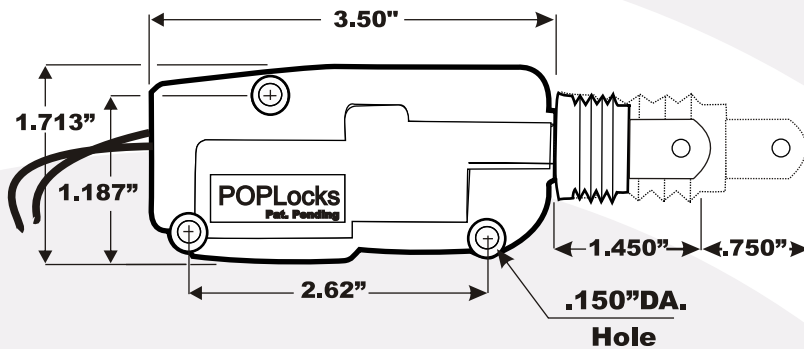


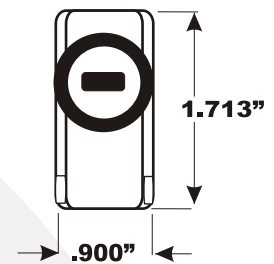
Red actuators employ a unique spring detent feature. The spring detent holds the intended lazy action latch in its designated position. This feature is the principle used with many P.O.P. Locks products.



**Side View**



**End View**



Flat Act™ actuators share critical dimensions allowing crossover components i.e.; bases, covers and connecting linkages to be interchanged.

**Nominal Voltage, 12 Volt**

Current with blocked rotor, 3 amp

**1) Operational Force**

VOLTAGE	TEMPERATURE	FORCE
13v+	20oC	30N
13v+	70oC	25N
13v+	25oC	30N

Tolerance for test result -10%, +30%

**2) Operational Test**

1 Cycle = 1 opening and one closing movement

Test = 180,000 cycles

Load = 20N

Test cycle power on 0.5 seconds power off 15.0 seconds.

Motor to be cooled by fan at 50 Celsius.

## **TECHNICAL SPECIFICATION**

### **FLAT ACT™ ACTUATORS**

**3) TEMPERATURE AND MOISTURE TEST**

**1 CYCLE=6 HOURS AT 80oC DRY HEAT  
6 HOURS AT 50oC 98% HUMIDITY  
6 HOURS AT -25oC**

**TRANSFER BETWEEN TEMPERATURES WITHIN THREE  
MINUTES REPEAT FOR 10 CYCLES (TOTAL 180 HOURS)**

**AT THE END OF THE TEST THERE SHOULD BE NO  
DEFORMATION OF PARTS OR BREAKAGE.**

**THE ACTUATOR SHOULD FUNCTION AS STANDARD.**

**4) SALT SPRAY TEST**

**PLACE DEVICE IN SALT FOR CHAMBER FOR 96 HOURS.  
DEVICE SHOULD THEN FUNCTION AS STANDARD.**

**5) PROTECTION AGAINST EXCESSIVE VOLTAGES**

**THE ACTUATOR MUST WITHSTAND A SPIKE INPUT 24 VOLTS.**

**6) ELECTROMAGNETIC COMPATIBILITY**

**THE ACTUATOR MUST CONFORM TO THE REQUIREMENTS  
PRINTED IN GENERAL MOTORS SPECIFICATIONS Qt12 6521**

**7) RADIO INTERFERENCE**

**THE ACTUATOR MUST NOT AFFECT RADIO RECEPTION OR  
RADIO TELEPHONE TRANSMISSION. THE REQUIREMENTS ARE  
PRINTED IN GENERAL MOTORS QT 12 537 DOCUMENT.**

## **TECHNICAL SPECIFICATION**

### **FLAT ACT™ ACTUATORS**

- 8) ELECTRICAL INSULATION**  
THERE SHOULD BE AN INSULATION RESISTANCE HIGHER THAN 10M WITH APPLIED VOLTAGE OF 500V cc BETWEEN ONE TERMINAL AND MASS.
- 9) IMPERMEABILITY TO WATER**  
THE ACTUATOR MUST BE WATERTIGHT TO THE REQUIREMENTS OF D.I.N. 40 050. THE TEST SHOULD BE CARRIED OUT WITH THE ACTUATOR IN ITS FITTED POSITION.
- 10) CABLE SECURITY**  
ALL FITTED CABLES SHOULD NOT PULL OUT UNDER A LOAD OF 50N.
- 11) VIBRATION TEST**  
5-60Hz FOR TWO HOURS AT 23oC  
AMPLITUDE 0.5MM  
CYCLE TIME ONE MINUTE  
VIBRATION DIRECTION VERTICAL TO MOUNTING
- 12) CASING MATERIAL CHEMICAL RESISTANCE**  
THE TESTS TO BE MADE TO THE MAIN OUTER CASING OF THE ACTUATOR BY THE 'SPOT' METHOD. THE MATERIAL SHALL SHOW NO SIGNS OF DETERIORATION TO:  
PETROLEUM  
GREASE  
HYDRAULIC FLUID