



LV690 ROTARY CONTROL VALVE



The LV690 is ideal for gas transmission and liquid pipeline applications. Manufactured by Valsource (9509 New Century Dr. St 1 Pasadena Tx, 77507), distributed by A-T Controls, its robust, heavy-duty construction delivers superior operational performance across a wide range of process conditions.

Designed for maximum versatility, the LV690 rotary control valve bridges the gap between trunnion ball valves and globe valves. Unlike trunnion ball valves, which are primarily intended for on/off service, the LV690 provides precise flow control under moderate pressure drop conditions while still delivering tight shutoff performance. Compared to globe valves, the LV690 offers significantly improved shutoff capability

- Engineered for High Differential Pressure Applications
- Reliable, Tight Shutoff for Enhanced Process Control
- Maintenance-Friendly Design for Reduced Downtime
- Optional Sour Gas Trim and Seal Upgrades Available
- Self-Centering Ball-to-Shaft Connection for Improved Alignment
- Keyed or Splined Shaft Options for Maximum Actuator Flexibility
- Proudly Designed and Manufactured in the USA
- Excellent Flow Control Performance

SPECIFICATIONS

VALVE BODY INFORMATION

Form Options

- Wafer – Ball Control Valve
- Lug Style
- 3-Piece – Rotary Pipeline Ball Control Valve

Available Sizes

- NPS 4" through 24"

End Connections

- Flangeless Wafer
- Lug
- 3-Piece body (API 6D face-to-face)

Body Pressure Rating

- Class 600 & 900 is standard
- Other pressure classes available only on 3-piece body construction

VALVE TRIM INFORMATION

Seal Types & Flow Direction

- Single Seal – Forward flow
- Dual Seal – Bi-directional flow

(Dual Seal provides bi-directional shutoff and includes a tapped and plugged test port for seal integrity verification in double block and bleed systems.)

Rated Travel

- 90 degrees

Flow Characteristic

- Modified Equal Percentage

Shutoff Classification

- 0.0001% of valve capacity
(This value is less than 1% of ANSI/FCI 70-2 Class IV.)

Body Seal Temperature Rating

- -20°F to 180°F

Valve Component	Standard Material	Sour Service Material
Valve Body, Inlet and Outlet Retainer	ASME SA516 gr70 Carbon Steel Plate	ASME SA516 gr70 Heat Treated Carbon Steel Plate
Upper & Lower Stem, Upper & Lower Stem Retainers	17-4PH HH1150	17-4PH HH1150
Ball	316 SS	316 SS
Ball Seal	Polyoxymethylene (POM)	Polyoxymethylene (POM)
Bearings	PTFE Composition-lined 316 SS	PTFE Composition-lined 316 SS
O-Rings	FKM	FKM
Shaft Seal with Backup Ring	FKM PolyPak	FKM PolyPak
Inlet and Outlet Retainer	316 SS	316 SS
Stem Retainer Stud Bolts	Grade B7 Steel	Grade B7M Steel
Stem Retainer Hex Nuts	Grade 2H Steel	Grade 2HM Steel

Other trim materials available upon request