

HIGH CONDUCTANCE EXTENDED LIFE (XL) HIGH VACUUM BALL VALVE

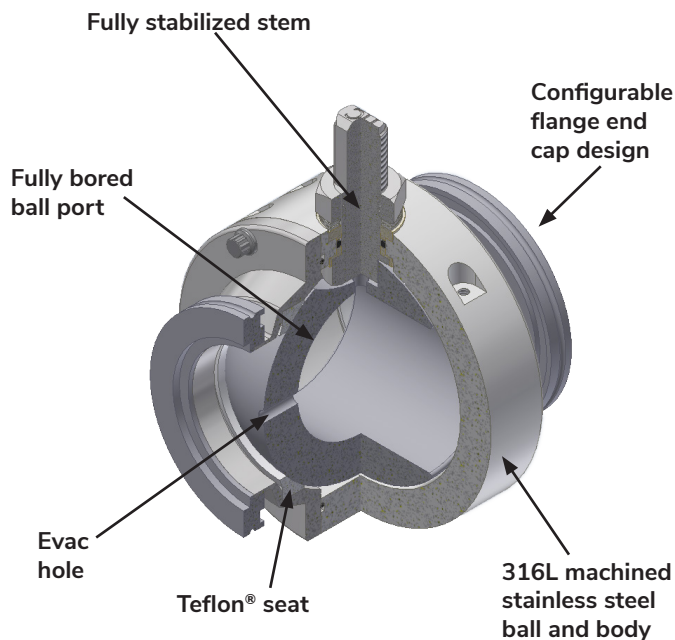
Description

ANCORP's High Conductance ball valve is the latest and largest addition to the Extended Life (XL) ball valve series. Including the XL's patented fully-stabilized stem design, the HC provides maximum conductance with its fully bored ball port and shortened two-piece corrosive resistant 316L stainless steel body.

The smooth profile makes this design easier and more efficient to heat. The valve is opened or closed manually or pneumatically by 1/4 turn, quick actuation. During actuation, the PTFE Teflon® seats wipe across the ball. This feature reduces particulate build-up, making this valve robust in particle-rich effluent streams.

Applications

The corrosive resistant design of ANCORP'S vacuum ball valves make them ideal for isolating reactors, traps, and scrubbers on vacuum coating tools used for MOCVD, PVD, and other thin-film coating processes.



The High Conductance Difference

Two-piece body

One less body O-ring seal means one less potential leak path and huge maintenance cost reductions when using perfluorelastomers

Smooth profile

Maximizes heat transfer from heating components

Minimized overall length and slimmer profile

Increases conductance and reduces weight & footprint

Fully bored ball port

Maximizes conductance with straight-through, unimpeded flow

Extra space between body & handle brackets

Minimum of 5/8" clearance allows more room for heating components

Adjustable stroke actuator

Adjusts to +/-5° to ensure proper open/close over life of the valve

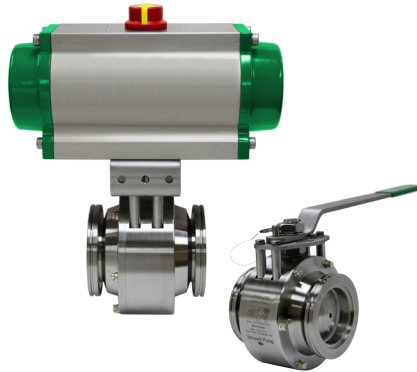
Integrated handle lock

Prevents accidental opening/closing. Lock out-tag out ready

PATENTED XL DESIGN

- 10X longer cycle life
- Fully stabilized stem
- Reduced wetted components

HIGH CONDUCTANCE EXTENDED LIFE BALL VALVE



Specifications

Vacuum and temperature ratings

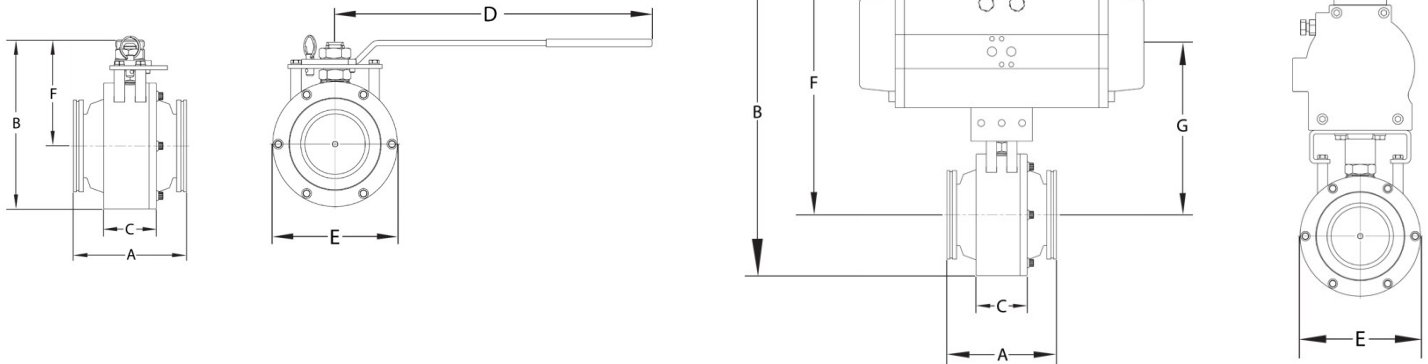
- Vacuum rated to 1×10^{-8} Torr
- Helium leak rated less than 1×10^{-9} std. cc/sec
- Standard fluoroelastomer seal:
-26°C to 150°C (-15°F to 302°F)

Materials

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

Pneumatic

- Actuator operating pressure: 80 - 150 psig
- Actuator temperature range:
- Dry air: -20°C to 150°C (-5°F to 317°F)
- Both Air-to-Open, Spring-to-Close (AS) single acting actuators and Air-to-Open, Air-to-Close (AA) double acting actuators are available
- "Fail-safe open" or "fail-safe closed" configuration available for ball valves with AS actuators
- 1/4 NPT air line hook-up
- Visual and mechanical position indicators available
- Solenoids available for 120VAC, 240VAC or 24VDC versions



Manual

Part Number	Reference Number	Ball Port	End Cap Type	End Cap Tube Size	Conduct. (L/SEC)	A	B	C	D	E	F
3007310	HC4300-LF80	2.88"	LF80	3" O.D.	347	5.35	8.0	2.8	15.1	6.0	5.0

Pneumatic

Part Number	Reference Number	Ball Port	End Cap Type	End Cap Tube Size	Conduct. (L/SEC)	A	B	C	D	E	F	G
3007320	HC4300-LF80-AS	2.88"	LF80	3" O.D.	347	5.35	15.9	2.8	13.9	6.0	12.9	8.4
3007330	HC4300-LF80-AA	2.88"	LF80	3" O.D.	347	5.35	15.9	2.8	13.9	6.0	12.9	8.4

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 XL ball valve configured for your system, contact one of our Application Engineers at

800-352-6431.