



69055 Electro Pneumatic Workstation is designed to demonstrate the design, construction and application of Pneumatic components. It integrates PLC technology to build Hybrid Industrial Automation systems with Pneumatic components and modules.

Pneumatic technology is found in numerous areas of engineering. Students investigate the basic “building blocks” of modern Pneumatics and how they are interconnected to form systems. Pneumatic systems provide the power needed to control aircrafts, operate heavy dump trucks, excavators, operate the brakes in our cars and even power lifts in tall buildings.

PLC provides flexibility to design and build numerous systems using software and I/O interfaces without changing hard wired connections.

Features

- PLC operated Electro Pneumatic platform
- 12 Digital Inputs, 8 Digital Outputs
- Toggle switches, Push to on Switch, double acting cylinder, Single Acting cylinder, solenoid valve, flow control valve, manifold, hand lever valve, limit switch, proximity sensor, palm actuator, OR valve, roller lever valve, FRL, pressure gauge, single acting cylinder, air compressor, Audio and visual indicator
- Industrial look & feel
- Function and identification of Pneumatic components and their symbols
- Powerful instruction sets
- Extremely easy and student friendly software
- Several sample Ladder programs
- Practice troubleshooting skills
- WorkStation has 4 wheels, for suitable movement and installation
- Storage drawers with locking facility, Place in drawers for patch cords, and other accessories for storage, and easy identification.

Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

305, Taru Chhaya Nagar, Tonk Road, Jaipur-302029, India
Tel: +91-141-2724326, Mob: +91-9413330765
Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in

- MCB for ON/OFF control and over load protection
- Sequential & Linear Pneumatic control
- Understanding of Industrial Pneumatic Components
- Pneumatic safety awareness
- Robust construction
- 4 mm patch cord connections
- Mounting panel for Pneumatic Components

Scope of Learning

Control of :

- Double Acting Cylinder (DAC) using 5/2 Solenoid Valve using PLC
- Double Acting Cylinder (DAC) by using 5/2- Hand lever valve
- Single Acting Cylinder using 3/2 Roller Lever Actuator
- Double Acting Cylinder (DAC) using two flow control valve
- Single Acting Cylinder using 3/2 Solenoid Valve using PLC
- Single Acting Cylinder using Palm Actuator (3/2 Pushbutton Valve)
- Double Acting Cylinder (DAC) using Shuttle Valve using PLC

Sequencing of :

- (A+A-) control of Double Acting Cylinder by 5/2 Solenoid Valve using PLC
- (A+B+A-B-) control of two Double Acting Cylinder (DAC) by using PLC
- (A+B-A-B+) control of two Double Acting Cylinder (DAC) by using PLC
- (A-B+A+B-) control of two Double Acting Cylinder (DAC) by using PLC
- (A-B-A+B+) control of two Double Acting Cylinder (DAC) by using PLC

Counting of :

- Double Acting Cylinder_2 (DAC2) Piston forward movement using proximity sensor using PLC
- Double Acting Cylinder (DAC) forward movement using limit switch using PLC

Technical Specifications

Programmable Logic Controller

Digital Inputs	: 12 nos.
Digital Outputs	: 8 nos.
Program size (words)	: 4096
Boolean execution speed	: 0.33 ms/Sequential instruction in average
Interfacing	: Ethernet
Input & Output Voltage	: 24 V DC
Power Supply	: 110V - 260V AC, 50/60Hz
Supply	: 24V DC
Push to On Switch	: 4 nos.
Visual Indicators	: 4 nos.

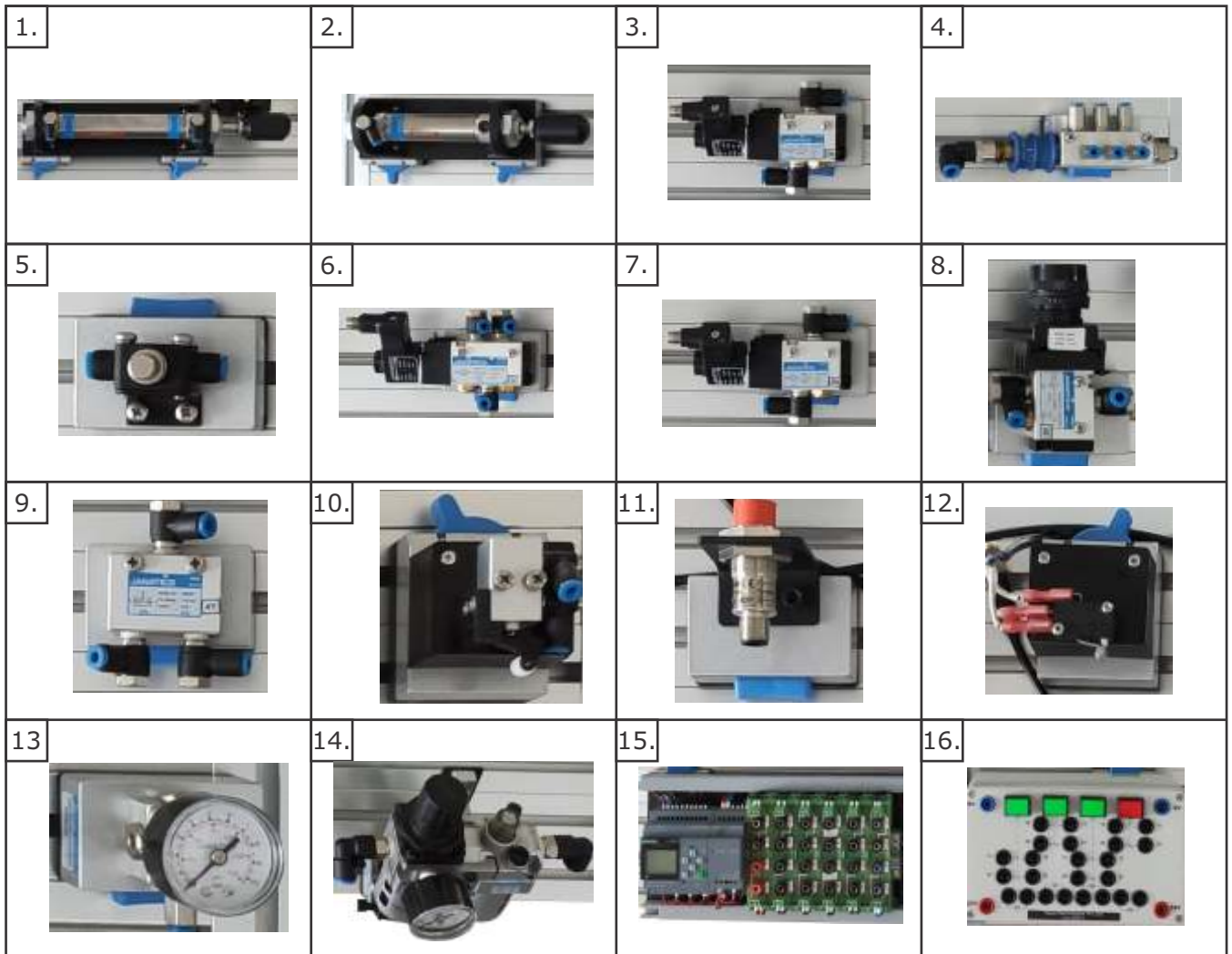
Pneumatics Components List

1. Double Acting Cylinder	:	2 nos.
2. Single Acting Cylinder	:	1 no.
3. 5/2 Hand lever Valve	:	1 no.
4. Manifold	:	1 no.
5. Flow control Valves	:	2 nos.
6. 5/2 Solenoid Valves	:	2 nos.
7. 3/2 Solenoid Valve	:	1 no.
8. 3/2 Push Button (Palm Actuator)	:	1 no.
9. Shuttle Valve (OR Valve)	:	1 no.
10. Roller lever Valve	:	1 no.
11. Proximity Sensor	:	1 no.
12. Limit Switch	:	1 no.
13. Pressure Gauge	:	1 no.
14. FRL Unit	:	1 no.
15. PLC Module	:	1 no.
16. Operating Module	:	1 no.
17. Air Compressor (Optional)	:	1 no.

Accessories

Patch Cord Set	:	5 nos.
PLC Communication Cable	:	1 no.
Ethernet Cable	:	1 no.
PU tube (Total Length)	:	15 meter
Tube cutter	:	1 no.
Air Compressor	:	1 no.

Pneumatics Components Photos



Note: Specifications are subject to change.

Tesca Technologies Pvt. Ltd.

305, Taru Chhaya Nagar, Tonk Road, Jaipur-302029, India
Tel: +91-141-2724326, Mob: +91-9413330765
Email: info@tesca.in, tesca.technologies@gmail.com
Website: www.tesca.in