



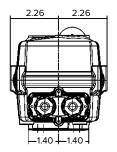
# **DynaQuip AV97 Data Sheet**

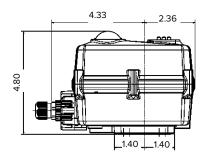
The AV97 Standard is an entry level electric actuator designed where only minimal features are required for on-off applications. The basic version is constructed traditionally with internal cams striking micro-switches to stop the reversible motor in the required positions. The lower torque models are available failsafe using capacitors.

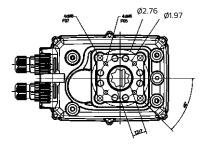
● Fully weatherproof to IP67 ● Dome style local visual indicator ● Hand operation ● End of travel confirmation switches ● Female octagon drive output ● Multiple ISO5211 mountings ● Anti-condensation heater

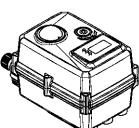


| Standard Specifications                            | AV97                                  |  |  |
|----------------------------------------------------|---------------------------------------|--|--|
| Max Rated torque Nm output (in./lbs.)              | Break 1240 in./lbs. / Run 974in./lbs. |  |  |
| Voltage range                                      | 24VDC, 110VAC, 220VAC                 |  |  |
| Mounting (ISO5211) x drive (female octagon)        | F05 & F07 x 17mm                      |  |  |
| Ingress Protection                                 | IP67                                  |  |  |
| Electrical connection                              | Terminal strip via gland              |  |  |
| End of travel confirmation (dry contact/volt-free) | 2 x Mechanical micro-switches         |  |  |
| Local visual position indicator                    | Dome style                            |  |  |
| Housing material                                   | ABS                                   |  |  |
| Weight ABS (Aluminum)                              | 4.85 Lbs.                             |  |  |







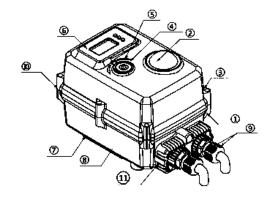




# DynaQuip AV97 Data Sheet

| Specification           |                                                                                                                            | AC 1ph 50/60Hz        |                    |                    | DC                 |  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|--------------------|--------------------|--|
| Rated Voltage           | AC230V                                                                                                                     | AC110V                | AC24V              | DC24V              | DC12V              |  |
| Voltage Range           | AC 95-265V                                                                                                                 | AC 95-265V            | AC22-28V           | DC22-28V           | DC10-15V           |  |
| Consumption             | 15W run, 1.6W<br>hold                                                                                                      | 15W run, 1.6W<br>hold | 15W run, 1.5W hold | 15W run, 1.5W hold | 15W run, 1.5W hold |  |
| Peak current            | 0.26A for 5ms                                                                                                              | 0.26A for 5ms         | 2.5A for 5ms       | 2.54A for 5ms      | 2.54A for 5ms      |  |
| Consumption Standard    | 15W run, 1.6W<br>hold                                                                                                      | 15W run, 1.6W<br>hold | 15W run, 1.5W hold | 15W run, 1.5W hold | 15W run, 1.5W hold |  |
| Peak current Standard   | 0.52A for 5ms                                                                                                              | 0.52A for 5ms         | 5A for 5ms         | 5A for 5ms         | 5A for 5ms         |  |
| Fuse                    | 2A                                                                                                                         | 2A                    | 5A                 | 5A                 | 5A                 |  |
| Fuse                    | 10A                                                                                                                        | 10A                   | 10A                | 10A                | 10A                |  |
| Maximum Break Torque    |                                                                                                                            | 708.06 in./lbs.       |                    |                    | 708.06 in./lbs.    |  |
| Run & Reseat Torque     | 708.06 in./lbs.                                                                                                            |                       |                    | 708.06 in./lbs     | 5.                 |  |
| Manual operation        | Yes, by hexagonal wrench (supplied in clip) when no power is being applied                                                 |                       |                    |                    |                    |  |
| Run time Standard       | 10 sec                                                                                                                     |                       |                    | 10 sec             | 10 sec             |  |
| Run time Failsafe       |                                                                                                                            | 10 sec                |                    |                    | 10 sec             |  |
| STANDARD FEATURES:      |                                                                                                                            |                       |                    |                    |                    |  |
| Operating frequency     | Not continuous, allow ≥1 minute between cycles                                                                             |                       |                    |                    |                    |  |
| Position Indication     | Mechanically driven dome style visual 2 color indicator                                                                    |                       |                    |                    |                    |  |
| Mounting restriction    | None, can be mounted at any angle. Leave room for space to operate manually, and for electrical connection                 |                       |                    |                    |                    |  |
| End Position indication | Micro-switches operated by adjustable internal cams, set slightly ahead of the final motor stop position.                  |                       |                    |                    |                    |  |
| ISO:5211                | F05 & F07                                                                                                                  |                       |                    |                    |                    |  |
| Working Angle           | Factory set at 90° ±2°, maximum angle of rotation 360°                                                                     |                       |                    |                    |                    |  |
| Female drive            | 17mm x 21mm deep                                                                                                           |                       |                    |                    |                    |  |
| Ingress protection      | IP67                                                                                                                       |                       |                    |                    |                    |  |
| Max media temp          | ≤176 °F                                                                                                                    |                       |                    |                    |                    |  |
| Ambient temp            | -4 to +140 °F (ABS)                                                                                                        |                       |                    |                    |                    |  |
| Cable Length            | Supplied without cable, 60-80 series is supplied with wiring box with conduit entry. Wiring via terminal strip within box. |                       |                    |                    |                    |  |
| Ambient humidity        | 5-95% RH non-condensing                                                                                                    |                       |                    |                    |                    |  |
| Explosion proof         | No, prohibited. Do not use in hazardous areas                                                                              |                       |                    |                    |                    |  |
| Housing                 | Plastic (ABS)                                                                                                              |                       |                    |                    |                    |  |
| Weight                  | 4.85 lbs.                                                                                                                  | 4.85 lbs.             |                    |                    |                    |  |
| Options                 | Extended flying lead option, per meter.                                                                                    |                       |                    |                    |                    |  |

# **Main Parts**

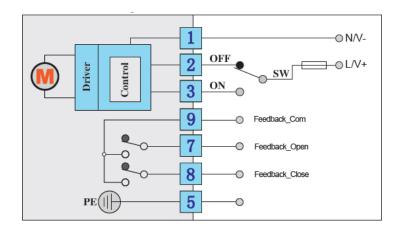


| ltem | Parts                        | Material       |  |
|------|------------------------------|----------------|--|
| 1    | Actuator                     | ABS            |  |
| 2    | Indicator                    | Transparent AS |  |
| 3    | Screw x 4                    | 304            |  |
| 4    | Manual Shaft                 | 304            |  |
| 5    | Oil Seat                     | NBR            |  |
| 6    | Label                        | PVC            |  |
| 7    | Wrench Fixed                 | ABS            |  |
| 8    | Hexagon Wrench               | Steel          |  |
| 9    | Weatherproof Cable connector | Nylon          |  |
| 10   | Cover Seal                   | NBR            |  |

## **AV97 Wiring**

#### **Standard Wiring for ON-OFF AV97 Actuators**

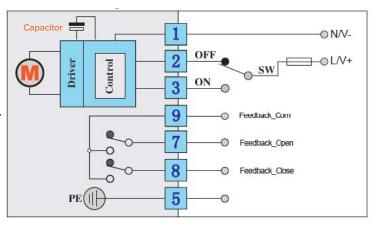
Standard wiring for our AV97 series actuators including all voltages, 12VDC, 24VDC, 24VAC, 110VAC, 220VAC, 24VAC/DC and 95-265VAC 50/60Hz. Our ON-OFF actuators use a simple 3 wire system for control and 3 wire feedback connection as below. Note that the internal space heater is pre wired and doesn't require additional wiring. When the actuator is powered, the internal heater will operate.



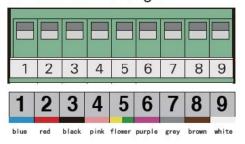
### **Standard Wiring for Failsafe AV97 Actuators**

Standard wiring for our AVA Standard series actuators including all voltages, 12VDC, 24VDC, 24VAC, 110VAC, 220VAC, 24VAC/DC and 95-265VAC 50/60Hz. Our failsafe actuators use a simple 2 wire system for control and 3 wire feedback connection as below. The failsafe actuators use capacitors and as such will require an initial charge period. After this point, the actuator will charge whilst opening and on removing power from pin 2 (Red) the actuator will close. Re applying power to pin 2 will Open the actuator and again charge the capacitor.

Note that the internal Space heater is prewired and doesn't require additional wiring. When the actuator is powered, the internal heater will operate.



#### 9P-5.08Terminal diagram



#### Wiring Instructions:

- 1. Fuse: Please refer to the manual for more parameters.
- SW switching capability: please refer to manual for more parameters.
- Feedback signal contact load capacity: 0.1A/250VAC 0.5A/30VDC.
- 4. Please make sure actuator connect ground reliably.