

ELECTRO HYDRAULIC SERVO TRAINING SYSTEM

MODEL: HYD04



FEATURES

- Stand alone system for teaching the basic principles of electronic control for hydraulic systems
- System complete with electrical power supply, transducers and actuators.
- Demonstration of both linear and rotary actuators.

DESCRIPTION

The Electro-hydraulic servo trainer aims at imparting working knowledge of basic hydraulic actuators, transducers used for the measurement of oil pressure, oil temperature, rotary speed, position, etc., control signals and controller tuning.

The system aims at studying closed loop feedback control in hydraulics for angular position, rotational velocity and linear position using an Electro-Hydraulic Servo valve. Optionally, a brake type loading arrangement is provided to vary the load on the hydraulic motor.

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. Study of the fundamental principles of hydraulic and electro-hydraulic servo controls
2. Study of closed loop feedback control of angular position, rotational velocity and linear position
3. Study of construction, operation and performance characteristics of servo valves
4. Importance of contamination in hydraulic circuits

** Some of the experiments are theoretical only.*

COMPONENTS

1. Sturdy MS frame to mount all the hydraulic valves
2. Hydraulic power pack
3. Inline filter
4. Double acting cylinder
5. Hydraulic motor
6. Electro hydraulic servo valve
7. Oil temperature indicator
8. Glycerine filled pressure gauges, qty. 4 nos.
9. Rotary speed and rotary velocity transmitter
10. Linear position transmitter
11. Signal converter and controller
12. Hydraulic pipes and fittings
13. Electronic control panel

OPTIONAL ADDITIONAL

1. Simulation software
2. Hydraulic components cut away models.
3. Transparent hydraulic components
4. Magnetic Symbols

Note: Details of optional additional items can be made available on request.

SERVICES REQUIRED

1. Electric supply

Dimension	Weight
800 (W) X 775 (B) X 1500 (H)	300 Kg

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
e-mail- sales@niyoindia.com Web: www.niyoindia.com



- (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.