

# MOOG

## M040-119 Servovalve Tester

The Moog Servovalve Tester has been developed based on practical field experience to provide a useful aid in commissioning, servicing and troubleshooting control systems that use servovalves and pump stroker valves with mechanical feedback. It is usually an advantage to separate the hydraulics (servovalve) from the electronics.

To do this, simply remove the valve connection and connect the cable (A48114-150) from the Moog Tester. The servovalve can then be operated and checked completely independently of the system electronics. In this way you can determine whether problems, such as null drift, unsuitable oscillations or failure to achieve maximum speed, are hydraulic or electronic.



### SPECIFICATIONS

**Outputs:**

100 mA into 50 ohms  
10 mA into 400 ohms

**Battery:**

PP3 9V Alkaline

**Dimensions:**

152 x 83 x 33 mm

**Weight:**

160 gm including battery

**Connecting Cable:**

P/N A48114-150  
Series coil connection  
Length 1500 mm  
P/N A48700-150  
Parallel coil connection  
Length 1500 mm

**Carrying Case:**

for valve tester and cable,  
Moog P/N B 96155

**EMC:**

EN 50082-1  
EN 55011 1A  
IEC 801-2  
IEC 801-3

### FEATURES

- Provides hydraulic test independent of electronics
- Battery operated
- Compact, lightweight design
- Carry case and cable
- CE marked

## OPERATING DETAILS



### 1. Cable Connections:

Cable supplied with the Valve Tester is connected with red plus (+) blue minus (-). Cable P/N A48114 provides series coil connection at servovalve.

### 2. Ammeter:

Magnitude and polarity of current to the servovalve can be read. If there is a break in the current circuit (e.g. in the valve) the meter reads 'null' because no current can flow. If it is not clear whether the valve or tester is defective, the tester can be verified with the 'Battery test', (see below).

### 3. Range Switch:

10 mA for valve with 200 ohm and 1000 ohm coils or when small signals are required. (For 1000 ohm coils connect to Tester in parallel, ie standard cable unsuitable.) 100 mA for all other valve coils.

### 4. Polarity ON/OFF Switch:

3 position toggle switch:  
 – reverses polarity of current  
 – in middle position the tester is turned off.  
 A step change in the applied signal can be obtained by switching from middle to plus (+) or minus (-).

### 5. Current Control Knob:

Current can be continuously adjusted from 0-100% with 100% corresponding to either 10 mA or 100 mA depending on the range selected. Zero current corresponds to the knob 'pointing' vertically up, with 0-100% in either polarity being achieved by rotating clockwise or anti-clockwise (respective polarity being determined by polarity switch 4).

### 6. Battery Test:

Position the current control knob at 90° from null, put the polarity switch to plus (+), output range switch to 100 mA, short circuit the cable connections (1). If the battery is good, current exceeding 90 mA is registered.

### 7. Battery Replacement:

Remove rear cover for access.

### Ordering Information

Servo Valve tester	M040-119
Carry case	B96155
Cable 1500 mm series	A48114-150
parallel	A48700-150

### Kit B96634 includes:

- Tester
- Carry case
- Cable 1500 mm series

**MOOG**  
 Industrial Controls Division  
 Moog Inc., East Aurora, NY 14052-0018  
 Telephone: 716/655-3000  
 Fax: 716/655-1803  
 Toll Free: 1-800-272-MOOG