

## Aero2 Cycle Speed Test

**Nº 1069**

### Purpose:

To measure the speed of a single stroke in each direction of rotation.

### Comments:

When properly sized, actuator output torque exceeds valve operational torque. The limiting factor is the speed at which air enters and exhausts from the actuator.

### Setup Parameters:

Actuators were cycle tested under no load, using 6 bar/87psi of air supply. See Results.

### Results: Recorded Cycle Times

aero2 Double Acting Actuator Model Number	Close to Open Position	Open to Close Position	aero2 Spring Return Actuator Model Number	Close to Open Position	Open to Close Position
A2D-020	0.22s	0.32s	A2S-020	0.18s	0.22s
A2D-035	0.30s	0.38s	A2S-035	0.22s	0.23s
A2D-050	0.34s	0.42s	A2S-050	0.28s	0.28s
A2D-075	0.40s	0.46s	A2S-075	0.37s	0.41s
A2D-110	0.71s	0.73s	A2S-110	0.59s	0.53s
A2D-160	0.85s	0.90s	A2S-160	0.79s	0.67s
A2D-255	1.42s	1.40s	A2S-255	1.29s	1.09s
A2D-400	1.84s	1.90s	A2S-400	2.32s	1.68s
A2D-500	2.67s	2.78s	A2S-500	3.35s	2.40s
A2D-550	3.87s	3.96s	A2S-550	5.59s	3.78s
A2D-600	5.78s	5.23s	A2S-600	10.21s	3.90s
A2D-650	7.73s	7.96s	A2S-650	12.96s	6.03s
A2D-700	9.46s	9.92s	A2S-700	14.65s	9.22s

### Operation:

To ensure the best speed of operation, the Quad4 pneumatic actuators were tested using our VECTOR pilot valves that have the following Air Flow (CV):

VECTOR Series Pilot Valves	
Pilot Valves	Air Flow (CV)
Vector PV4	1.1
Vector PV7	1.1
Vector PV9	1.1

Visit our website, [www.SVF.net](http://www.SVF.net) for more information on our Quad4 Pneumatic Actuators.