

# PROFIRE Q SERIES TECHNICAL DATA INFORMATION PACKET

## **Technical Data Q** Series

Q: Gas Only Configuration

**UL/ cUL listed** 

.375 - 2.5 MM BTU/H

Standard equipment:	Combustion Control System options:	Fuel options:
5600 RPM motor, panel signal lights (Power, Fuel, Ignition, Failure), combustion air proving switch, safety shutoff valves, 120/1/60 control circuit, burner mounted panel, and a shipped loose gas train (where applicable).	Flame safety controls and parallel positioning	Main Fuel: Natural or propane gas Igniter Fuel: Natural gas and/or propane.

#### **Series Features**

Optional Feature			/				/		/
Flame Safeguard									
Open Damper Purge Control with Flame Rod	•	•	•	•	•	•	•	•	•
Open Damper Purge Control with UV Scanner	<b>\Q</b>	<b>\Q</b>	<b>\lambda</b>	<b>\lambda</b>	<b>\lambda</b>	<b>\lambda</b>	<b>♦</b>	<b>\lambda</b>	<b>◊</b>
Mode of Operation									
On/Off Firing	•	•	•	•	•	•	•	•	•
Low-High-Low Firing	<b>◊</b>	<b>\Q</b>	<b>\Q</b>	<b>\Q</b>	<b>\Q</b>	<b>◊</b>	<b>♦</b>	<b>◊</b>	<b>◊</b>
Full Modulation Firing w/ Butterfly Valve	-	<b>\Q</b>	<b>\Q</b>	<b>\Q</b>	<b>\Q</b>	<b>◊</b>	<b>♦</b>	<b>◊</b>	<b>◊</b>
Turndown									
Turndown on Natural Gas	1:1	1.5:1	2:1	2.7:1	3.3:1	4:1	3.5:1	4:1	5:1
Combustion Control System									
Parallel Positioning System	<b>\Q</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>\Q</b>	<b>♦</b>	<b>\Q</b>	<b>◊</b>
Ignition									
Direct Spark		•	•	•	•	•	•	•	•
Gas Components									
Butterfly Rate Control Valve	<b>◊</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>◊</b>	<b>♦</b>	<b>◊</b>	<b>◊</b>
Gas Shutoff Cocks (2)	•	•	•	•	•	•	•	•	•
Solenoid Valves (2)	•	•	•	•	•	•	•	•	•
Motorized w/POC (1)	<b>◊</b>	<b>\Q</b>	<b>◊</b>	<b>◊</b>	<b>◊</b>	<b>◊</b>	<b>◊</b>	<b>◊</b>	<b>◊</b>
Motorized Valve w/POC	<b>◊</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>♦</b>	<b>◊</b>	<b>\Q</b>	<b>◊</b>	<b>◊</b>

## Standard Ratings Q Series

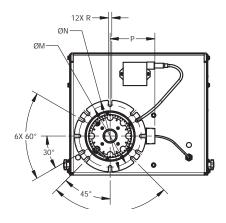
#### **Q: Gas Only Configuration**

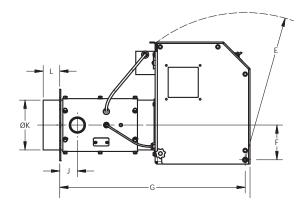
	Gas Input MBH	BHP @ 80% Eff.	Blower Motor HP	Furnace Pressure ("w.c.)	Standard Gas Train Pipe Size (in.)	Min. Gas Pressure ("w.c.)	Low Pressure Gas Train Pipe Size (in.)	Low Gas Pressure Inlet ("w.c.)	Fresh Air Inlet Size (in.)	Air Inlet Orifice Size (in.)	
Model No. & F	rame Size										
Q6-037	375	9	1/2	1.0	1.5	4.0	1.5	4.0	4.0	1.25	
Q6-055	550	13	1/2	1.0	1.5	4.0	1.5	4.0	4.0	1.50	
Q6-075	750	18	1/2	1.0	1.5	4.0	1.5	4.0	4.0	1.80	
Q6-100	1,000	24	1/2	1.0	1.5	4.0	1.5	4.0	4.0	2.25	
Q6-130	1,250	30	1/2	1.0	1.5	4.0	1.5	4.0	4.0	2.95	115/1
Q6-150	1,500	36	1/2	0.75	1.5	6.0	2.0	4.0	4.0	-	
Q8-175	1,750	42	3/4	1.0	1.5	6.0	2.0	4.0	5.75	3.45	
Q8-200	2,000	48	3/4	1.0	1.5	6.0	2.0	4.0	5.75	3.80	
Q8-250	2,500	60	3/4	0.75	1.5	10.0	2.0	4.5	5.75	-	

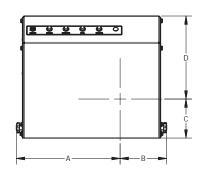
Input is based on fuel BTU content, listed furnace pressure and altitude of 2,000 feet or less. If altitude > 2,000 feet and < 8,000 feet, derate capacity 4% per 1,000 feet over 2,000. Consult factory for higher altitudes. If furnace pressure exceeds listed value, derate capacity 5% for every 0.5" w.c. of pressure in excess of stated. Consult factory if derate exceeds 20%. Gas input is based on natural gas with 1,000 BTU/cu.ft. and 0.60 gravity. For total pressure at manifold, add furnace pressure. Consult factory for 50 Hz. applications.

# **Standard Dimensions** Q Series

### Q: Gas Only On-Off Configuration





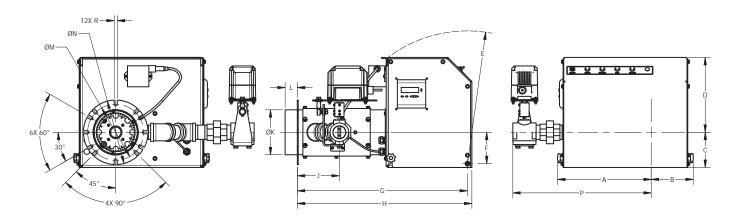


		Burner Model			
	DIM	Q6	Q8		
Length in inches					
Overall burner length	Н	22 7/8	25 5/8		
Width in inches					
Center line to left side	A	12 1/2	15 5/16		
Center line to right side	В	5 5/8	6 7/8		
Height in inches					
Center line to top	D	10	11 7/8		
Center line to bottom	С	4 11/16	4 3/8		
Hinge pivot point in inches					
Mounting flange to hinge	G	22 3/8	25		
Hinge swing radius	E	17 11/16	20 5/8		
Center line to hinge	F	4 3/16	3 7/8		
Blast tube in inches					
Extension	L	2	2		
Diameter	K	6	8		
Mounting flange dimensions in inches					
Outer diameter of mounting flange	N	12	11		
Bolt circle diameter	М	7 1/2	9 1/2		
Mounting flange slot width	R	3/8	1/2		
Gas inlet dimensions in inches					
Mounting flange to main gas inlet	J	2 1/8	2 1/8		
Center line to main gas inlet	Р	5 3/8	6 3/8		

Accompanying dimensions, while sufficiently accurate for layout purposes, must be confirmed for construction.

# **Standard Dimensions** Q Series

#### Q: Gas Only Full Modulation Configuration



		Burner	Model				
	DIM	Q6	Q8				
Length in inches							
Overall burner length	Н	22 7/8	25 5/8				
Width in inches							
Center line to left side	A	12 1/2	15 5/16				
Center line to right side	В	5 5/8	6 7/8				
Height in inches							
Center line to top	D	10	11 7/8				
Center line to bottom	С	4 11/16	4 3/8				
Hinge pivot point in inches							
Mounting flange to hinge	G	22 3/8	25				
Hinge swing radius	Е	17 11/16	20 5/8				
Center line to hinge	F	4 3/16	3 7/8				
Blast tube in inches							
Extension	L	2	2				
Diameter	K	6	8				
Mounting flange dimensions in inches	Mounting flange dimensions in inches						
Outer diameter of mounting flange	N	12	11				
Bolt circle diameter	М	7 1/2	9 1/2				
Mounting flange slot width	R	3/8	1/2				
Gas inlet dimensions in inches							
Mounting flange to main gas inlet	J	5 5/8	5 5/8				
Center line to main gas inlet	Р	18 1/2	18 1/2				

Accompanying dimensions, while sufficiently accurate for layout purposes, must be confirmed for construction.



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