

Rotary Actuator & Ball Valve Sizing Guide

For ATS three-piece stainless steel ball valves with actuator mounting.

Use these pairings to shortlist an actuator. Final selection depends on valve operating torque, available air pressure, process conditions and the complete mounting arrangement.

Ball valve size	Double acting	Single acting / spring return
1/2 inch	RE051	RE051
3/4 inch	RE051 / RE064	RE051 / RE064
1 inch	RE051 / RE064	RE064 / RE076
1 1/4 inch	RE064 / RE076	RE076 / RE086
1 1/2 inch	RE064 / RE076	RE076 / RE086
2 inch	RE076 / RE086	RE086
3 inch	RE086	RE086

Where two models are shown, choose using the required torque and available air pressure. These are initial guide pairings, not guaranteed fits or a pressure-specific torque table.

Choose the operating type

Double acting

Air powers both directions. Select sufficient torque for opening and closing.

Spring return

Air powers one direction and springs return the valve. Check torque on both strokes and the required fail position.

Check before ordering

Torque: confirm valve breakaway and running torque, then allow an appropriate safety margin. Account for differential pressure, the medium and time spent closed.

Air supply: size at the pressure actually available at the actuator.

Mounting: check both flange patterns, the fitted drive square, valve-stem profile, adaptor engagement and bracket height.

RE101: available in the ATS rotary range, but the supplied sizing guide does not establish a valve-size pairing. Select it from verified torque requirements and mounting dimensions.

Need help? Contact ATS with your valve size, medium, process pressure, available air pressure and required fail position. Visit atspneumatics.co.nz.

Pairings reproduced from the ATS Rotary Actuator & Ball Valve Sizing Guide supplied 15 October 2026. Actuator model codes have been standardised to RE051, RE064, RE076 and RE086.