



Vacuum Ball Valves

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Product Information

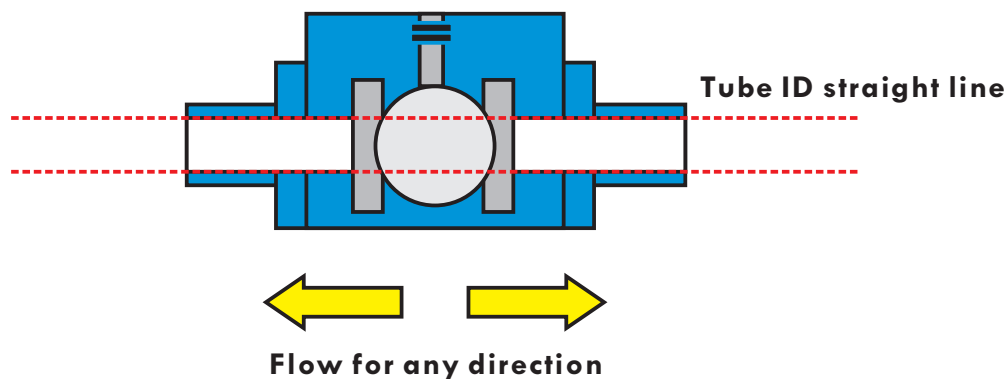
Vacuum Ball Valves are ideal for high and coarse vacuum applications, one of which is the exhaust section of a system where it's designed to protect against harsh processes involving particles or even powder. The valve's main body is manufactured from a single billet of stainless steel, whereas the inlet and outlet sections are manufactured from forged metal.

Vacuum
Valves

Vacuum Ball Valves are ideal for high-chemical or high-temperature environments since they are manufactured using high-grade SS 316L or SS 316Ti materials. Optional materials for the gate seal are also available including FKM, FFKM and Teflon.

Product Features

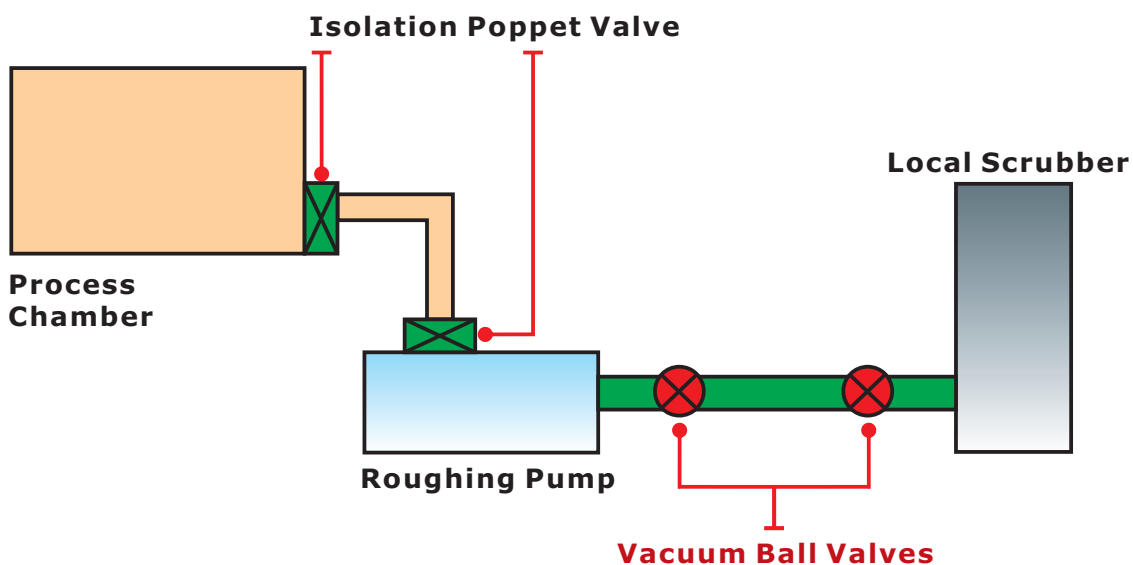
- Ideal for high or coarse vacuum.
- Available in a range of sizes from KF16 to KF50.
- Can protect systems from harsh environments.
- Simple valve body design with three casting pieces.
- Option for high-chemical resistance.



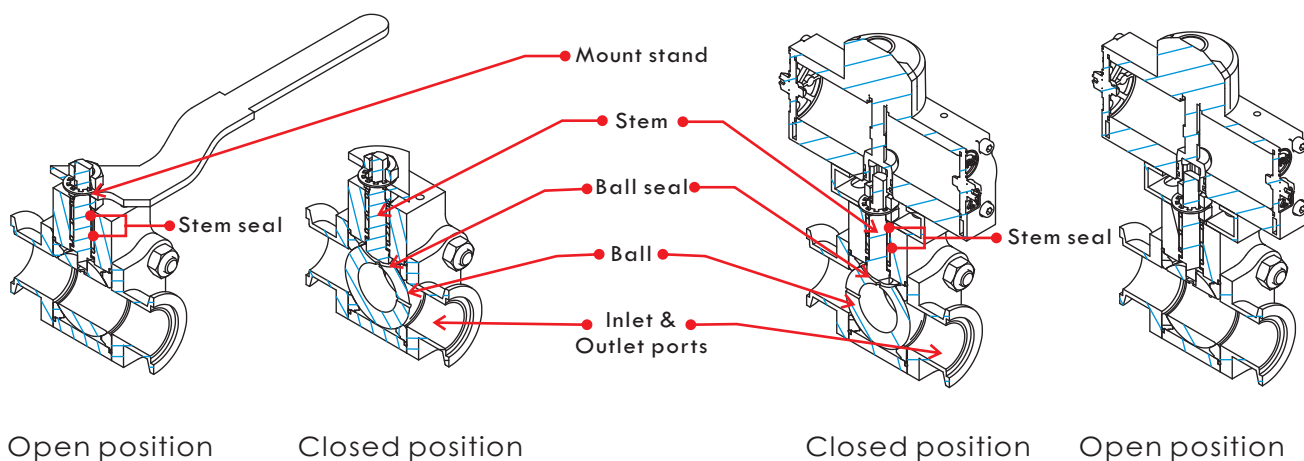
Product's Application

Layout for Process System

Vacuum Ball Valves are positioned within the Scrubber Line



Valve's Operation Concept



Technical Data

Technical Data for Vacuum Ball Valve

Vacuum
Valves

	Medium Vacuum
Feedthrough	FKM o-ring
Gate seal	PTFE packing
Bonnet seal	FKM
Operate pressure range	4,500 Torr~ 1x10 ⁻⁵ Torr 6,000 mbar~ 1.33x10 ⁻⁵ mbar 600 kpa~ 1.33x10 ⁻⁶ kpa
Leak rate	1x10 ⁻⁸ Torr l/s, He 1.33x10 ⁻⁸ mbar l/s, He 1.33x10 ⁻⁹ kpa l/s, He
Cycle life	>30,000 Cycles
Temperature for valve body	200°C (392°F) Open and Close
Temperature for actuator	150°C 302°F
Temperature for solenoid / position indicator	80°C 176°F
Bake temperature	100°C (212°F) for FKM gate seal
Valve body material	Casting SS316L
Mechanism material	SS316L
Actuator material	Pneumatic version = Aluminum Manual version = SS304L Handle with plastic cover
Mounting position	Any

Valve operation data

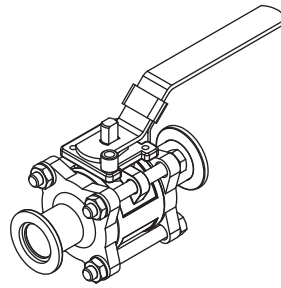
Pneumatic operating pressure	4 bar~8 bar 400 kPa~800 kPa 58 psi~116 psi
Position indicator (included as standard for pneumatic version)	Integrated visual indicator
Solenoid (optional)	Optional for 24V DC, standard
Failure protection (included as standard)	Integrated handle hook with manual version (Open/ Closed position locked)

Valve's Performance data

	KF16	KF25	KF40	KF50
Maximum differential pressure against gate	4,500 Torr 6,000 mbar 600 kpa			
Maximum differential pressure at opening	4,500 Torr 6,000 mbar 600kpa			
Pneumatic valve open / close time	2(s)	3(s)	3(s)	4(s)
Valve's conductance inline type (Molecular flow)	5(l/s)	12(l/s)	33(l/s)	54(l/s)

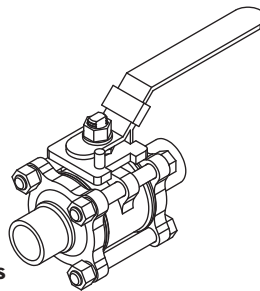
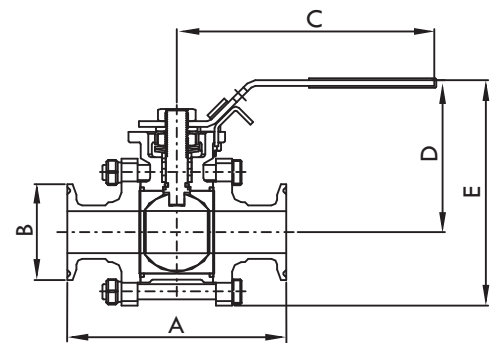
Product Order Information

Vacuum
Valves



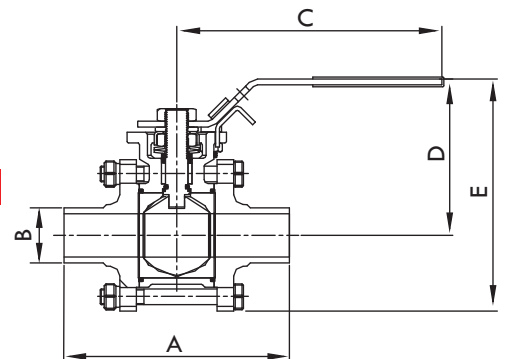
Manual Casting Ball Valves, SUS316L, KF Flange

Part Number	Tube OD	A	B	C	D	E
MBV-CT-KF-16	3/4"	110	30	138	70	98
MBV-CT-KF-25	1"	123	40	138	79	108
MBV-CT-KF-40	1 1/2"	148	55	191	97	137
MBV-CT-KF-50	2"	166	75	191	107	154



Manual Casting Ball Valves, SUS316L, Tube Ends

Part Number	Tube OD	A	B	C	D	E
MBV-CT-075	3/4"	103	19	138	70	98
MBV-CT-100	1"	115	25	138	79	108
MBV-CT-150	1 1/2"	140	38	191	97	137
MBV-CT-200	2"	158	51	191	107	154

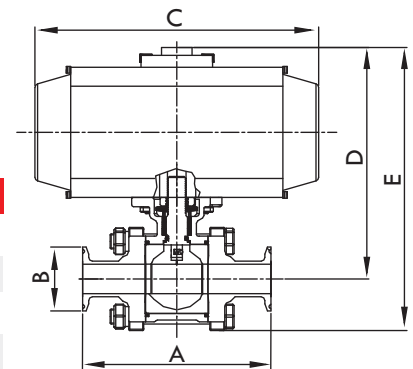


Product Order Information

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Pneumatic Casting Ball Valves, SUS316L

Part Number	Tube OD	A	B	C	D	E
PBV-CT-KF-16	3/4"	110	30	147	136	164
PBV-CT-KF-25	1"	123	40	147	145	174
PBV-CT-KF-40	1 1/2"	148	55	168	173	213
PBV-CT-KF-50	2"	166	75	184	195	243



Pneumatic Casting Ball Valves, SUS316L

Part Number	Tube OD	A	B	C	D	E
PBV-CT-075	3/4"	103	19	147	136	164
PBV-CT-100	1"	115	25	147	145	174
PBV-CT-150	1 1/2"	140	38	168	173	213
PBV-CT-200	2"	158	51	184	195	243

