

ENGINEERING and TECHNICAL

GAGE RANGE (in W.C.)	MEDIA @ 70° F	FULL RANGE FLOWS BY PIPE SIZE (APPROXIMATE)									
		1"	1¼"	1½"	2"	2½"	3"	4"	6"	8"	10"
2	WATER (GPM)	4.8	8.3	11.5	20.5	30	49	86	205	350	560
	AIR @ 14.7 PSIA (SCFM)	19.0	33.0	42.0	65.0	113	183	330	760	1340	2130
	AIR @ 100 PSIG (SCFM)	50.0	90.5	120.0	210.0	325	510	920	2050	3600	6000
5	WATER (GPM)	7.7	14.0	18.0	34.0	47	78	138	320	560	890
	AIR @ 14.7 PSIA (SCFM)	30.0	51.0	66.0	118.0	178	289	510	1200	2150	3400
	AIR @ 100 PSIG (SCFM)	83.0	142.0	190.0	340.0	610	820	1600	3300	5700	10000
10	WATER (GPM)	11.0	19.0	25.5	45.5	67	110	195	450	800	1260
	AIR @ 14.7 PSIA (SCFM)	41.0	72.0	93.0	163.0	250	410	725	1690	3040	4860
	AIR @ 100 PSIG (SCFM)	120.0	205.0	275.0	470.0	740	1100	2000	4600	8100	15000
25	WATER (GPM)	18.0	32.0	40.5	72.0	108	173	310	720	1250	2000
	AIR @ 14.7 PSIA (SCFM)	63.0	112.0	155.0	255.0	390	640	1130	2630	4860	7700
	AIR @ 100 PSIG (SCFM)	185.0	325.0	430.0	760.0	1200	1800	3300	7200	13000	22000
50	WATER (GPM)	25.0	44.0	57.5	100.0	152	247	435	1000	1800	
	AIR @ 14.7 PSIA (SCFM)	90.0	161.0	205.0	360.0	560	900	1600	3700	6400	
	AIR @ 100 PSIG (SCFM)	260.0	460.0	620.0	1050.0	1700	2600	4600	10000	18500	
100	WATER (GPM)	36.5	62.0	82.0	142.0	220	350	620	1500		
	AIR @ 14.7 PSIA (SCFM)	135.0	230.0	300.0	505.0	800	1290	2290	5000		
	AIR @ 100 PSIG (SCFM)	370.0	660.0	870.0	1500.0	2300	3600	6500	15000		

Pressure Correction Factors

Regulator Inlet Pressure	Pressure Factor
1 psig	1.05
2 psig	1.11
3 psig	1.18
4 psig	1.25
5 psig	1.32
6 psig	1.39
7 psig	1.45
8 psig	1.52
9 psig	1.59
10 psig	1.66
11 psig	1.72
12 psig	1.81
13 psig	1.86
14 psig	1.93
15 psig	2.00

To set desired input change BTU input on boiler to cu. ft. by subtracting the last 3 zeros. If gas supply pressure is over 1 psig take the corresponding pressure factor from the above chart and divide it into the input. This is the actual input required at the supply pressure.

EXAMPLE:

The boiler input is equal to 2,500,000 BTU minus 3 zeros = 2,500 cu. ft. input. The gas supply pressure is 2 psig = 1.11 correction factor. $2,500 \div 1.11 = 2,250$. 2,250 = 16 seconds on 10 cu. ft. dial