

# PNEUMATIC TRAINER *(Family of Training systems)*

## (Model : TMS-Pneumatic )



**Double sided Pneumatic & Electropneumatic Trainer [optional]**



**Side view**

### SALIENT FEATURES

- ◆ Choice of 2 table top models Pneumatic / Electro Pneumatic trainer (optionally PLC may be supplied.)
- ◆ The trainer is mounted on sturdy light weight Aluminum profile grooved plate experiment board (1070 x 700 mm) mounted slant. Optionally table with drawers arrangement and caster wheel may be supplied. Optionally double sided trainer supplied Electro on one side & other pneumatic.

### Technical Specification

Items	Model I: Pneumatic Trainer	Qty.
Air distribution & manual control	Flow & Pressure Regulator (FRL) unit with Pressure gauge(10bar) 1/4" BSP (F)	1
	Manifold 4 way, 1/4" BSP (F) with ON/OFF 4 nos. ball valve.	1
	One-way flow control adjustable valve 1/4" BSP (F)	1
	Ball valve 1/4" BSP for ON-OFF (M-F)	4
	Silencer	1
Control Element	3/2 way directly actuated valve [with push button 1/4 " BSP (F)]	1
	3/2 way Mushroom button operated spring return valve 1/4" BSP (F)	1
	5/2 way valve with selector switch 1/4" BSP (F) with 230V AC Operated)	1
	5/2 way pilot operated spring return valve 1/4" BSP (F)	1
	5/2 way double pilot valve (with manual override) 1/4" BSP (F)	1
	3/2 way hand lever valve 1/4" BSP (F)	1
	2/2 way directional control valve with 230V AC operated.	1
	5/3 way directional control valve mid position closed	1
	Quick exhaust valve 1/4" BSP	1
	Single acting cylinder - Bore 25 mm, Stroke 100mm	1
Actuating devices (O/P)	Double acting cylinder Bore 25 mm, Stroke 100mm	1
	Vacuum suction generator	1
Logic Control	OR gate / shuttle valve 1/8" BSP (F)	1
	AND gate 1/8" BSP (F)	1
Electrical connectons	Mains cord with stackable connection	2
Pneumatic Quick change couplers	Polyurethane 6 x 4 = 1 meter	10 pcs
	1/4" BSP Female socket	35
	1/8" BSP Female socket	11
Mechanical Dimensions	<ul style="list-style-type: none"> <li>Aluminum Profile Rack (table top) system with Aluminum profile T groove experiment board optionally double sided.</li> <li>Total dimension : 1165 mm (L) x 300 mm (W) x 800/990mm (H), Net weight : 75 kg. /45 kg. (Electro), Gross Weight : 8 5 kg. /60 kg. (Electro)</li> <li>Aluminum Profile Grooved T bolt Board : L = 1070 mm, W =70 mm. Reclining at 00, 200, 300, Height : 700 mm, Groove Pitch : 25mm.</li> </ul>	
Air compressor [optional]	Air Compressors Displacement 3 cfm, Working pressure 7 kg / cm <sup>2</sup> (7 bar) with 0.5 HP 1440 rpm electric motor 230 V/ 50Hz, 1 ph. with 10 bar gage (Optional)& shut off valve with 8 mm brass male connector hose, safety valve, storage tank 35-50 Ltr.	

#### A) List of Experiments

- Working of Air filter, Lubricator and Regulator
- Use of manifold block
- Working of 2/2 way DC valve
- Working of Single acting cylinder
- Working of Double acting cylinder
- Working of 5/2 way valve
- Working of 4/2 way directional control valve
- Working of 5/3 way mid position closed
- Working of 5/2 way double pilot valve air operated with manual override
- Working of one way flow control valve
- Working of quick exhaust valve
- Study of Vacuum suction generator
- Working of 5/2 way valve solenoid operated
- Working of OR gate / Shuttle valve
- Working of AND gate
- Working of silencer
- Working of Indirectly actuation of single acting single

#### B) Optional:

##### Control Elements : (1 No. each)

- Sequence valve
- Time delay valve
- Pneumatic motor
- Pneumatic air indicator

##### Transparent Elements [Optional] : (1 No. each)

- 3/2 hand lever valve
- 5/2 hand lever valve
- Flow control valve
- Manifold
- Quick exhaust valve
- Double acting cylinder

##### Cut section elements [optional] : (1 No. each)

- 3/2 hand lever valve
- 5/2 hand lever valve
- 5/2 double pilot valve
- 3/2 solenoid valve
- Flow control valve
- Double acting cylinder
- Single acting cylinder