

Hypn08.xls Revision No: 09 Date: January 22, 2021

TRANSPARENT HYDRAULIC TRAINER KIT MODEL: HYD08



FEATURES

• Compact, comprehensive, sturdy design

- Smooth and silent operation
- Study of Hydraulic Circuits
- All components have quick release coupling with NRV built-in -on both sides of QRC

DESCRIPTION

This trainer explains the essential physical principles of hydraulics. It demonstrates the construction and working of basic hydraulics with the help of transparent components and helps the students in the designing and building of basic hydraulic circuits.

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

- 1. Fundamental principles of hydraulics
- 2. Application of hydraulics
- 3. Study of symbols, schematic diagrams and standards
- 4. Study of sources of hydraulic power
- 5. Transmission and conditioning of oil
- 6. Study of direction control valve
- 7. Study of hydraulic actuators
- 8. Building of simple hydraulic circuits
- 9. Study of safety aspects in hydraulic circuits

* List of experiment may vary depending on model selected. Some of the experiments are theoretical only.



COMPONENTS

- Transparent 4/2 Direction Control Valve, Hand-Lever Operated
- Transparent Uni-directional Flow Control Valve
- Transparent Double Acting Cylinder 2 nos.
- Transparent Check valve (in-line type)
- Transparent Pressure Relief valve
- Transparent Distributor Block
- Transparent Pressure gauge
- Hose Set with Quick Release Coupling
- Hydraulic power pack suitable for the above trainer will be supplied.
- Maximum pressure 10 bar. This will be complete with motor, oil tank, pressure gauge, pressure relief valve, strainer, etc.

OPTIONAL ADDITIONAL

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Computer based training	Simulation software	Hydraulic components cut	Magnetic Symbols
software on Oil Hydraulics		away models	
Transparent 3/2 Way Valve,	Transparent 4/2 Way	Transparent 4/2 Way	Transparent 4/2 Way
Lever Operated	Double Solenoid Valve	Solenoid Operated Spring	Valve Lever Operated
		Return	Spring Return
Transparent 4/3 Way lever	Transparent 3/2 or 4/2	Transparent Sequence Valve	Transparent Pressure
Operated 3 position Valve	Single pilot valve		Reducing Valve
Transparent 4/3 or 4/2	Transparent Pressure	Transparent Pressure Relief	Transparent Pressure
Double pilot valve	Regulating Valve- 3	Valve	Relief Valve Pilot
Double pliot valve	0 0	valve	
	way		Operated
Transparent Counter	Transparent Flow	Transparent Unidirectional	Transparent Bi
balance valve	divider	Flow Control Valve Inline	Directional Flow
	uividei	Type	Control Valve
Transmer Flam Cantral	There exerns the Chart off	11	
Transparent Flow Control	Transparent Shut off	Transparent Non-Return	Transparent Non-
Valve Pressure	valve	Valve Inline Type	Return Valve Pilot
Compensated			Operated
Tran <mark>sparent</mark> Hydraulic	Transparent Hydraulic	Transparent Hydraulic Pump	Transparent
Cylinder	Motor		Diaphragm
			Accumulator
Tra <mark>nspare</mark> nt <mark>Ele</mark> ctrical Limit	Transparent Pressure	Transparent Pressure Gauge	Transparent Manifold
Switch	switch		

SERVICES REQUIRED

• Electric supply

MODELS

- HYD08: Component mounting fixed type. No storage facility.
- HYD08-Q: Sliding type component mounting. No storage facility. Table top model.
- HYD08-R: Sliding type component mounting. With storage facility & with table

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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.