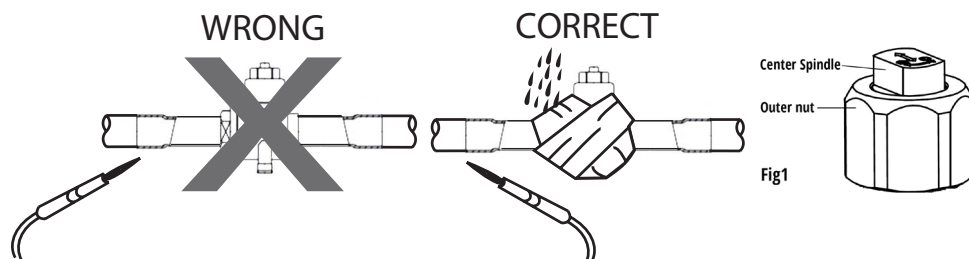




# Ball Valve Installation Instructions

1. The NDL ball valve is suitable for installation in refrigeration system applications, commercial A/C and VRF/ VRV applications.
2. Application temperature range: (-40°C to 150°C) -40°F to 302°F.
3. Suitable refrigeration mediums include R134A, R32, R404A, R407A, R410A, R454B, R513A, R1234ze, R290, and sub critical CO<sub>2</sub>. For other refrigerants - contact NDL.
4. The NDL ball valve is an "open/closed" style valve, with a zero pressure differential when installed in a horizontal position.
5. Loosen (but don't remove) outer nut of the two piece cap first (see fig 1). Use wrench to turn valve cap center spindle one quarter turn (90 degrees) CCW to open, or one quarter turn (90 degrees) CW to close.

Size	Torque (in*lb)	Torque (N*m)
1/4"	2.8	3.8
3/8"	2.8	3.8
1/2"	2.8	3.8
5/8"	5.2	7
3/4"	6.6	9



**IMPORTANT: For Ball Valves with schrader, remove the valve schrader core before brazing.**

When brazing/welding tubing to valve, valve body must be cooled to prevent seal damage. When brazing/welding maintain valve body in a horizontal position and wrap valve body in absorbent cloth. Soak cloth with cool water prior to commencing brazing/welding and continue to run cool water to top of cloth wrapping during the brazing/welding process to ensure that valve seals are not damaged due to over-heating. Refer to sketches above. Flow dry nitrogen or CO<sub>2</sub> through the valve while brazing. Do not loosen the stem nut that is located under the two piece cap or leak will develop!

In case of use with the actuator, tightening of the stem nut might be required after a number of open/close cycles.