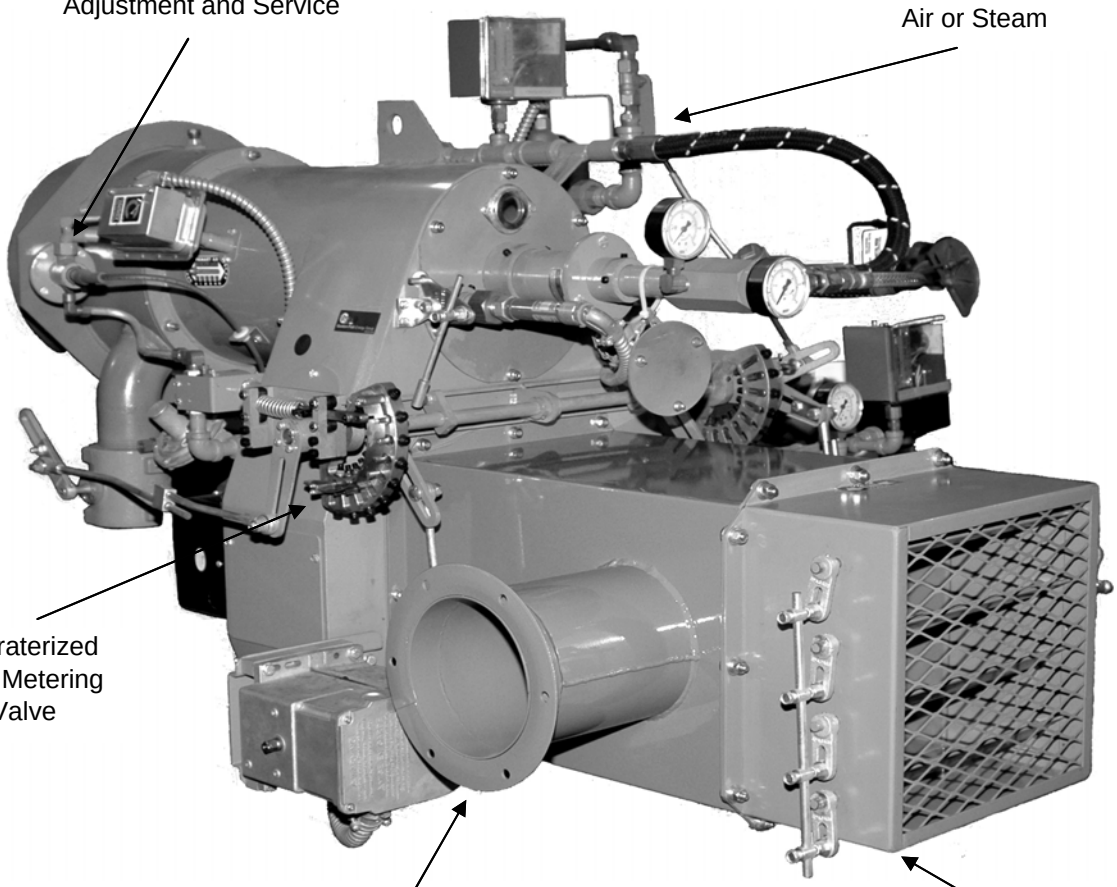
JOHN ZINK
JOHN ZINK COMPANY LLC
Gordon-Piatt

1	IF	15.1	Rev. 0
05 - 05			

Specification Data

*TYPE **IF** FORCED DRAFT LOW NOx BURNERS*

For Gas and Light Oil Firing



Burner Numbering System

IF - 14 - GO - 50 - XXXXXX - E2.20 - F8.2 - UL

- IF - Burner Type
- 14 - Burner Size
- GO - Fuel (Gas/Oil)
- 50 - Blower Motor HP
- XXXXXX - Flame Safeguard Control
- E2.20 - Gas Control System
- F8.2 - Gas Train Size
- UL - Oil Control System
- Agency Code

An exclusive brand of John Zink Company, LLC

* Covered by one or more of the following patents: U.S. Patent Numbers: 6565361; 4932274; 5441404: 5722821; 5944506; 5957682

Specifications and Capacities

BASIC BURNER MODEL NO.	MAXIMUM FIRING RATE COMBUSTION CHAMBER PRESSURE								BURNER BLOWER MOTOR 3450 RPM
	DRAFT -.05" W.C.		LOW PRESSURE			HIGH PRESSURE			
	NATURAL GAS BTU/HR 1,000's	OIL GPH	PRESS INCHES W.C.	NATURAL GAS BTU/HR 1,000's	OIL GPH	PRESS INCHES W.C.	NATURAL GAS BTU/HR 1,000's	OIL GPH	HP
IF10 - 15	3,650	26	0.5	3,360	24	-	-	-	1 1/2
IF10 - 30	4,750	34	-	-	-	-	-	-	3
IF10.1 - 30	-	-	0.5	4,400	31	1.3	4,200	30	3
IF10.1 - 50	6,050	43	-	-	-	-	-	-	5
IF10.2 - 50	-	-	0.5	5,500	39	-	-	-	5
IF12.9 - 30	7,000	50	-	-	-	-	-	-	3
IF12 - 30	-	-	0.5	6,300	45	1.5	5,600	40	3
IF12 - 50	8,400	60	-	-	-	-	-	-	5
IF12.1 - 50	-	-	0.5	7,700	55	2.0	6,700	48	5
IF12.4 - 50	-	-	-	-	-	1.5	8,400	60	5
IF12.5 - 75	-	-	-	-	-	3.0	8,400	60	7 1/2
IF14.9 - 30	9,800	70	0.5	9,700	69	2.0	9,000	64	3
IF14 - 50	12,300	88	0.5	11,200	80	1.5	10,500	75	5
IF14.1 - 75	-	-	-	-	-	2.0	10,500	75	7 1/2
IF16.9 - 50	-	-	-	-	-	0.7	12,600	90	5
IF16.9 - 75	16,800	120	-	-	-	-	-	-	7 1/2
IF16 - 75	-	-	0.5	15,400	110	1.6	12,600	90	7 1/2
IF16 - 100	18,480	132	-	-	-	-	-	-	10
IF16.1 - 100	-	-	0.5	16,800	120	2.3	14,700	105	10
IF16.1 - 150	-	-	-	-	-	2.5	16,800	120	15
IF18.9 - 75	-	-	-	-	-	0.9	16,800	120	7 1/2
IF18.8 - 100	18,200	130	-	-	-	-	-	-	10
IF18.9 - 100	-	-	0.5	19,200	137	-	-	-	10
IF18.9 - 150	23,100	165	-	-	-	-	-	-	15
IF18 - 150	-	-	0.5	23,100	165	3.0	21,000	150	15
IF18 - 200	24,600	176	-	-	-	-	-	-	20
IF18.1 - 200	-	-	0.5	25,900	185	2.0	25,200	180	20
IF18.2 - 250	-	-	0.5	27,300	195	4.0	25,200	180	25
IF18.1 - 300	30,500	218	-	-	-	-	-	-	30
IF18.2 - 300	-	-	0.5	30,100	215	3.0	29,400	210	30
IF18.2 - 400	-	-	0.5	31,500	225	6.0	29,400	210	40
IF20.9 - 400	-	-	-	-	-	5.0	29,400	210	40
IF20 - 400	-	-	-	-	-	5.0	34,000	243	40

Fuel

Gas = G
Oil = O
Gas / Oil = GO

NOTES:

1. Natural Gas capacities shown are based on firing Natural Gas with a heating value of 1,000 btu/cf at an elevation of 2,000 feet above Sea Level. Capacity will be reduced by 4% for each additional 1,000 feet of elevation.

2. Oil capacities shown are based on firing No. 2 Oil, GPH based upon 140,000 Btu / U.S. gallon. Maximum viscosity 38 SSU at 100degree F average 31 Redwood seconds.

Standard Equipment

SINGLE OR COMBINATION FUEL BURNERS		FUEL CONTROL SYSTEMS				
		MODULATING WITH PROVEN LOW FIRE START				
		GAS SYSTEM	OIL SYSTEMS		GAS OIL SYSTEMS	
			AIR ATOMIZING	STEAM ATOMIZING	AIR ATOMIZING	STEAM ATOMIZING
		E2	F8.2	F9.2	E2 - F8.2	E2 - F9.2
GENERAL	Blower Motor and Fan Air Inlet Register Air Flow Safety Switch Proven Low Fire Start, Modulating Motor Flame Detector	X	X	X	X	X
CONTROL CABINET	Remote Control Cabinet, 5 Indicator Lights & Control Switch Programming Combustion Safety Control Motor Contactor and O.L. Protection Modulating Sub-Panel With Manual-Auto Switch & Manual Potentiometer	X	X	X	X	X
	Air Compressor Motor Contactor w/O.L. Protection		X		X	
	Oil Pump Motor Contactor w/O.L. Protection		O		O	
	Fuel Transfer Switch (Gas / Oil)				X	X
GAS PILOT SYSTEM	Safety Pilot Burner or Igniter Gas Pilot Ignition Transformer, 6,000 V. Pilot Solenoid Valve Pilot Gas Pressure Regulator (14" w.c.. - 10 Psig) Pilot Shutoff Cock	X	X	X	X	X
GAS CONTROL	Butterfly Gas Valve Safety Leak Test Cock Gas Pressure Gauge U.L. Gas Control Train	X			X	X
NOx CONTROL	Induced FGR Inlet Induced FGR Control Valve Induced FGR Characterized Metering Assembly FGR Modulating Motor	X	X	X	X	X
OIL CONTROLS	Oil Drawer Assembly with Air Diffuser Main Oil Solenoid Valve Secondary Safety Oil Solenoid Valve Low Oil Pressure Switch Manual Valve Oil Pressure Gauge Oil Metering Valve		X	X	X	X
	Oil Strainer Burner Oil Pump Set Check Valve (Return Line) Check Valve (Supply Line)		O	O	O	O
	Flexible metal Hose Oil Supply Line Air or Steam Atomizing Oil Nozzle Oil Pressure Regulator		X	X	X	X
AIR CONTROLS	Air Compressor Low Air Pressure Switch Back Pressure Regulating and Relief Valve Flexible Air Supply Line Air Pressure Regulating Valve Air Pressure Gauges Air Metering Valve Air Check Valve		X		X	
STEAM CONTROLS	Manual Valve Low Atomizing Steam Pressure Switch Steam Strainer Steam Regulator Steam Metering Valve Steam Trap Steam Solenoid Valve Steam Check Valve Condensate Manual Valve Flexible Metal Hose Steam Supply Line			X		X

KEY: X = Standard, O = Optional

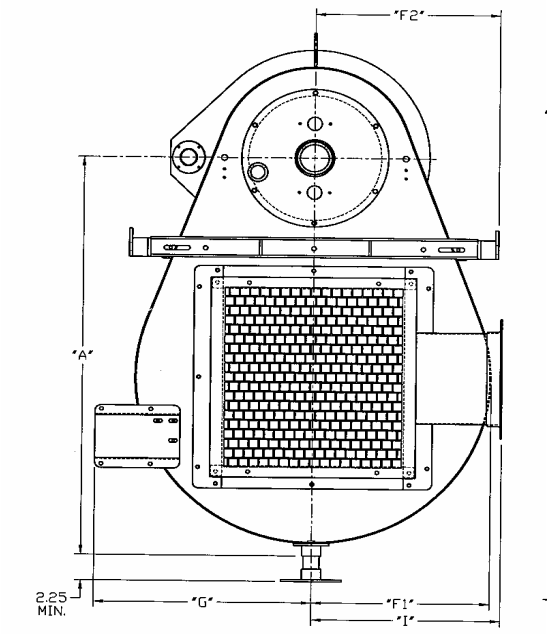
Dimensions

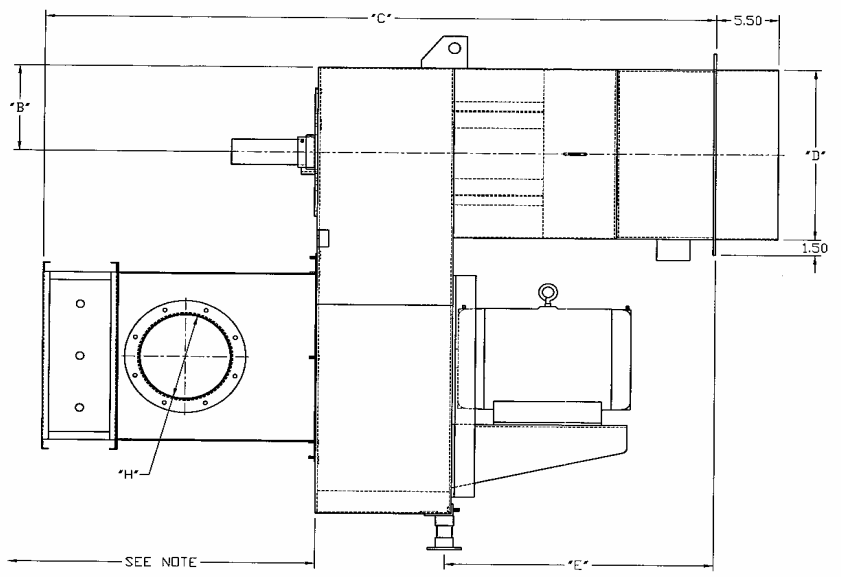
BASIC BURNER MODEL NO.	SHIPPING WEIGHT LBS. APPROX.	OVERALL BURNER DIMENSIONS (INCHES)									
		A	B	C	D	E	F1	F2	G	H	I
IF10 - 15	670	23-1/8	5	47	10	16-3/4	10-1/4	15	15-1/2	4	17
IF10.1 - 30	700										
IF10 - 30	700										
IF10.2 - 50	720										
IF10.1 - 50	720										
IF12 - 30	750	23-1/8	5	47-1/2	12	17-5/8	10	15	15-1/2	6	17
IF12.9 - 30	750										
IF12.1 - 50	800	23-1/8	5	47-1/2	12	17-5/8	10-1/4	15	15-1/2	6	17
IF12 - 50	800										
IF12.4 - 50	900	31	6	55	12	21-1/4	13	19	18	6	17
IF12.5 - 75	950										
IF14.9 - 30	1,100	32-7/8	7	55	14	21-1/4	14-3/4	19	19-1/2	6	17
IF14 - 50	1,100										
IF14.1 - 75	1,200										
IF16.9 - 50	1,450	32-7/8	7	55	16	21-1/4	14-3/4	19	19-1/2	8	17
IF16 - 75	1,450										
IF16.9 - 75	1,450										
IF16.1 - 100	1,550										
IF16 - 100	1,550										
IF16.1 - 150	1,550	34-1/8	8	57	16	21-1/4	14-3/4	19	19-1/2	8	17
IF18.9 - 75	1,600	34-1/8	8	59	18	21-1/2	14-3/4	19	19-1/2	10	17
IF18.9 - 100	1,700	34-1/8	8	59	18	21-1/2	14-3/4	19	19-1/2	10	17
IF18.8 - 100	1,700										
IF18 - 150	1,800										
IF18.9 - 150	1,800										
IF18.1 - 200	1,900										
IF18 - 200	1,900										
IF18.2 - 250	2,000	37-3/4	9	62-1/2	18	25-1/2	16-3/4	19	20-1/2	10	17
IF18.2 - 300	2,100										
IF18.1 - 300	2,100										
IF18.3 - 400	2,200										
IF20.9 - 400	2,750	37-3/4	9	62-1/2	20	25-1/2	16-3/4	19	20-1/2	12	17
IF20 - 400	2,750										

Fuel
Gas = G
Oil = O
Gas / Oil = GO

NOTES:

3. Weight will vary by burner depending on size and type of gas train, type of fuel control system, etc. The figure shown represents a burner with standard controls including gas train.
4. Dimensions shown cover the most commonly used burners within each size. These dimensions are typical and subject to change without notice.
5. FGR inlet can be mounted on the left hand or right hand side, as specified at time of order.





NOTE
Dimension C plus nose length (5-1/2" standard shown) is required behind the burner to remove the drawer assembly