

Product Overview | Limiting Orifice Valve

An 1807B Valve is used to set the desired flow rate of oxygen to the burners. It has a V-port plug that can be adjusted accurately with an Allen wrench. Turning the screw counterclockwise increases flow. A cap conceals the adjustment and discourages tampering with the setting.

The V-port adjustment is in a removable cartridge assembly, simplifying inspection or replacement.^① 1807B Valves have brass bodies and internals with Viton "O" ring seals on the stuffing box and around the shaft. All 1807B Valves are cleaned for oxygen service according to oxygen specifications.

Limiting Orifice Valves are not designed for shutting off gas. Use an approved ball valve, plug valve or cock.

SPECIFICATIONS

Operating Pressure: 1807B- -C, 125 psig (8.6 bar)

Maximum Design Temperature: 225°F (107°C)

Minimum Design Temperature: -20°F (-28°C)

Body Materials: brass

Gas Cartridge Assembly Material: brass

Stuffing Box Cap Material: brass

O-rings: Viton, Silicone

CAPACITIES: scfh Oxygen (1.1 s.g.)

Pressure Drop psi	Valve designation and pipe size					
	1807B-1-C 1"	1807B-2-C 1¼"	1807B-3-C 1½"	1807B-4-C 2"	1807B-5-C 2½"	1807B-6-C 3"
0.1	165	240	310	730	1100	1920
0.2	230	350	430	1030	1560	2710
0.3	285	420	530	1270	1910	3320
0.4	330	480	615	1460	2200	3840
0.5	370	540	685	1650	2470	4300
1.0	520	760	970	2330	3490	6070
2.0	730	1080	1370	3290	4920	8560
3.0	895	1320	1680	4020	6060	10500
4.0	1040	1520	1940	4650	6970	12100
5.0	1170	1710	2160	5200	7800	13600
6.0	1270	1880	2370	5690	8550	14900

^① All inspected parts or replacements must be subjected to a degreasing process per North American's oxygen specs.