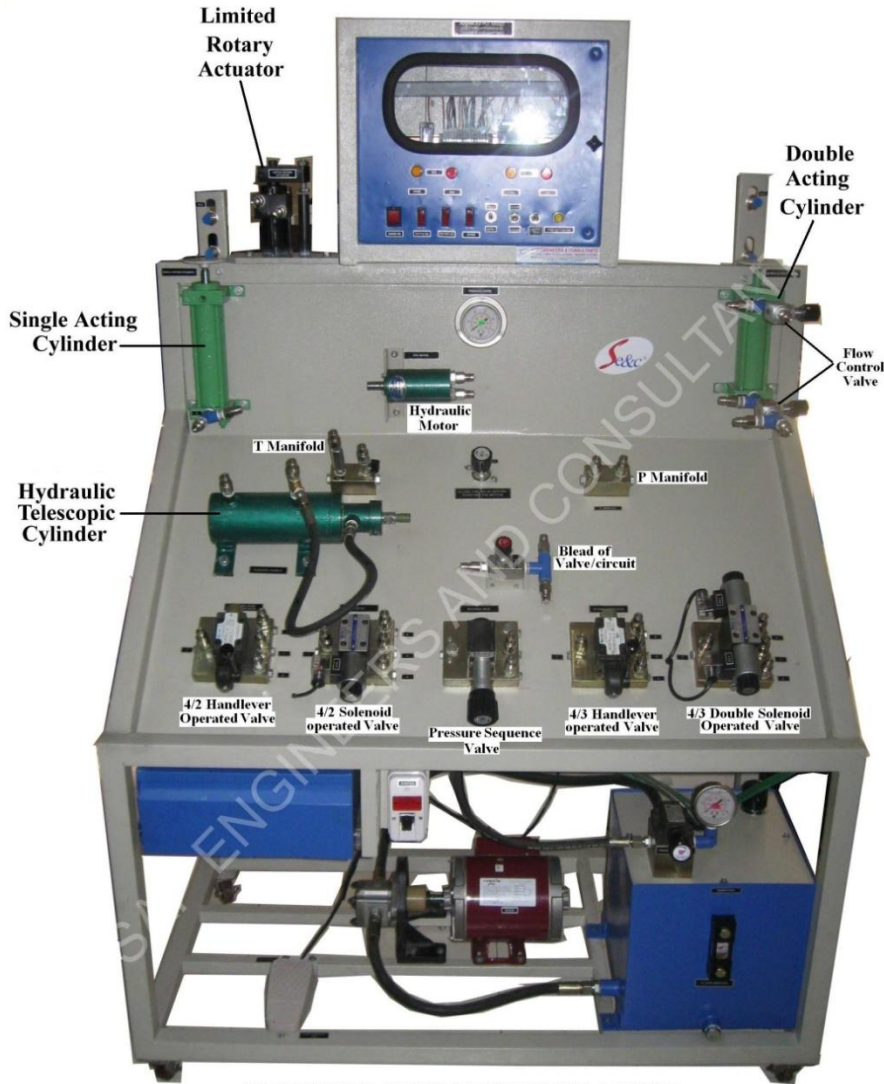


SAP E & C ELECTRO-HYDRAULIC TRAINER
(PRODUCT CODE: SAP - 38)



The **Electro-Hydraulic Trainer (SAP – 38)** outlines the basic Principle of Hydraulic Control System, Hydraulic Control System Components & its applications using electronic proximity position sensor & electro-mechanical actuators (solenoid valves).

ELECTRO HYDRAULIC TRAINER

Technical Specification:-

No.	Item Name	Technical Specifications
1	Relay Module-	4 Relays, 24V DC supply, 2 NO/NC contacts, panel mounting type.
2	Single Acting Cylinder-	Bore: 40 mm × Stroke: 75mm/100mm, Mounting: Foot.
3	Double Acting Cylinder-	Bore: 40 mm × Stroke: 75mm/100mm, Mounting: Foot.
4	Solenoid Valve-	2 Nos, 4/3 way, ¼", 24VDC & 4/2 way, ¼", 24 VDC
5	Pressure Relief Valve-	¼", 60 Kg/cm ²
6	Flow Control Valve-	¼" (F), Square Body
7	Block Manifold-	¼", 4 ways
8	Male Connector-	¼" Quick Release Couplings
9	Indicator-	24 VDC Operated
10	Proximity Sensors-	4 nos. Type: Inductive 2 wire, Diameter: 18 mm, Sensing Distance: 5 mm.
11	Pressure Gauge-	Range- 100 Kg/cm ² , Dial Size: 50/60 mm, Glycerin Filled.

12	Oil Hydraulic power pack-	MS Powder Coated Oil Tank, Capacity: 25/30 Liters. With Oil Level Indicator, Gear Pump: 3-5 LPM, 40/60 Bar, Breather, Oil filter & suction, Electric Motor- Single Phase, 230VAC / 3 Phase 415 V AC, ½ HP/ 1 HP, DOL starter.
13	Pressure sequence valve	¼" (F), Square Body, 60kg/cm ² .
14	Hand Lever Valve (Optional)-	4/3 way & 4/2 way Directional Control Valve
15	Hydraulic Motor (Optional)-	3 LPM, Flange mounting type.
16	Hydraulic Accumulator (Optional)-	Capacity : 0.075 Liters, mWP bar: 250 bar, Weight: 0.62 Kg, Connection: ½" BSP
17	Meter-in Circuit & Meter Out Circuit	
18	Bleed-off Circuit	
19	Pulley Arrangement to carry load applied to the actuator, i.e., Double Acting Cylinder (Optional)	
20	Transverse & Feed Circuit(Optional)	
21	Hydraulic Telescopic Cylinder (Optional)	
22	Limited Rotary Actuator (Optional)	

Range of experiments:

- ❖ Study of pressure control.
- ❖ Study of direction control.
- ❖ Study of fundamental principles of Hydraulics & its applications.
- ❖ Study of Meter-in circuit, Meter-out circuit and Bleed-off circuit.
- ❖ Study of flow control.
- ❖ Study of hydraulic valves.
- ❖ Study of cylinder control.
- ❖ Study of power pack control characteristics.
- ❖ Study of electro-hydraulic control.
- ❖ Study of sequencing of two cylinders using sequence valve.
- ❖ Study of sequencing operation of two cylinders using electro-hydraulic components.
- ❖ Study of hydraulic Motor (optional).
- ❖ Study of Hydraulic Accumulator (optional).
- ❖ Study of operation of Telescopic Cylinder(Optional).
- ❖ Study of operation of Limited Rotary Actuator (Optional).

Features: -

- ❖ Compact Ergonomic Design.
- ❖ ISO Symbol for each mounted components.
- ❖ User Friendly, Self Explanatory Systems.
- ❖ Leak proof Safety Measures, sturdy piping & Robust Construction.
- ❖ Training Manuals mimic Charts for Operation Ease.
- ❖ System Frame with Caster Wheel Arrangement for ease in movement.
- ❖ M.S. powder coated cubical plant with standard Instrument Mountings.
- ❖ Inbuilt Safety Measures to avoid improper usage.
- ❖ Wall mounting assemblies of hydraulic actuator & self-reciprocating cylinder.
- ❖ Hydraulic motor (optional), Solenoid Valves (electro-hydraulic), Limit Switches.
- ❖ Proximity type sensors (electro-hydraulic),
- ❖ QRC Couplings provided Tubing /hose pipes for circulation of pressure.
- ❖ Manifold for distribution.
- ❖ Oil Hydraulic power pack for power supply.
- ❖ Optional components are available to allow fault operation and diagnosis training.

System Dimension-3.5 Ft. (L) X 2Ft. ((W) X 4.5 Ft (H)

Services Required:

- ❖ Electric supply 1 ϕ 230 V AC / 3 ϕ supply of 415 V, 50 Hz suitably used for direct on line starting of an induction motor

Note:

All descriptive matter and illustrations are intended to give only a general idea of the equipment Detailed specifications may be altered at the company's discretion without any notice.

