



1/2" & 3/4" 309 Series Diverter Ball Valves

2 Otter Court, Raymond, New Hampshire 03077 • Tel. (603) 244-7931 • service@geminivalve.com • www.geminivalve.com



FEATURES

- **Materials of Carbon Steel and Stainless Steel.**
- **Self Compensating Valve Stem Seal Design Ensures Long, Leak-Tight Maintenance Free Service**
- **Leak-Tight Shutoff Regardless of Direction of Applied Pressure**
- **Reinforced P.T.F.E. Stem Seal and Seats, Seats Backed by Viton® O-rings (Optional EPR)**
- **Easily Visible Open / Close Identification**
- **Full Thread Length Compliance with ANSI B1.20.1 Specification**
- **Bubble Tight Closure - each valve is bubble tested to ensure that all sealing points function properly**
- **Pneumatic & Electric Actuators**

The Gemini Model 309 is a 90° (quarter-turn) 3-port ball valve designed to maintain bubble-tight performance throughout its pressure-temperature range when used as a diverter or as a selector valve.

In addition to its unique 3-port features, the Model 309 incorporates the premium features found in Geminis' 2-way valves, such as

metal to metal body joints and self compensating stem seal design.

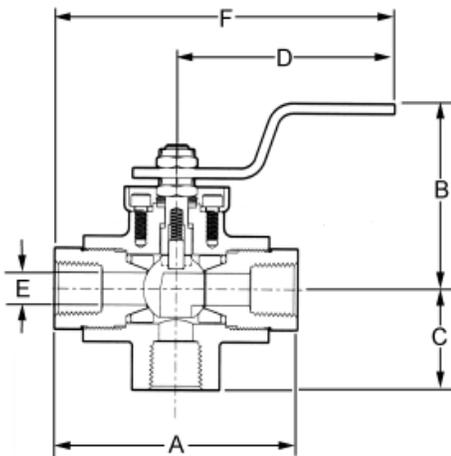
The Gemini 309 utilizes a unique 'floating' seat, backed a Viton® seal which enables the seat to seek the optimum sealing position with relationship to the valve ball.

The Model 309 is available in 1/2" and 3/4" sizes. Valve seats and

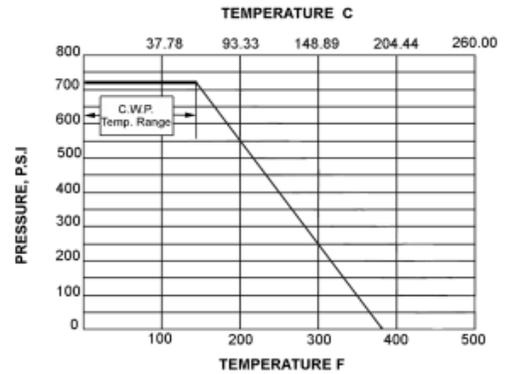
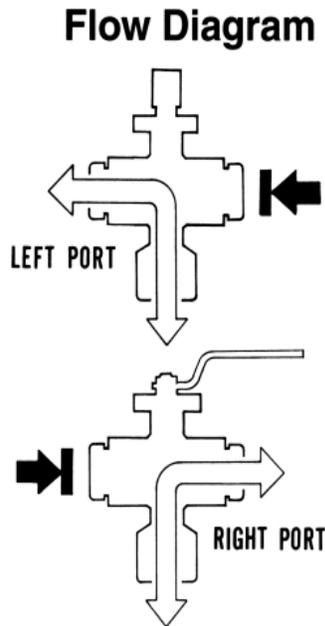
stem trim are glass-reinforced PTFE, seals are Viton® (optional EPR seals available). Both the carbon steel and stainless steel models feature stainless steel external trim.

The 309 Series can be actuated with a manual lever style handle along with Geminis' Model 400 and 500 Pneumatic and 600 Electric Actuators.

Dimensions and Specifications



DIMENSIONS IN INCHES						
Valve Size	A	B	C	D	E-Port	F
1/2" & 3/4"	3.85	2.86	1.55	5.38	0.500	7.30



Pressure: 720 psi (49.7 Bar) C.W.P. (Cold Working Pressure) nonshock service.

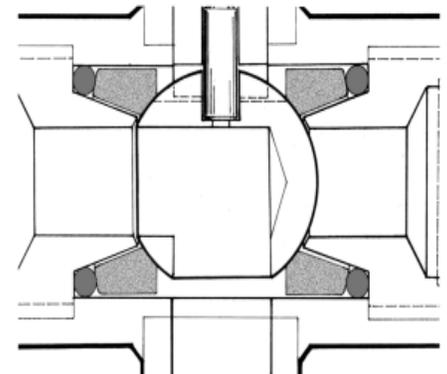
Temperature: -20 F° to 380 F° (-28.9 C° to 137.8 C°)

Note: Not recommended for Steam Service.

Unique Feature

The Gemini 309 utilizes a unique "floating" seat, backed by Viton® seals which enable the seat to seek its optimum sealing position with relationship to the valve ball. The conical guide on the downstream side of the valve maintains centrality as the seat approaches it under the influ-

ence of upstream pressure. In addition the ball and stem are connected in such a manner as to assure proper ball port alignment while allowing adequate float between the ball and seats to assure optimum operation throughout the pressure range of the valve.



Materials

Carbon Steel Body with 316 Stainless Steel Ball and Stem or CF8M Stainless Steel Body with 316 Stainless Steel Ball and Stem. Stem Seal, Seats and Thrustwasher are Glass Filled Reinforced P.T.F.E.. Seats backed by Viton® O-rings. **Note:** Alternative O-rings are available. Please consult factory for details.

CAUTION: Care must be taken to assure that the internal media and external environment are compatible with the valve materials.

LIMITED WARRANTY - Copy Available Upon Request.

Specifications subject to change without notice and without obligation on the part of the manufacturer.

Note: A small amount of lubricant is often used in the assembly of the internal components of the valve.



2 Otter Court
Raymond, NH 03077

Tel. (603) 895-4761
FAX (603) 895-6785
www.geminivalve.com

SL09-1712