pneumatic sequence controls
- Pressure-dependent controls with pressure sequence valves
- Position-dependent controls with limit switch valves
- Time-dependent controls with time delay valves
- Trouble-shooting in pneumatic control system
- Safety regulations of the pneumatic system
- Calculation basic or advanced parameters
- Use of pilot operated check valves to stop pneumatic drives in any position
- Displacement-step diagrams
- Design circuit by cascade control circuit
- Basic stepper control circuit
- Self-latching circuits
- Controls with peripheral conditions: single cycle/continuous cycle
- Controls with safety conditions: Emergency Stop

- Trouble-shooting in extensive pneumatic controls
- End positions without limit switch valves
- Back pressure signal generator
- Physical principles of electrical systems and pneumatics
- Function and use of electro-pneumatic components
- Recognizing and drawing of electro-pneumatic symbols
- Drawing of electrical circuit diagrams
- Direct and indirect position-dependent controls
- Logical AND/OR function of switch-on signals
- Representing motion sequences and switching states
- Constructing control systems using relays
- Electrical latching circuits
- Application and function of 3/2 and 5/2-way solenoid valves
- Analyzing circuits
- Function and application of limit switches
- End-position monitoring using electronic proximity sensors
- Realizing oscillating movement
- Time-dependent controls with timer relays
- Using pressure switches
- Troubleshooting simple electro-pneumatic circuits
- Function and use to electro-pneumatic components
- Step diagrams/process-oriented sequence controls
- Using and adjusting different sensor types
- Realizing sequence controls with signal overlap
- Solution according to the group method, cascade circuit
- Sequence chain with spring-return valves and sequence chain with bistable valves
- Control with peripheral conditions (i.e. single/continuous cycle, Emergency Stop)
- Position-dependent control with predetermining counters
- Emergency stop conditions
- Explaining the function and application of a 5/3-way solenoid valve
- Troubleshooting in complex electro-pneumatic circuits

Specification

No.	Q'ty	Pneumatics Training Set
1	1	1.1 Basic Set Comprising the following
	1	Pneumatic working Table (Single side) include – Aluminum profile plate: 1200 × 750 mm at least – Drawers Unit with a lock-key – Mounting bar for fixing electric devices – All Components Must be one Touch Clamp
	1	Silent Air Compressor 5~10 bar with Electrical power: $\frac{3}{4}$ -1.5 HP and Tank:24L

No.	Q'ty	Pneumatics Training Set
2	1	1.2 Basic Pneumatics Training Set Comprising the following
	1	Service unit contain: Air filter, pressure regulator, lubricator
	1	Air distributor with Output: 8 port at least
	1	Single-acting cylinder, stroke: 40mm-50mm
	2	Double-acting cylinder with cushion, stroke: 50mm-120mm
	1	Pressure sequence valve, slide type, spring return
	1	Pressure regulating valve, Pressure gauge attached
	4	One-way flow control valve, 0-150 l/min
	1	Quick exhaust valve
	2	Pressure gauge
	1	Time-delay valve (Normally closed) with Delay time : 0.1~30 sec
	2	3/2-way push-button valve (Normally closed)
	1	3/2-way push-button valve (Normally open)
	1	5/2-way selector switch valve
	1	3/2-way selector switch valve (Normally closed)
	1	3/2-way air-act, spring-return valve (Normally closed)
	1	5/2-way air-act, spring-return valve
	4	5/2-way air-act, air-return valve
	4	3/2-way limit switch valve
	2	3/2-way idle return limit switch valve
	2	AND valve
	2	OR valve
	1	Spare parts
	5	T-connector
	20	Plastic hose (1Meter)
	1	Hose cutter
	3	1
1		Double-acting cylinder with cushion, stroke: 50mm-120mm
2		One-way flow control valve
1		Time delay valve (Normally open) with Delay time : 0.1~30 sec
1		3/2-way emergency switch valve
1		3/2-way air-act, spring-return valve (Normally closed)
2		3/2-way air-act, spring-return valve (Normally open)
2		5/2-way air-act, spring-return valve
3		5/2-way air-act, air-return valve
2		3/2-way limit switch valve
6		AND valve
6		OR valve
2		Pilot operating check valve
5		T-connector
30		Plastic hose (1Meter)
1		Vacuum valve and suction cup

No.	Q'ty	Pneumatics Training Set
4	1	1.4 Basic Electro-Pneumatics Training Set (Supplementary to Basic Pneumatics Training Set) Comprising the Following
	5	T-connector
	1	3/2-way solenoid valve (Normally closed)
	2	5/2-way single solenoid valve
	2	5/2-way double solenoid valve
	1	Pressure switch
	1	Push-button switch set (3-fold)
	2	Relay unit (3-fold)
	1	Digital time relay ON/OFF with Delay time : 1~99 sec
	1	Digital counter 4digit, counter pulse: 20sec
	1	Pilot lamp & buzzer unit
	1	Inductive sensor
	1	Capacitive sensor
	1	Optical sensor
	2	Electrical limit switch (left)
	2	Electrical limit switch (right)
	1	4mm Electrical Cable set
	1	Power supply 24 VDC
	1	Cable hanger
1	PLC Unit: 18 DI /12 DO	
5	1	1.5 Advanced Electro-Pneumatics Training Set (Supplementary to Basic Electro-Pneumatics Training Set) Comprising the Following
	1	Double-acting cylinder, cushion/proximity switch
	1	Double-acting cylinder with cushion
	2	One-way flow control valve
	1	3/2-way solenoid valve(N/O) Normally Open
	1	5/2-way single solenoid valve
	1	5/2-way double solenoid valve
	1	5/3-way solenoid Valve (All Block)
	1	Push-button switch set (3-fold)
	1	Relay unit (3-fold)
	1	Emergency switch
	2	Electric proximity switch for cylinder
	2	Electrical limit switch (left)
	2	Electrical limit switch (right)
30	Plastic hose(1Meter)	