Adjustable Limiting Orifice Valves



Series ALO-R

Eclipse "ALO-R" Valves are needle and seat type valves designed to provide accurate gas flow adjustment when installed in gas lines feeding nozzle mix burners. These valves are constructed with the inlet and outlet ports at right angles to each other, allowing them to be used where space is limited or in place of a 90° elbow in a pipe line. "ALO-R" valves may be used with low pressure (1 psig maximum) natural gas, propane or butane. Inlet and outlet pipe sizes from 1" to 4" are available and capacities vary from 86 cfh to 6800 cfh depending upon valve size selected and the pressure drop taken.

Capacities — CFH

(Using Nat. Gas — 0.65 Sp. Gr.)

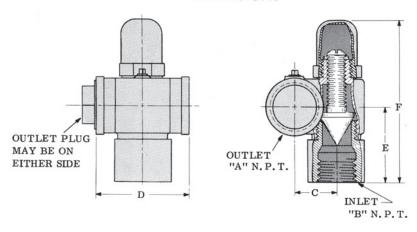
(Using Nat. Gas — 0.65 Sp. Gr.)*											
CATALOG	INCHES W.C. DROP										
NUMBER	. 5	1	1.5	2	2.5	3	4	5	6	8	10
42-8 ALO-R	42	60	73	85	95	104	120	134	147	170	189
43-17 ALO-R	131	185	226	262	292	320	370	414	453	523	585
44-17 ALO-R	131	185	226	262	292	320	370	414	453	523	585
44-24 ALO-R	290	410	502	580	648	710	820	917	1,004	1,160	1,296
44-8 ALO-R	56	80	97	113	126	138	160	179	196	226	253
45-24 ALO-R	290	410	502	580	648	710	820	917	1,004	1,160	1,296
63-16 ALO-R	177	250	306	354	395	433	500	559	612	707	790
64-16 ALO-R	212	300	367	424	474	520	600	670	735	848	949
64-8 ALO-R	56	80	97	113	126	138	160	179	196	226	253
64-24 ALO-R	290	410	502	580	648	710	820	917	1,004	1,160	1,296
65-24 ALO-R	318	450	551	636	711	779	900	1,006	1,102	1,273	1,423
66-24 ALO-R	424	600	735	848	949	1,039	1,200	1,341	1,470	1,697	1,897
66-36 ALO-R	707	1,000	1,225	1,414	1,581	1,732	2,000	2,236	2,449	2,828	3,160
66-30 ALO-R	566	800	980	1,131	1,265	1,385	1,600	1,789	1,959	2,262	2,530
83-16 ALO-R	177	250	306	354	395	433	500	559	612	707	790
84-16 ALO-R	212	300	367	424	474	520	600	670	735	848	949
85-24 ALO-R	290	410	502	580	648	710	820	917	1,004	1,160	1,296
86-24 ALO-R	424	600	735	848	949	1,039	1,200	1,341	1,470	1,697	1,897
86-30 ALO-R	566	800	980	1,131	1,265	1,385	1,600	1,789	1,959	2,262	2,530
86-36 ALO-R	707	1,000	1,225	1,414	1,581	1,732	2,000	2,236	2,449	2,828	3,162
88-30 ALO-R	636	900	1,102	1,273	1,423	1,559	1,800	2,012	2,204	2,546	2,846
88-48 ALO-R	1,590	2,250	2,755	3,182	3,558	3,897	4,500	5,031	5,511	6,364	7,135
88-40 ALO-R	1,131	1,600	1,959	2,263	2,530	2,771	3,200	3,578	3,919	4,525	5,060
126-24 ALO-R	424	600	735	848	949	1,039	1,200	1,341	1,470	1,697	1,897
128-30 ALO-R	636	900	1,102	1,273	1,423	1,559	1,800	2,012	2,204	2,546	2,846
1212-62 ALO-R	2,828	4,000	4,899	5,657	6,325	6,928	8,000	8,944	9,798	11,314	12,649
166-24 ALO-R	424	600	735	848	949	1,039	1,200	1,341	1,470	1,697	1,897
168-30 ALO-R	636	900	1,102	1,273	1,423	1,559	1,800	2,012	2,204	2,546	2,846
1612-62 ALO-R	2,828	4,000	4,899	5,657	6,325	6,928	8,000	8,944	9,798	11,314	12,649
1616-94 ALO-R	6,364	9,000	11,023	12,728	14,230	15,588	18,000	20,125	22,045	25,455	28,460

*When using other specific gravities, apply multifactor below to above capacities.

GAS - S. G.	.5	.6	.7	.85	1.5	2.0
MULTIFACTOR	1.14	1.04	.96	.87	.66	.57



DIMENSIONS

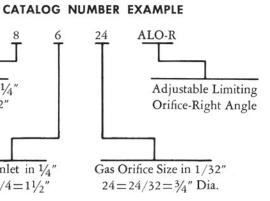


CATALOG	ASSEMBLY	DIMENSIONS					
NUMBER	NUMBER	A	В	C	D	E	F
42-8 ALO-R	302030	1	1/2	1-1/4	2-13/16	2-5/16	5
43-17 ALO-R*	302028	1	3/4	1-1/4	2-13/16	2-5/16	5-1/8
44-17 ALO-R*	302001	1	1	1-1/4	2-13/16	2-5/16	5
44-24 ALO-R	302040	1	1	1-1/4	2-13/16	2-5/16	5
44-8 ALO-R	302025	1	1	1-1/4	2-13/16	2-5/16	5
45-24 ALO-R	302041	1	1-1/4	1-1/4	2-13/16	2-5/8	5-1/2
63-16 ALO-R	302027	1-1/2	3/4	1-1/2	3-1/8	2-5/8	6-5/16
64-16 ALO-R	302002	1-1/2	1	1-1/2	3-1/8	2-5/8	5-5/8
64-8 ALO-R	302026	1-1/2	1	1-1/2	3-1/8	2-5/8	5-5/8
64-24 ALO-R	302043	1-1/2	1	1-1/2	3-1/8	2-5/8	5-5/8
65-24 ALO-R	302042	1-1/2	1-1/4	1-1/2	3-1/8	2-15/16	6-1/32
66-24 ALO-R	302003	1-1/2	1-1/2	1-1/2	3-1/8	2-1/2	5-1/2
66-36 ALO-R	302024	1-1/2	1-1/2	1-1/2	3-1/8	2-1/2	5-1/2
66-30 ALO-R	302023	1-1/2	1-1/2	1-1/2	3-1/8	2-1/2	5-1/2
83-16 ALO-R	302029	2	3/4	2-3/8	4-1/4	3-1/8	6-7/16
84-16 ALO-R	302004	2	1	2-3/8	4-1/4	3-1/8	6-7/16
85-24 ALO-R	302044	2	1-1/4	2-3/8	4-1/4	3-7/16	6-3/4
86-24 ALO-R	302005	2	1-1/2	2-3/8	4-1/4	3-1/8	6-7/16
86-30 ALO-R	302045	2	1-1/2	2-3/8	4-1/4	3-1/8	6-7/16
86-36 ALO-R	302046	2	1-1/2	2-3/8	4-1/4	3-1/8	6-7/16
88-30 ALO-R	302006	2	2	2-3/8	4-1/4	2-15/16	6-1/4
88-48 ALO-R	302022	2	2	2-3/8	4-1/4	2-15/16	6-1/4
88-40 ALO-R	302021	2	2	2-3/8	4-1/4	2-15/16	6-1/4
126-24 ALO-R	302008	3	1-1/2	2-3/4	6-1/8	3-1/2	5-5/8
128-30 ALO-R	302009	3	2	2-3/4	6-1/8	3-7/16	5-9/16
1212-62 ALO-R	302012	3	3	2-3/4	6-1/8	4-1/16	6-3/16
166-24 ALO-R	302010	4	1-1/2	4	7-3/8	4-1/2	6-7/8
168-30 ALO-R	302011	4	2	4	7-3/8	4-1/4	6-5/8
1612-62 ALO-R	302013	4	3	4	7-3/8	4-7/8	7-1/4
1616-94 ALO-R	302014	4	4	4	7-3/8	5-1/8	7-1/2

NOTE: All dimensions are in inches.

TYPICAL APPLICATION NOZZLE MIXING ADJUSTABLE LIMITING ORIFICE VALVE RIGHT ANGLE

Gas Outlet in 1/4" 8 = 8/4 = 2" Gas Inlet in 1/4" $6=6/4=1\frac{1}{2}$ "





^{*} These mixers have a 33/64" port dia. and are equipped with a flat taper pin instead of a cone type adjusting screw.