

ENGINEERING DATA

HEATER GAS SUPPLY AND PIPE SIZING INFORMATION

When installing any Pentair or Sta-Rite pool or spa heater, it is very important to have the proper amount of gas supplied to all Pentair or Sta-Rite Heaters for pools. Below, for your information, is a table which will assist you in selecting the correct size of piping for the installation.

When installing any gas appliance, it is very important to have the proper size gas meter and home pressure regulator installed. Once you have selected the correct size heater for the pool or spa, contact the local utility which supplies the gas and request a field review of the installation and have them install the proper size meter and proper size pressure regulator.

LOW PRESSURE, SINGLE STAGE PIPE SIZING FOR GAS LINE CONNECTIONS

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Natural gas at 1000 BTU per Cubic Foot

Propane Gas at 2500 BTU per Cubic Foot

MODEL	1/2 in.		3/4 in.		1 in.		1-1/4 in.		1-1/2 in.		2 in.		2-1/2 in.	
	NAT	PRO	NAT	PRO	NAT	PRO	NAT	PRO	NAT	PRO	NAT	PRO	NAT	PRO
100 & 75	20 ft.	50 ft.	50 ft.	150 ft.	150 ft.	600 ft.	-	-	-	-	-	-	-	-
150	10 ft.	40 ft.	50 ft.	150 ft.	150 ft.	600 ft.	-	-	-	-	-	-	-	-
200	-	20 ft.	30 ft.	80 ft.	125 ft.	250 ft.	450 ft.	600 ft.	-	-	-	-	-	-
250	-	10 ft.	20 ft.	50 ft.	70 ft.	150 ft.	250 ft.	500 ft.	600 ft.	-	-	-	-	-
300	-	-	10 ft.	30 ft.	50 ft.	100 ft.	200 ft.	350 ft.	400 ft.	600 ft.	-	-	-	-
350	-	-	10 ft.	20 ft.	30 ft.	70 ft.	125 ft.	250 ft.	250 ft.	500 ft.	500 ft.	-	-	-
400	-	-	-	10 ft.	20 ft.	60 ft.	100 ft.	150 ft.	200 ft.	450 ft.	400 ft.	-	-	-
525	-	-	-	5 ft.	15 ft.	35 ft.	65 ft.	150 ft.	130 ft.	360 ft.	390 ft.	700 ft.	-	-
750	-	-	-	-	-	20 ft.	35 ft.	80 ft.	75 ft.	180 ft.	260 ft.	600 ft.	-	-
900	-	-	-	-	-	15 ft.	20 ft.	45 ft.	45 ft.	100 ft.	150 ft.	360 ft.	400 ft.	-

Gas Pressure	Model	<u>Natural</u>	<u>Propane</u>
		Inches W. C.	
Gas Pressure Requirements Pentair Water Heaters			
Maximum Inlet	CH	10	14
	STD	10	14
	TSI	10	N/A
	LN	10	N/A
Minimum Inlet	CH	6	12
	STD	6	12
	TSI	4	N/A
	LN	6	N/A
Manifold	CH	4	11
	STD	4	11
	TSI	2	N/A
	LN	4	N/A

Gas Pressure	Model	Natural	Propane
		Inches W. C.	
Gas Pressure Requirements for MasterTemp, Max-E-Therm and ETi 400 Pentair Water Heaters			
Maximum Inlet	MT	14	14
Minimum Inlet	MT	4	4
Manifold	MT	-0.2 ± 0.1	-0.2 ± 0.1

Gas Pressure	<u>Natural</u>	<u>Propane</u>
	Inches W. C.	
Gas Pressure Requirements for MiniMax 75 & 100 Pentair Water Heaters		
Normal Altitudes (0–2500 ft. above Sea Level)		
Maximum Inlet	10	14
Minimum Inlet	5	12
Normal Manifold	4	11
High Altitudes (2500–7000 ft. above Sea Level)		
Maximum Inlet	10	14
Minimum Inlet	5	12
Normal Manifold	3	7

Note: All readings must be taken while heater is operating. Any adjustments or readings made while heater is off will give incorrect readings and should not be used for evaluation of heater operation.

All Values are +/- 0.2 inch W. C.