

Hypn08.xls Revision No: 11 Date: April 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

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

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.
- $\bullet~$ HYD08-R: Sliding type component mounting. With storage facility $\mbox{\ensuremath{\mbox{G}}}$ with table
- HYD08-S: Flexible type component mounting. With storage facility and with table

NiYo Engineers

Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029 INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051 m Web: www.niyoindia.com





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