

## **ADVANCED HYDRAULIC TRAINER KIT**

MODEL: HYD02



### **FEATURES**

- Compact, comprehensive, sturdy design
- Smooth and silent operation

### **DESCRIPTION**

This trainer explains the essential physical principles of hydraulics. It demonstrates the construction and working of basic as well as advanced components and helps the students in the designing and building of basic and advanced hydraulic circuits. It can be upgraded to learn the advanced theories and comparatively complicated circuits. The trainer aims at helping the students to make complex hydraulic circuits. Optionally, sliding arrangement for in-use component mounting can be provided along with component storage facility.

### **INSTRUCTION MANUAL**

Self-explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual.

## LIST OF EXPERIMENT

Fundamental principles of hydraulics	Application of hydraulics
Study of symbols, schematic diagrams and standards	Study of pressure measurement and control
Study of sources of hydraulic power	Study of flow control
Study of Transmission and conditioning of oil	Study of direction control valve
Application of hydraulics	Study of hydraulic actuators
Study of symbols, schematic diagrams and standards	Building of hydraulic circuits
Study of Pressure compensated Flow Control Valve	Study of safety aspects in hydraulic circuits
To study the speed control of the Double Acting Cylinder	
<b>*List of experiment may vary depending on model selected. Some of the experiments are theoretical only.</b>	

## COMPONENTS

COMPONENTS	QTY	COMPONENTS	QTY
4/3 Way lever Operated 3 position Valve	1	Shut Off Valve	1
4/2 Way Solenoid Operated Spring Return Valve	1	Non Return Valve	1
4/2 Way Double Solenoid Valve	1	Double Acting Cylinder	2
Sequence Valve	1	Pressure gage, Glycerine filled	1
Pressure Relief Valve	1	Pressure Relief Valve Pilot Operated	1
Pressure Reducing Valve	1	Electrical Limit Switch	2
Unidirectional Flow Control Valve	1	Hydraulic Powerpack	1
Bi-directional Flow Control Valve	1	Distributor Block	4
Pressure gage, Bourden type, panel mounted	1	Hose Set with Quick Release Coupling	1Set
Power Supply	1		

## OPTIONAL ADDITIONAL

- 4/2 Way Hand Lever Operated Spring Return Valve
- 3/2 Way Hand Lever Operated Valve
- Flow Control Valve, Pressure Compensated with built-in check valve
- Non Return Valve Pilot Operated
- Hydraulic Motor Bi-directional
- Computer based training software (Automation Studio Software) on Oil Hydraulics. An advanced personal computer based software. The Software has facility to study the basic hydraulics to advanced hydraulic circuits.
- An interface device for interface of trainer with Automation Studio Software.
- Hydraulic components cut away models
- Transparent hydraulic components
- Magnetic Symbols



## MODELS

HYD02-P: Component mounting fixed type. No storage facility  
 HYD02-Q: Sliding type component mounting. No storage facility. Table top model  
 HYD02-R: Sliding type component mounting. With storage facility & with table  
 HYD02-S: FLEXIBLE TYPE COMPONENT MOUNTING. WITH STORAGE FACILITY AND WITH TABLE

Model No.	Dimension	Weight
HYD02-P	1000 (W) X 600 (B) X 1200 (H)	300 Kg
HYD02-Q	1000 (W) X 800 (B) X 900 (H)	300 Kg
HYD02-R	1000 (W) X 800 (B) X 1700 (H)	300 Kg
HYD02-S	1000 (W) X 800 (B) X 1700 (H)	300 Kg

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- (1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice
- (2) Photographs are indicative only.