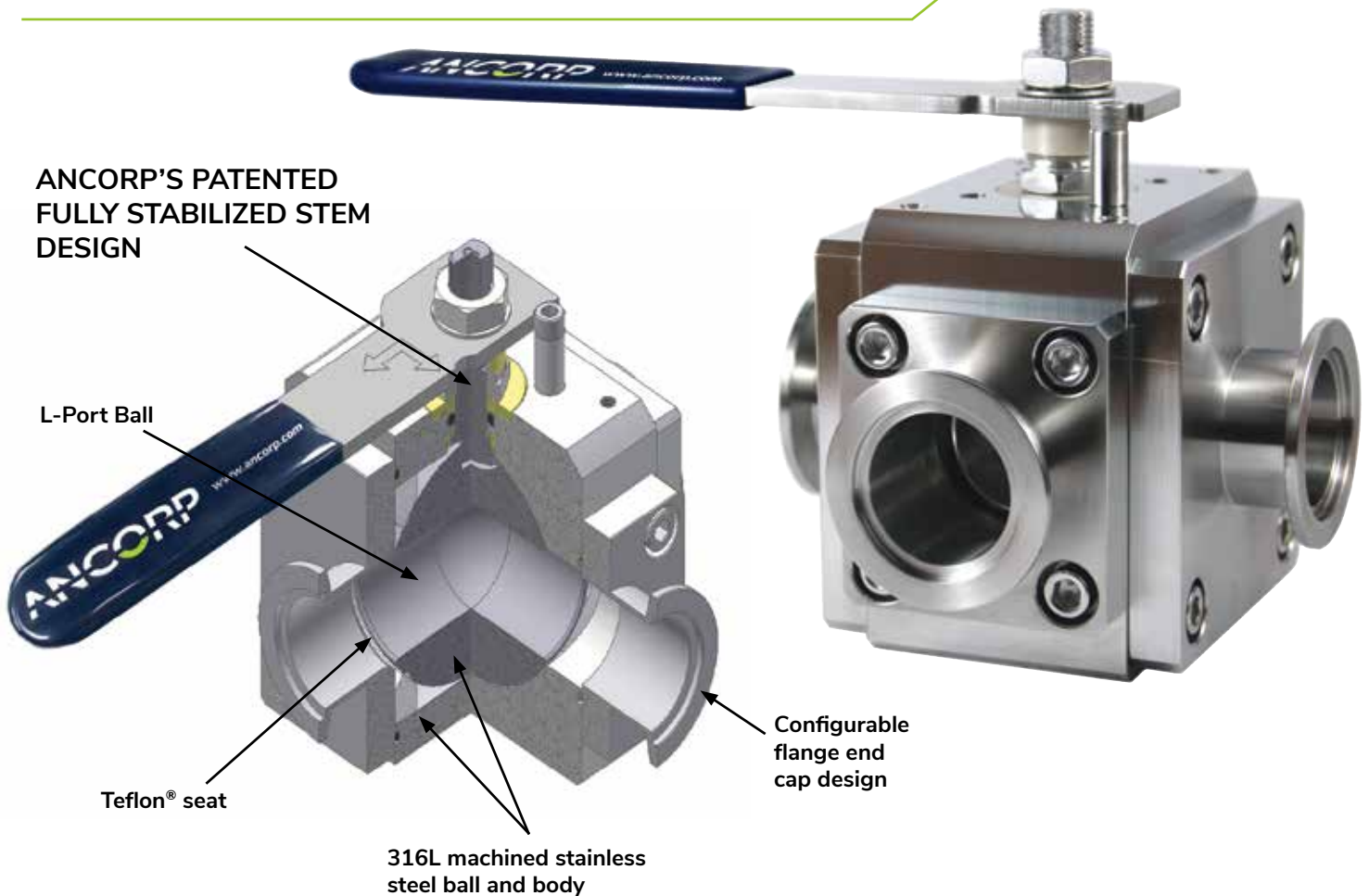


# 3-WAY HIGH VACUUM BALL VALVE



## Description

ANCORP's 3-way ball valve is designed to divert flow between a common port and either of two side ports. The 3-way ball valve consists of a body, stem, L-port ball, and three end caps. Components are machined from corrosive resistant 316L stainless steel. Fluoroelastomers are used to seal the stem and end caps from atmosphere while Teflon® seats cold flow around the ball to isolate one port while diverting flow through the other. Flow through the valve is diverted manually or pneumatically by 1/4 turn, quick actuation.

## Applications

The corrosion resistant design of ANCORP's 3-way vacuum ball valves makes them ideal for diverting flow or isolating pumping lines, reactors, traps, and scrubbers on vacuum process tools.

## Features:

ANCORP's 3-way ball valve maximizes design efficiencies in high vacuum systems when compared to multi-valve systems with equivalent functionality:

- Reduced bill of materials
- Reduced footprint
- Reduced overall weight
- Reduced design complexity
- Fewer actuated components
- Fewer leak paths
- Less total area to heat
- Reduced maintenance costs from MRO parts

## PATENTED FULLY STABILIZED STEM DESIGN

XL Stem Design minimizes wetted components

A&N CORPORATION US PATENTS:

US 8,496,227 B2, US 8,905,375 B2, US 8,936,231 B2

# 3-WAY BALL VALVE SPECIFICATIONS

## Vacuum and temperature ratings

- Vacuum rated to  $1 \times 10^{-8}$  Torr
- Standard fluoroelastomer seal:  
-26°C to 150°C (-15°F to 302°F)

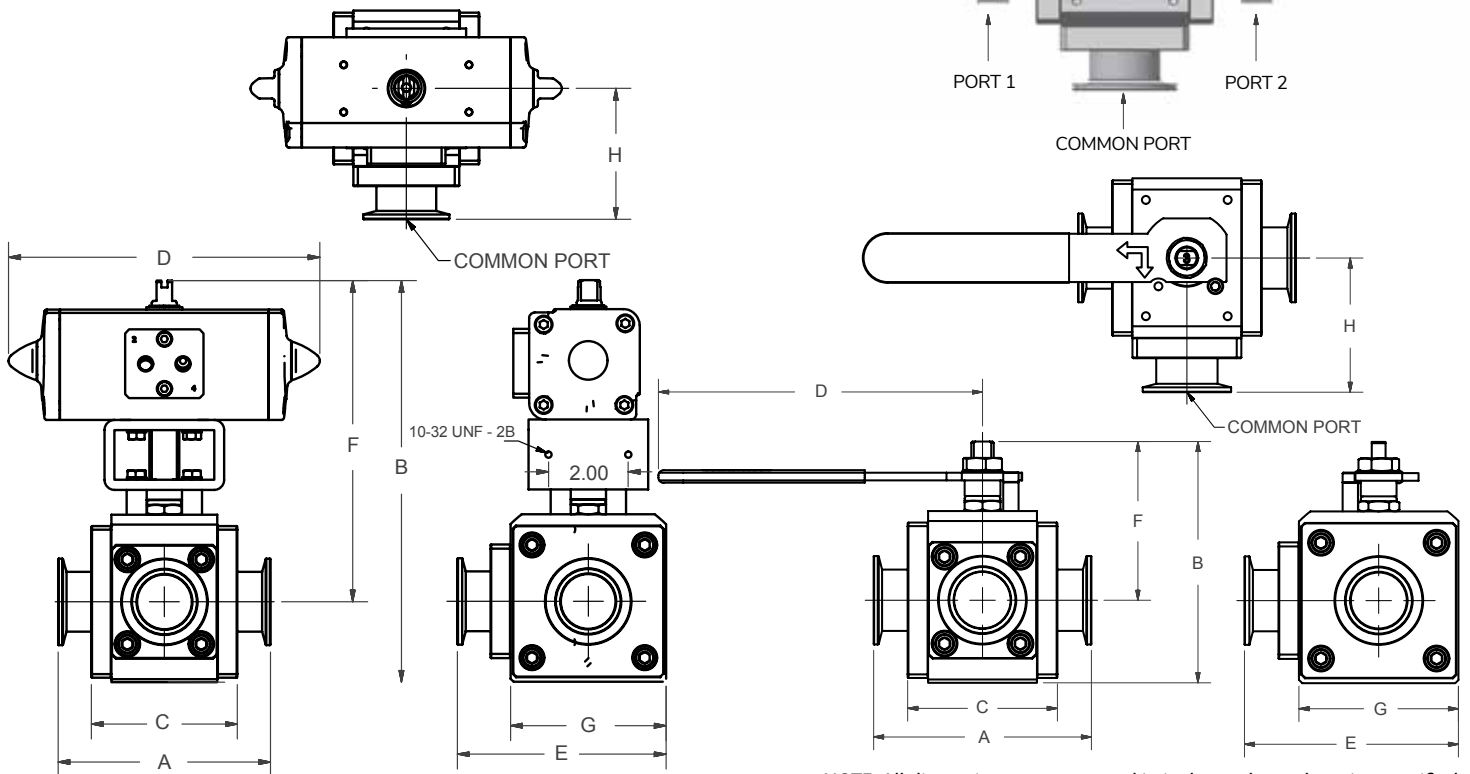
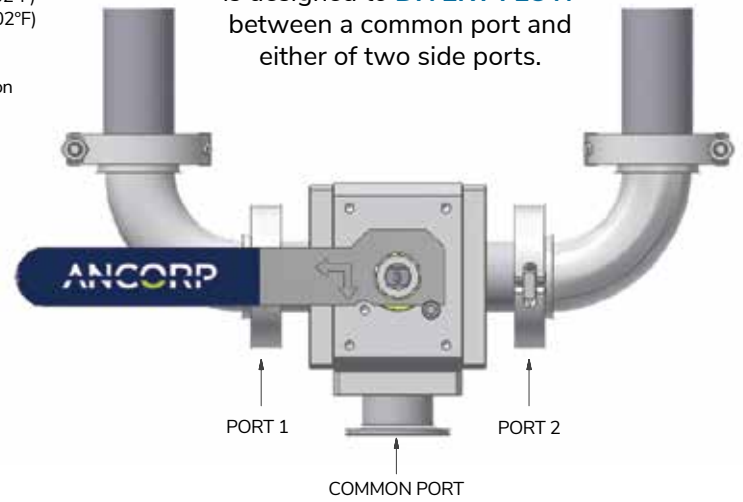
## Materials

- Valve body, ball, stem, and end caps: machined from solid 316L stainless steel
- Standard seal: fluoroelastomer
- Seats: Teflon® PTFE
- Lubricant: Dow Corning® High Vacuum Grease

## Pneumatic

- Actuator operating pressure: 80 - 120 psig
- Actuator temperature range:  
- Moist air: 0°C to 150°C (32°F to 302°F)  
- Dry air: -20°C to 150°C (-4°F to 302°F)
- 1/8 NPT air line hook-up
- Visual and electromechanical position indicators available
- Solenoids available for 120VAC, 240VAC or 24VDC versions

ANCORP's 3-way ball valve is designed to **DIVERT FLOW** between a common port and either of two side ports.



NOTE: All dimensions are measured in inches unless otherwise specified.

## Manual

Part ID	Reference Number	Ball Port	Flange Type	End Cap Tube O.D.	Conduct. (L/s)	A	B	C	D	E	F	G	H
3008305	TL4150-QF40-H075	1.375	QF40	1 1/2	29	5.33	5.9	3.7	7.9	5.2	3.9	3.9	3.28
3008306	TL4200-QF50-H075	1.375	QF50	2	34	6.31	5.9	3.7	7.9	5.7	3.9	4.4	3.78

## Pneumatic

Part ID	Reference Number	Ball Port	Flange Type	End Cap Tube O.D.	Conduct. (L/s)	A	B	C	D	E	F	G	H
3008325	TL4150-QF40-AA-H062	1.375	QF40	1 1/2	29	5.33	10.1	3.7	7.8	5.2	8.1	3.9	3.28
3008326	TL4200-QF50-AA-H062	1.375	QF50	2	34	6.31	10.1	3.7	7.8	5.7	8.1	4.4	3.76

ANCORP's ball valves are routinely configured with non-standard seals and greases to meet system requirements for high temperature or highly corrosive applications. To have an ANCORP ball valve configured for your system, contact one of our Application Engineers at 800-352-6431.