

SAP E & C BASIC HYDRAULIC TRAINER
(PRODUCT CODE: SAP – 38A-I)



The **Basic Hydraulic Trainer (SAP – 38A-I)** outlines the basic Principle of Hydraulic Control System, hydraulic Control System Components & its applications.

BASIC HYDRAULIC TRAINER

Technical Specification:

No.	Item Name	Technical Specifications
1	Single Acting Cylinder-	Bore: 40 mm × Stroke: 75mm /100mm, Mounting: Foot.
2	Double Acting Cylinder-	Bore: 40 mm × Stroke: -75mm/ 100mm, Mounting: Foot.
3	Directional Control Valves-	2 No.s, 4/3 way & 4/2, 1/4" Hand Lever Operated.
4	Flow Control Valve-	¼" (F), Square Body.
5	Pressure Relief Valve-	¼", 60 Kg/cm ² .
6	Block Manifold-	¼", 4 ways.
7	Male Connector-	¼" Quick Release Couplings.
8	Hydraulic Hoses-	10 No.s
9	Drain Plug-	Magnetic type
12	Pressure Gauge-	100 Kg/cm ² , Dial Size: 50 mm, Glycerin Filled.

For More Details Visit Our Website At: www.sapengineers.com, E-mail:- pravinsdeode@vsnl.net
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11	Oil Hydraulic power pack-	MS Powder Coated Oil Tank, Capacity: 25 Liters. with Oil Level Indicator, Gear Pump: 3-5 LPM, 40-70 Bar, Breather, Oil filter & suction, Electric Motor: Single Phase, ½ HP/ 1HP, 230VAC / 3φ, ½ HP/ 1 HP, 415V AC with DOL starter
10	Pressure Sequence Valve (Optional)-	¼" (F), Square Body, 60kg/cm ² .
13	Hydraulic Motor (Optional)-	3 LPM, 1/4"
14	Hydraulic Accumulator (Optional)-	Capacity : 0.075 Liters, mWP bar: 250 bar, Weight: 0.62 Kg, Connection: ½" BSP
15	Needle Valve (Optional)-	1/4", 1 No.
16	Meter-in Circuit & Meter Out Circuit	
17	Bleed-off Circuit	
18	Transverse & Feed Circuit	
19	Pulley Arrangement to carry load applied to the actuator, i.e., Double Acting Cylinder (Optional)	

Range of experiments:

- ❖ Study of fundamental principles of Hydraulics & its applications.
- ❖ Study of Meter-in Circuit & Meter-out circuit.
- ❖ Study of Bleed-off Circuit.
- ❖ Study of Transverse & Feed Circuit.
- ❖ Study of Speed Control, Pressure Control & Flow Control.
- ❖ Study of Direction Control.
- ❖ Study of Hydraulic valves
- ❖ Study of Hydraulic Actuators.
- ❖ Study of Hydraulic Power Pack.
- ❖ Study of Hydraulic Accumulator & Hydraulic Motor (Optional).
- ❖ Study of sequencing operation using Pressure Sequence Valve (Optional).

Features: -

- ❖ Compact Ergonomic Design.
- ❖ 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.
- ❖ Inbuilt Safety Measures to avoid improper usage.
- ❖ Wall mounting assemblies of hydraulic actuator & self-reciprocating cylinder.
- ❖ QRC couplings provided, Tubing for circulation of pressure (Hose Pipe Tubing)
- ❖ Manifold for distribution.
- ❖ Oil Hydraulic power pack for power supply. .
- ❖ Optional component are available to allow fault operation and diagnosis training.
- ❖ Hydraulic motor & Hydraulic Accumulator (Optional).

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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.

Manufactured/Marketed By
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The logo for S&C (SAP Engineers & Consultants) features a stylized red 'S' and 'C' intertwined within a blue oval. Below the oval, the text 'The Instrumentation People' is written in a smaller font, and 'SINCE 1996' is written in a larger font at the bottom.

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