



## CAPACITIES

# AIG HIGH PRESSURE GAS-AIR INSPIRATORS

**TABLE A – For Manufactured Gas – 530 Btu per Cubic Foot – Gravity 0.56**

Mixer Discharge Pipe Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	3"	4"
Spud Size No.	55	50	46	1/8	24	7	D	11/32
Gas Pressure In lbs. per Sq. In.	CUBIC FEET OF GAS PER HOUR							
1	21	36	52	127	202	340	517	1028
2	29	51	73	180	286	482	733	1453
3	36	63	90	220	349	590	895	1778
4	41	73	104	246	405	683	1038	2059
5	46	81	116	285	452	763	1160	2300
6	50	89	127	312	495	835	1270	2520
7	54	96	137	337	534	901	1380	2719
8	58	103	147	360	570	963	1463	2900
9	62	109	155	381	605	1020	1550	3078
10	65	115	164	403	640	1079	1639	3250
12	71	126	179	441	700	1180	1793	3660
14	77	136	194	477	756	1276	1939	3847
16	82	146	208	510	810	1365	2075	4115
18	87	154	220	541	858	1448	2200	4360
20	92	162	231	568	900	1520	2305	4580
25	103	182	260	640	1013	1710	2600	5150
30	112	199	283	696	1104	1862	2830	5620

**TABLE B – For Natural Gas – 1000 Btu per Cubic Foot – Specific Gravity 0.56**

Mixer Discharge Pipe Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	3"	4"
Spud Size No.	71	65	57	50	45	38	30	14
Gas Pressure In lbs. per Sq. In.	CUBIC FEET OF GAS PER HOUR							
5	13	21	33	81	121	209	332	639
6	14	23	36	89	132	229	364	700
7	15	24	39	96	143	248	394	758
8	16	26	41	103	153	264	420	808
9	17	28	44	109	162	281	446	858
10	18	29	46	115	171	296	469	903
12	20	32	51	126	187	324	515	990
14	22	34	55	136	202	350	555	1070
16	23	37	58	146	216	374	595	1145
18	25	39	62	155	230	398	632	1216
20	26	41	65	163	242	419	665	1280
25	29	46	73	182	270	468	744	1430
30	32	50	80	199	296	512	813	1564

(OVER)

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**TABLE C – For Propane Gas – 2500 Btu per Cubic Foot – Specific Gravity 1.52**

Mixer Discharge Pipe Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	3"	4"
Spud Size No.	77	74	69	56	53	48	44	31
Gas Pressure In lbs. per Sq. In.	CUBIC FEET OF GAS PER HOUR							
5	3.3	5.3	8.9	21	33	60	82	166
6	3.6	5.8	9.7	23	36	66	80	182
7	3.9	6.3	10.5	25	39	71	97	197
8	4.2	6.7	11	27	42	76	103	210
9	4.4	7.1	12	28	44	80	110	223
10	4.7	7.5	12.5	30	46	85	115	235
12	5	8.2	13.5	33	50	93	126	258
14	5.5	9	15	35	55	100	137	280
16	6	9.5	16	38	60	107	146	300
18	6.3	10	17	40	62	114	155	315
20	6.7	11	18	42	66	120	165	335
25	7.4	12	20	48	75	135	188	375
30	8.1	13	23	52	80	150	200	432

All of the above capacities are based upon the mixer supplying a burner of the proper size which is operated without back pressure or draft. Back pressure will decrease the capacity of the mixer and burner as much as 50%, and draft will increase the capacity to 150% and more.

For gases of any other specific gravity than 0.56 multiply the capacities given in Tables A or B by the correction factors shown below. (Do not apply these factors to Table C.)

Specific Gravity	Factor
.44	1.13
.46	1.10
.48	1.08
.50	1.06

Specific Gravity	Factor
.52	1.04
.54	1.02
.56	1.00
.58	.98

Specific Gravity	Factor
.60	.96
.62	.95
.64	.93
.66	.92

Specific Gravity	Factor
.68	.90
.70	.89
.75	.86
.80	.83

Specific Gravity	Factor
.90	.79
1.00	.74
1.52 p	.603
2.07 b	.52

p=propane      b=butane

Given on this sheet are the capacities of Hauck High Pressure Inspirators for various gases under pressures of from 1 to 30lbs. per square inch. Intermediate capacities can be supplied or unusual operation conditions can be overcome by replacing the easily interchangeable gas spud with one of the proper drill size opening.

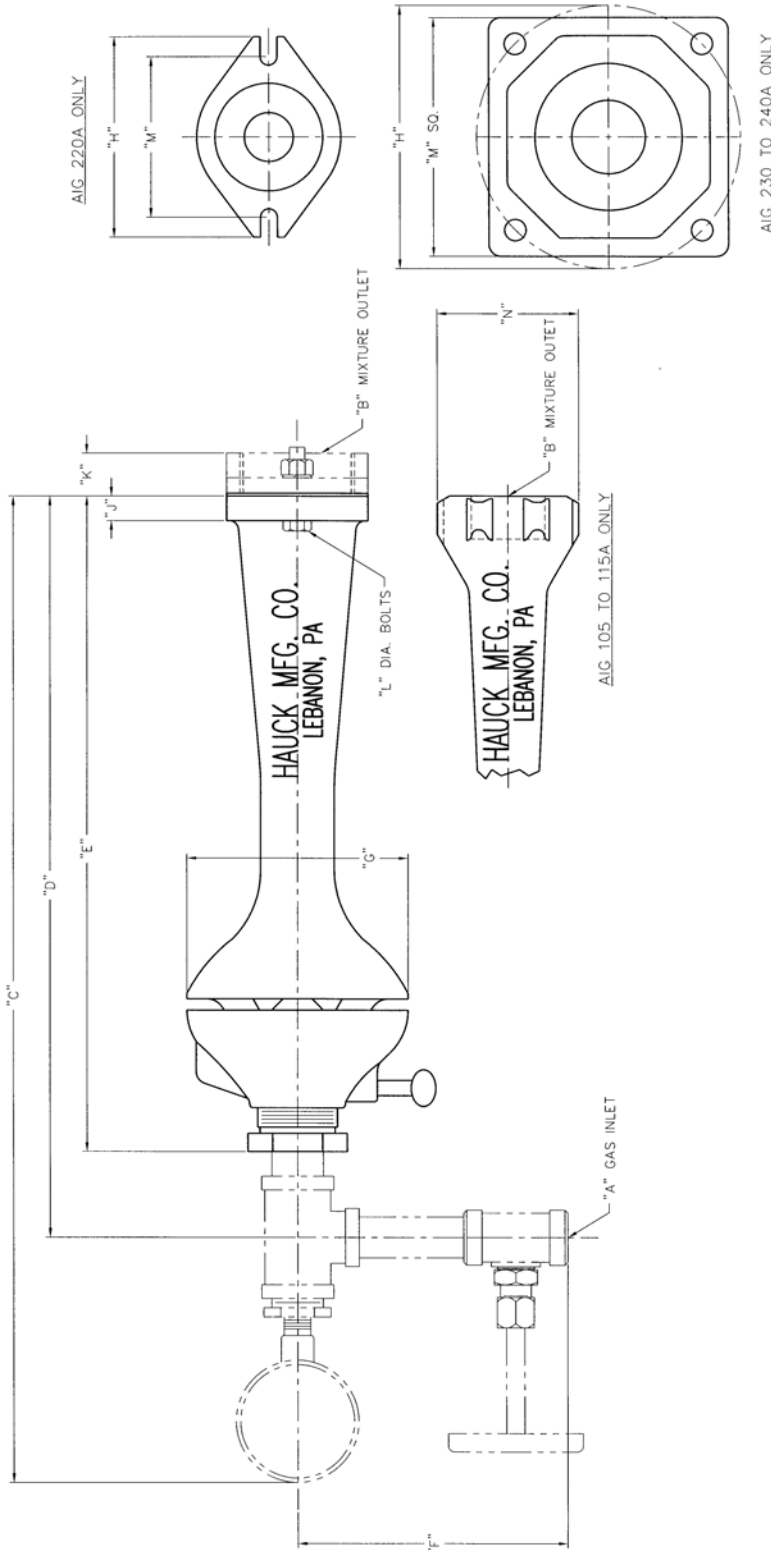
Constant gas pressure should be supplied to these inspirators to eliminate the necessity of readjusting the gas valve to compensate for the fluctuation in pressure.

To obtain a minimum loss in mixture pressure, use as few elbows as possible in the mixture piping from the outlet of the mixer. Where multiple burners are to be served by one inspirator, the mixing piping should be large enough (usually one pipe size larger than the mixer outlet) to avoid undesirable pressure loss.



# DIMENSIONS

## AIG HIGH PRESSURE GAS-AIR INSPIRATORS



MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	N
AIG 105A	3/8 NPT	1/2 NPT	14 1/4	10	8	5	2 5/16	1 9/16	-	-	-	-	1 9/16
AIG 107A	3/8 NPT	3/4 NPT	14 1/4	10	8	5	2 5/16	1 9/16	-	-	-	-	1 9/16
AIG 110A	1/2 NPT	1 NPT	16 1/4	12	10	5 1/2	2 13/16	2 1/4	-	-	-	-	2 1/4
AIG 112A	1/2 NPT	1 1/4 NPT	17	12 3/4	10 3/4	5 1/2	3 5/16	2 9/16	-	-	-	-	2 9/16
AIG 115A	1/2 NPT	1 1/2 NPT	17 3/4	13 1/2	11 1/2	5 1/2	3 5/16	2 7/8	-	-	-	-	2 7/8
AIG 220A	3/4 NPT	2 NPT	20 5/8	16	13 3/8	6 3/8	4 1/2	4 3/16	7/16	7/8	5/16	3 9/16	-
AIG 230A	3/4 NPT	3 NPT	25 1/8	20 1/2	17 7/8	6 3/8	4 9/16	4 7/8	7/16	1 3/8	3/8	5 5/8	-
AIG 240A	1 NPT	4 NPT	29 1/4	24 1/8	21 3/4	6 7/8	5 15/16	5 1/2	9/16	1 1/2	3/8	6 3/8	-

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(NOT TO SCALE)

NOTES:  
1) DIMENSIONS ARE IN INCHES.  
2) PHANTOMED ITEMS ARE OPTIONAL AND MUST BE ORDERED SEPARATELY.

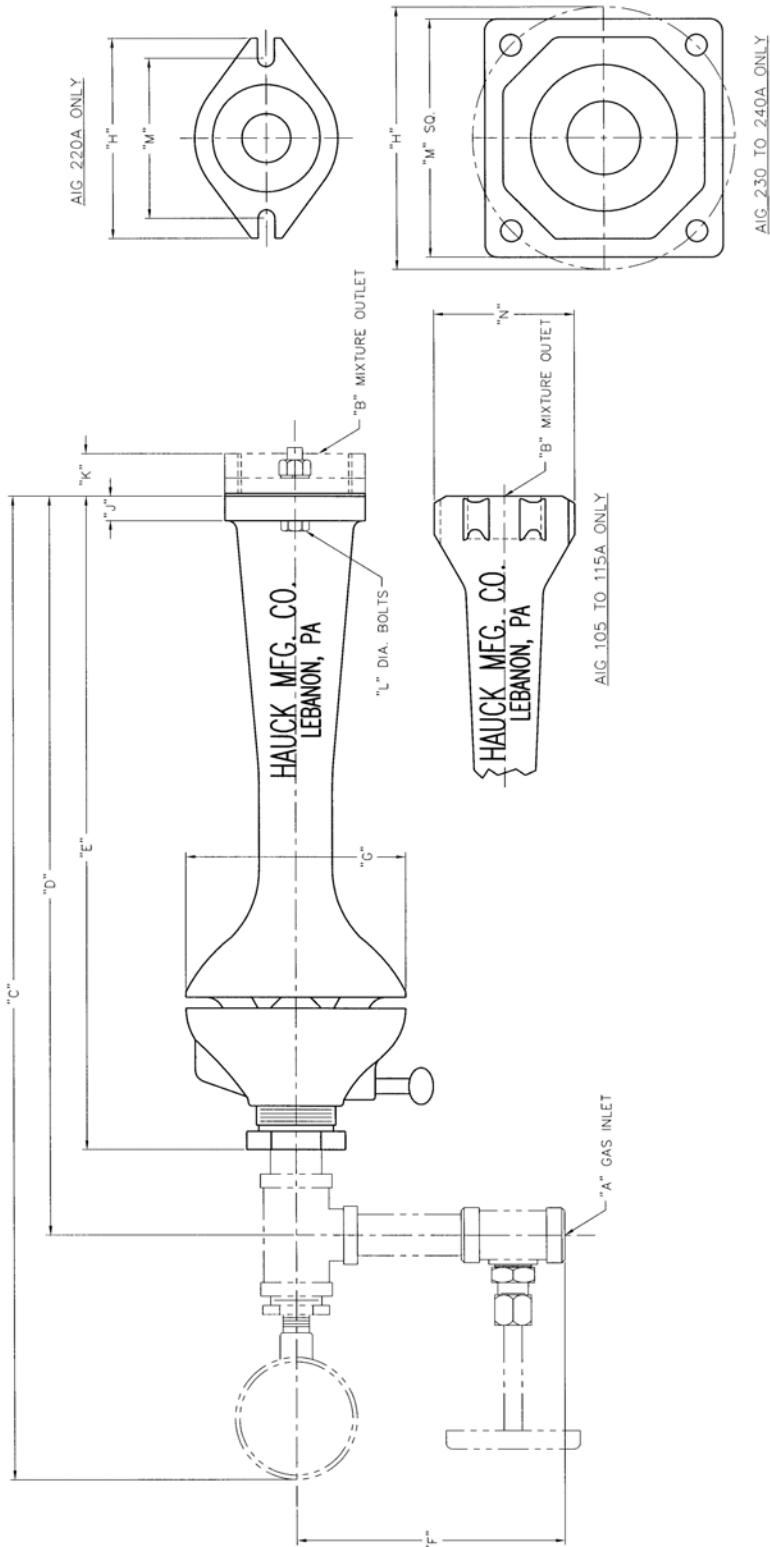
(See Reverse Side For Metric Dimensions)

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# METRIC DIMENSIONS

## AIG HIGH PRESSURE GAS-AIR INSPIRATORS



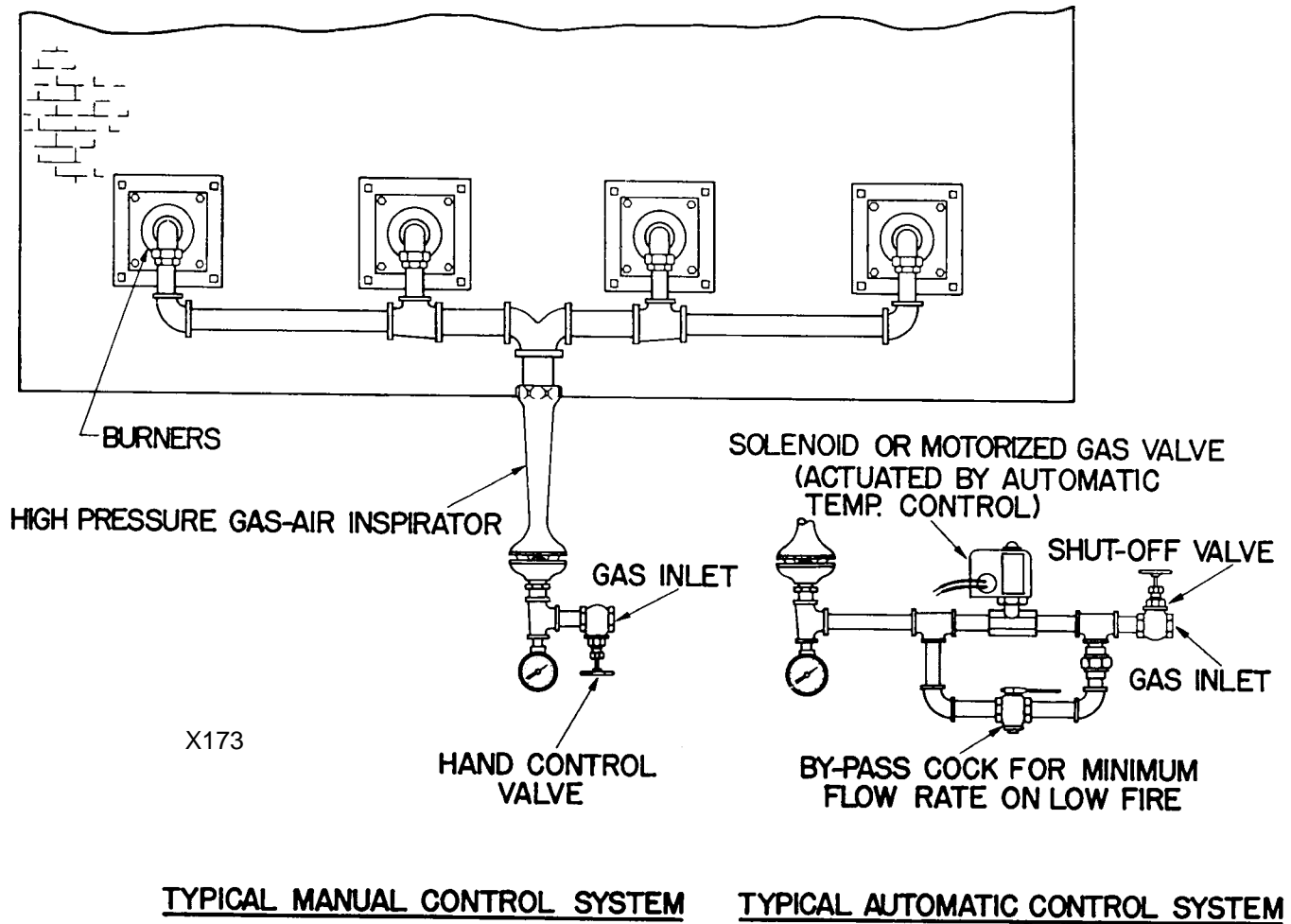
MODEL NO.	A	B	C	D	E	F	G	H	J	K	L	M	N
AIG 105A	3/8 NPT	1/2 NPT	362	254	203	127	59	40	-	-	-	-	40
AIG 107A	3/8 NPT	3/4 NPT	362	254	203	127	59	40	-	-	-	-	40
AIG 110A	1/2 NPT	1 NPT	413	305	254	140	71	57	-	-	-	-	57
AIG 112A	1/2 NPT	1 1/4 NPT	432	324	273	140	84	65	-	-	-	-	65
AIG 115A	1/2 NPT	1 1/2 NPT	451	343	292	140	84	73	-	-	-	-	73
AIG 220A	3/4 NPT	2 NPT	524	406	340	162	114	106	11	22	8	91	-
AIG 230A	3/4 NPT	3 NPT	638	521	454	162	116	124	11	35	10	143	-
AIG 240A	1 NPT	4 NPT	743	613	552	175	151	140	14	38	10	162	-

Y258 METRIC  
(NOT TO SCALE)

NOTES:  
1) DIMENSIONS ARE IN MM.  
2) PHANTOMED ITEMS ARE OPTIONAL AND MUST BE ORDERED SEPARATELY.

# AIG HIGH PRESSURE GAS-AIR INSPIRATORS

## Typical Application of a Hauck High Pressure Gas-Air Inspirator for Multiple Burners



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