

CAUTION

Prior to installing, the instructions provided herein should be completely reviewed and understood before operating or repairing this equipment. All CAUTION and WARNING notes must be strictly observed to prevent personal injury or equipment damage.

Description

The R2L Adapter enables the Kimray High Pressure Control Valve (HPCV) to be controlled by quarter-turn electric actuators. This solution is a durable, simple, and effective way to maintain control within an automated production site.

The Kimray R2L Adapter translates rotary motion into linear motion. As an extra feature, this product is designed with a series of springs with a live loaded stem in order to compensate for seat wear. The Kimray R2L Adapter allows any ISO-5211 rotary actuator to be coupled with an industry standard Kimray High Pressure Control Valve.

Installation

If the R2L Adapter has been shipped separately for installation on a Kimray Valve Body, or if the R2L Adapter was removed for maintenance, mount the R2L Adapter by following the instructions presented in this section. Inspect the surface of the Mounting Yoke and clean the mating valve surface to remove scale, chips, and debris.

The Kimray R2L is used with Kimray High Pressure Control Valves such as through or angle body valves. In the R2L Actuator, the spiral rotation of the Rotary Shaft by means of a rotary Actuator is translated into linear motion, opening, and closing the valve. The stroke length is achieved with a 90° rotation of the shaft, clockwise to close. As the Plug contacts the seat, a series of Springs become loaded to ensure valve closure in the event of seat creep or wear.

1. Mount the Actuator onto the Valve using supplied bolts and tighten.

NOTE:

Tighten the bolts in a crisscross pattern to avoid any miss alignment. DO NOT OVER TIGHTEN. For 1in. and 2in. tighten bolts from 25-30 ft/lbs torque.

2. Install Travel Indicator Assembly on Stem and tighten the bolts in the Coupling Block with a socket. Align the open or close line on the Indicator Scale with the Travel Indicator and secure the Indicator Scale by driving in the u-drive screws. Adjust the Travel Indicator as needed to ensure it does not catch or drag against the Indicator Scale.

NOTE:

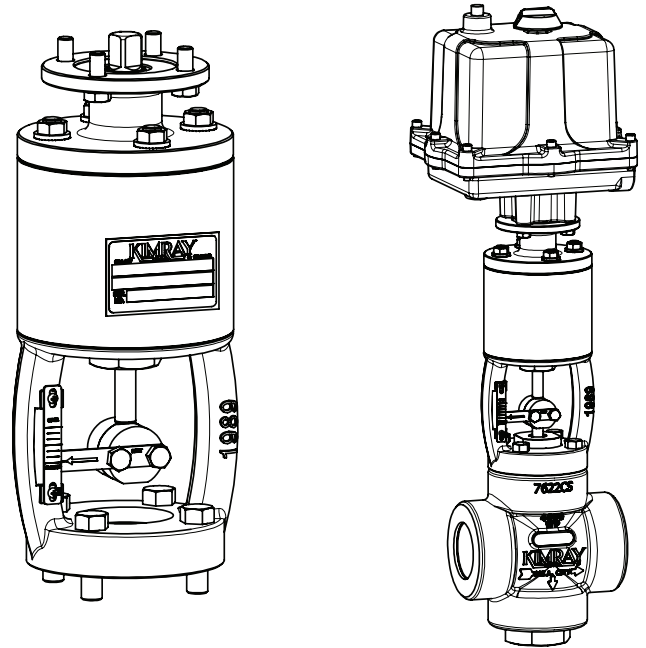
For the quarter turn Actuator, follow manufacturer recommendation for the installation and operation notes.

3. Install the valve with the arrow on the body pointing in the direction of flow. The arrow signifies that the device will operate properly in the direction of flow indicated and will not necessarily prevent flow in the opposite direction.

4. Install the valve using good piping practices. For flanged bodies, remove the masking sticker from the raised face of each end connection, and use a suitable gasket between the body and the pipeline flanges. For threaded (NPT) bodies, use TFE tape or pipe thread sealant on external pipe threads.

NOTE:

Use good electrical wiring practices and consult with an electrician.



NOTE

When ordering a 600lb Valvcon Electric Actuator to accompany Kimray's Rotary to Linear Adapter (R2L), please use the following 'Q' codes prefixes to ensure the firmware is flashed appropriately:

Q30243 ADCWX600UL211-UP
Q30244 ADCWX600UL211MB-UP
Q30228 ADCWX600UL211Z-UP
Q30229 ADCWX600UL211MBZ-UP

CAUTION

When ordered, the valve configuration and construction materials were selected to meet specific pressure, temperature, pressure drop and fluid conditions. Since some body/trim material combinations are limited in their pressure drop and temperature ranges, do not subject the high pressure valve to any other conditions without first contacting the Kimray Inc. sales office or a sales / applications representative.

Start-up and Test

Warning:

Before any service, be certain that the valve is fully isolated and that all pressure upstream and downstream has been relieved. Use bypass valves or fully shut off the process. Be sure that any operating or instrument gas lines have been disconnected. Never assume that a check valve is fully blocking the downstream line. Never tighten any fitting or the main connections to the regulator while there is pressure on the line. A leaking valve indicates that service is required. Failure to take the valve out of service immediately may create a hazardous condition.

Verify all pressure connections are tight before pressurizing the system.

Maintenance

For maintenance of the High Pressure Control Valve, please reference page SG:CV001.

For maintenance of the Electric Actuator, please follow the manufacturer's maintenance schedule and recommendations.

For maintenance of the R2L adapter, inspect the coupling block bolts and flange adapter lock nuts on a routine basis to ensure they are tight. Disassembly of the R2L adapter is not suggested. For repair, please contact your local Kimray authorized distributor.

Only use genuine Kimray replacement parts.

Repair kits are available. See Section 1 (Series CV) of the Kimray catalog for the correct repair kit numbers.

Visit www.kimray.com or contact your Kimray authorized distributor for additional product information and / or literature.

WARNING

Before beginning installation:

- Read and follow instructions.
- Make sure the valve cannot operate during installation.

Do not exceed the maximum supply pressure specified on the valve name-plate.

Never tighten any fitting or the main connections to the valve while there is pressure on the line.

WARNING

Before any service, be certain that the valve is fully isolated and that all pressure upstream and downstream has been relieved. Use bypass valves or fully shut off the process.

Be sure that any operating or instrument gas lines have been disconnected.

Never stand directly in front of or over a valve when the system is pressurized. The valve could suddenly open, blowing debris into the person's face and eyes.

WARNING

A leaking valve is an indication that service is required. Failure to take valve out of service immediately may cause a hazardous condition.

NOTE

If conditions indicate the possibility of backward flow you may wish to install check valves. Never assume that a check valve is fully blocking the downstream line.

For questions or comments, contact your local Kimray authorized distributor, or visit www.kimray.com.

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