

# PROPORTIONAL OIL-HYDRAULIC COMPONENTS

## Mod. HPV-S/EV

The proportional hydraulic components assembled on plates with proper handles for an easy coupling to the Trainer of oil control hydraulics for students mod. HST/EV, enable to upgrade the educational resources of the same trainer.

The set of proportional oil-hydraulic components provides the study of closed-loop and open-loop control techniques and the related oil-hydraulic circuits which are fundamental for a complete automation and robotics program.

The set of proportional oil-hydraulic components widens the educational possibilities of the trainer mod. HPT/EV and includes:

- Industrial oil-hydraulic components specifically modified for educational purposes, including pressure test-points, quickacting couplings and mounted on modular panels with standard symbols
- Hydraulic connections with flexible hoses and quick-acting couplings on the front panels



### TRAINING PROGRAM:

The program suggests different exercises among which:

- Closed-loop position control for oscillating motor
- Open-loop position control for hydraulic motor
- Closed-loop speed control for hydraulic motor
- Closed-loop slope control for combine-harvester

### TECHNICAL SPECIFICATIONS:

#### Proportional oil-hydraulic components on modular panels

##### Module:

- 1 proportional single-solenoid directional control valve
- 1 line filter
- 2 oscillating motors
- 1 reversible hydraulic motor

##### Transducers

- tacho-generator
- angular position (potentiometric)
- slope (potentiometric)

#### Electronic regulators for

- position control
- speed command
- speed control

#### Measurement instruments

- digital tester
- revolution counter

**Power Supply:** 230 Vac 50 Hz single-phase - 100 VA  
(Other voltage and frequency on request)

**Dimensions:** 108 x 84 x 54 cm

**Weight:** 50 kg

### REQUIRED

#### UTILITIES (PROVIDED BY THE CUSTOMER)

- Oil-hydraulic power supply: 60 bar - 6 l/min

### SUPPLIED WITH

THEORETICAL-EXPERIMENTAL HANDBOOK  
WITH INTRODUCTION TO THE EXERCISES

