






# Selection Guide

Cracking Pressure: The upstream pressure at which the first indication of flow occurs.

Reseal Pressure: The pressure at which there is no indication of flow.

Back Pressure: Differential between inlet and outlet pressures.

Type	Series	Product Photo	Working Pressure psig (bar)	Working Temperature °F (°C)	Cracking Pressure psig (bar)	Reseal Pressure psig (bar)	Flow Coefficient Cv	Mounting Direction	Features and Applications
All-Welded Check Valves	CW		3000 (206.7)	-9.4~348.8 (-23~204)	≤ 2 (0.14)	≤ 2 (0.14) (Back Pressure)	0.55/0.7	Any direction	<ul style="list-style-type: none"> <li>⊙ All-welded design, internally springless, providing excellent sealing, high cleanliness, high working pressure, and both low cracking and reseal pressures.</li> <li>⊙ Ideal for high purity and ultra-high purity systems requiring high reliability and sensitivity</li> </ul>
High Flow Sensitive Check Valves	CF		145 (10)	32~248 (0~120)	0.1 (0.007) ~1.05 (0.07)	≤ 0.1 (0.007) (Back Pressure) ≥ 0.2 (0.014) (Inlet Pressure)	14.4	Any direction	<ul style="list-style-type: none"> <li>⊙ Minimal cracking pressure, high sensitivity, large orifice, high flow capacity</li> <li>⊙ Typically installed on the exhaust side of a vacuum pump to prevent air from entering the system during pump shutdowns or malfunctions</li> </ul>
Surface-Mounting Check Valves	CI		145 (10)	14~176 (-10~80)	≤ 2 (0.14)	—	0.2	Vertical	<ul style="list-style-type: none"> <li>⊙ Small sized and surface mountable</li> <li>⊙ Ideal for high purity and ultra-high purity integrated gas system, especially where installation space is limited</li> </ul>
Low Pressure High Flow Check Valves	CB		Vacuum to 250 (17.2)	32~250 (0~121)	≤ 1.8 (0.12)	≤ 5 (0.34)	10.96~165.5	Any direction	<ul style="list-style-type: none"> <li>⊙ Low cracking pressure, high sensitivity, high flow capacity, integrated purge port on valve body for easy purging</li> <li>⊙ Ideal for low pressure and high flow bulk gas distribution applications, effectively preventing undesired reverse flow within the high purity system</li> </ul>
Low Pressure Medium Flow Check Valves	CHP		145 (10)	14~176 (-10~80)	≤ 0.33 (0.02)	≤ 9.95 (0.69)	2.5/1.2	Any direction	<ul style="list-style-type: none"> <li>⊙ Low cracking pressure and medium flow capacity</li> <li>⊙ Ideal for low-pressure, medium-flow high purity and ultra-high purity systems</li> </ul>