

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	◎ All-welded design, internally springless, providing excellent sealing, high cleanliness, high working pressure, and both low cracking and reseal pressures. ◎ Ideal for high purity and ultra-high purity systems requiring high reliability and sensitivity
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	◎ Minimal cracking pressure, high sensitivity, large orifice, high flow capacity ◎ Typically installed on the exhaust side of a vacuum pump to prevent air from entering the system during pump shutdowns or malfunctions
Surface-Mounting Check Valves	CI		145 (10)	14~176 (-10~80)	≤ 0.33 (0.02)	2 (0.14)	0.25	Vertical	◎ Small sized and surface mountable ◎ Ideal for high purity and ultra-high purity integrated gas system, especially where installation space is limited
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	◎ Low cracking pressure, high sensitivity, high flow capacity, integrated purge port on valve body for easy purging ◎ Ideal for low pressure and high flow bulk gas distribution applications, effectively preventing undesired reverse flow within the high purity system
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	◎ Low cracking pressure and medium flow capacity ◎ Ideal for low-pressure, medium-flow high purity and ultra-high purity systems