

ELECTRIC TRIM SERVOS

BY **MAC** **MENZIMER AIRCRAFT
COMPONENTS, INC.**

INTRODUCTION

MAC Trim Servos are high-quality, durable, electrically-operated servos designed specifically for homebuilt aircraft and robotic applications. They enable you to control trim surfaces and many other mechanisms on your aircraft without the use of bulky cables and pulleys. Their small size and light weight makes them easy to install inside elevators, ailerons, and rudders.

MAC servos operate on 12-14 volts D.C. Since their current requirement is very low, they can be installed using small 26 or 28 gage wire. When activated, they push or pull with tremendous force. This thrust is generated by means of a jackshaft, so the output shaft will lock in any position when the electrical power is turned off. They will also automatically stop when their travel limit is reached. Voltage polarity determines the direction of travel.

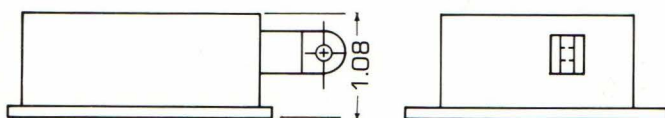
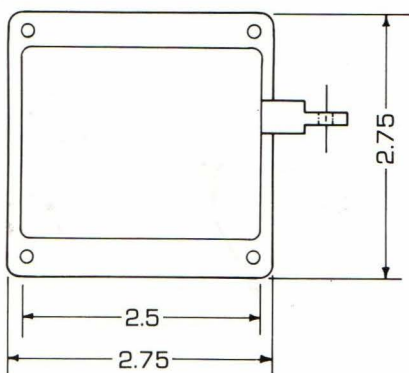
Two models of MAC servos are available, the MAC S4 and S6, which differ only in their output shaft travel. They can be purchased individually, or as a trim system which includes servo, rocker switch, 3-position indicator, clevis/pushrod kit, and instructions.

MAC, Inc. also has available a very high quality, teflon insulate 26 gage wire which is recommended for the system installation.

Engineered
and Quality
Constructed to
Last the Lifetime
of Your Aircraft.

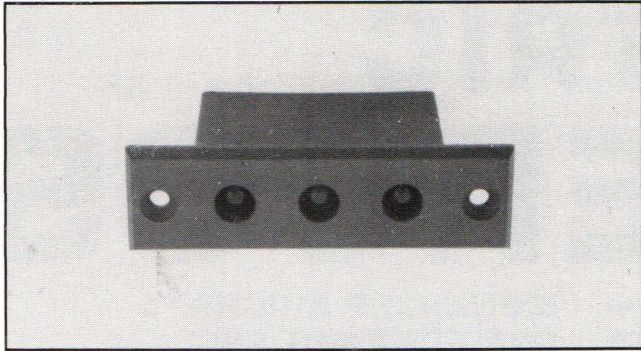


MAC S4
MAC S6



SPECIFICATIONS

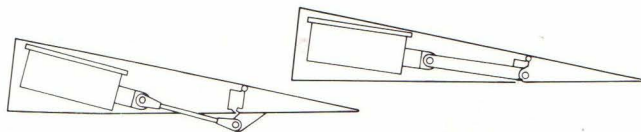
Operating Voltage 12-14 VDC
No Load Current 130 MA
Max Thrust 40 lbs.
Weight 4 oz.
Output Shaft Clevis (1/8" Pin Hole)
Output Shaft Movement (MAC S4)7 inch
Output Shaft Movement (MAC S6)95 inch
Output Travel Time (MAC S4) 8 seconds
Output Travel Time (MAC S6) 11 seconds
Construction Material... 22C Fiber-Filled Nylon



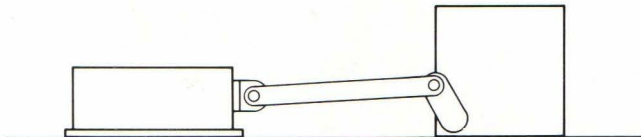
MAC 3-POSITION INDICATOR

The MAC 3-position indicator is an LED device designed to be installed in the cockpit to give an indication of the servo output shaft position. When the servo reaches its limit of travel in either direction, an end light will go on. The center light will go on when the servo runs through its center position. The indicator is connected to the servo by three small 26 or 28 gage wires. It is included with MAC trim systems or it can be purchased separately for your special needs. Any red, yellow and green LED color combinations can be ordered. This reliable solid state device can be very useful for applications such as landing gear or flap position indicator.

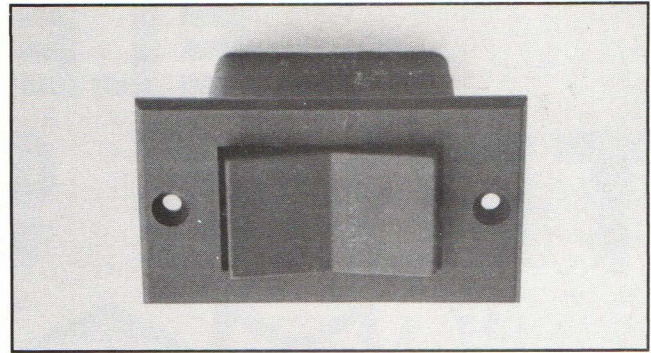
If no special LED colors are specified when ordering a trim system, the indicator will be a red-green-red combination.



Use a MAC S4 servo for installations requiring a short ($\frac{1}{2}$ " to $1\frac{1}{4}$ ") control horn.



Use MAC servos to control almost any mechanism in your aircraft that would be controlled by cables or levers.

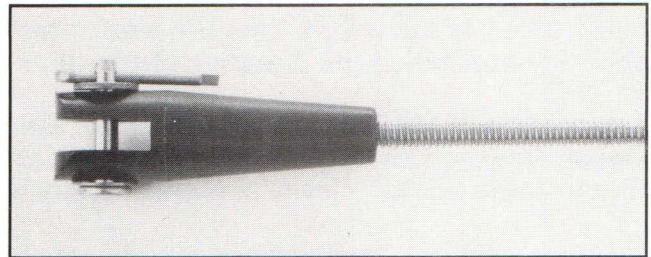


MAC ROCKER SWITCH

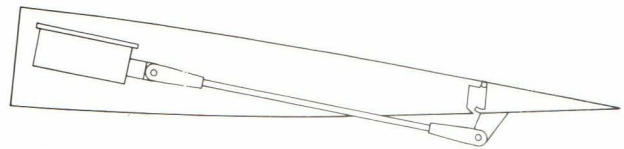
The MAC rocker switch is designed for use with the MAC trim system. It has a soft snap action in two directions and returns to a center off position. This unique switch is especially desirable for controlling aircraft trims. It is included with the MAC trim systems or can be purchased separately.

SPECIFICATIONS:

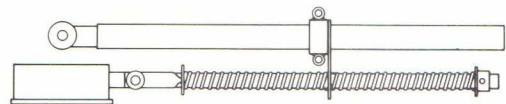
Maximum Current 5 amps at 28 VDC
Mechanical Life 30 Million Cycles
Housing Material 1040 Nylon



Clevis/Pushrod kit contains 2 clevis forks, pushrod and hardware.



Use a MAC S6 servo for installations requiring a long ($1\frac{1}{4}$ " to 3") control horn.



Use a MAC S6 servo for most trim systems using a spring tension device.

NAME _____

ADDRESS _____

METHOD OF PAYMENT: ☐ CHECK ENCLOSED ☐ MONEY ORDER ENCLOSED ☐ C.O.D. ☐ VISA ☐ MASTERCARD

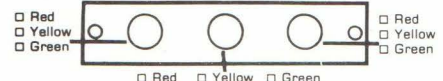
CREDIT CARD # _____ Expiration Date _____

SIGNATURE **X** _____

- Add \$2.00 shipping & handling to all orders.
- All domestic orders sent UPS unless otherwise specified.

- Add \$1.90 for C.O.D. Orders.
- California residents add 6% sales tax.

<input type="checkbox"/> MAC S4 System (includes servo, switch, indicator, pushrod, & clevises) ...	99.95	<input type="checkbox"/> MAC S4 servo only	69.95
<input type="checkbox"/> MAC S6 System (includes servo, switch, indicator, pushrod & clevises) ...	109.95	<input type="checkbox"/> MAC S6 servo only	79.95
<input type="checkbox"/> 50 ft. of 26 gage quality teflon insulated wire	6.00	<input type="checkbox"/> MAC rocker switch	9.95
<input type="checkbox"/> 100 ft. of 26 gage quality teflon insulated wire	12.00		
<input type="checkbox"/> MAC clevis/pushrod kit (2 clevis forks, 7" pushrod, hardware)	9.95		
<input type="checkbox"/> MAC 3-position indicator (circle LED colors)	14.95		



ORDER FORM
MAC
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(619) 724-7557