

Quad4 Cycle Speed Test

Nº 1076

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:

Model	Close to Open Position	Open to Close Position	Model	Close to Open Position	Open to Close Position
QDB15	0.1s	0.1s	QSB15	0.2s	0.1s
QDB20	0.2s	0.2s	QSB20	0.3s	0.2s
QDB25	0.3s	0.3s	QSB25	0.5s	0.2s
QDB30	0.4s	0.5s	QSB30	0.8s	0.4s
QDB35	0.7s	0.9s	QSB35	1.2s	0.6s
QDB45	1.5s	1.7s	QSB45	2.0s	1.3s

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 for more information on our Quad4 Pneumatic Actuators.