

1480 SERIES HOT OR COLD AIR, HIGH VELOCITY, HIGH MOMENTUM BURNER

CAPABILITIES

- Suitable for low furnace operating temperature through 2500°F (1371°C) with standard design
- Standard burner designed for cold air or hot air to 800°F(427°C) operation
- Wide operating range from over 2000% excess air levels through excess fuel
- Very high velocity (momentum) burner
- Nominal capacity from less than 250,000 to 1.5 million BTU/hour at 10% excess air
- For use with most gaseous fuels with heating values above 250 BTU/cubic foot
- Suitable for most construction designs including light wall
- Custom engineered models available



FEATURES

- Baffle design
- Provides outstanding flame stabilization
- Shields burner internals from furnace temperature
- Rugged burners, port block and mounting plate construction
- The standard port block is square with optional designs available, all in a variety of lengths
- Low port block temperatures insure block life
- Integral gas distribution orifice

CONTROL

- Cross connected regulator (per burner recommended)
- Meter flow

FLAME MONITORING

- Provisions for flame monitoring to 700% excess air
- U.V. Detector

APPLICATIONS

- Heat Treat Furnaces
- Ceramics Kilns
- Galvanizing Pots
- Continuous Strip and A&P Furnaces
- Forge Furnaces
- Ladle Heating and Drying
- Roller Hearth Furnaces
- Tube Reheating Furnaces
- Tundish Heating and Drying
- Other Applications requiring high excess air or reducing atmospheres

BURNER IGNITION

- Pilot (optional – see Bloom representative)
- Direct Spark (preferred)

FUEL CAPABILITIES

- Most Gases

CAUTION: The improper use of combustion equipment can result in a condition hazardous to people and property. Users are urged to comply with National Safety Standards and/or Insurance Underwriters recommendations

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BURNER SIZES, CAPACITIES AND OXIDATIONS ENVELOPES

100°F COMBUSTION AIR (38°C)

Catalog No. 1480-	Air Flow @ 20" WC (50 mBar) Firing		Air Flow @ 20" WC (50 mBar) Not Firing		Excess Air Capability (%) @ 20" WC* (50 mBar)	Flame Length 10% Excess Air		Flame Diameter 10% Excess Air	
	SCFH	Nm ³ /hr	SCFH	Nm ³ /hr		inches	mm	inches	mm
015	2,800	76	3,640	98	2,000	18	457	2.0	51
020	5,500	149	7,150	193	2,000	22	558	2.5	64
025	8,300	224	10,800	292	2,000	26	660	3.5	89
030	11,000	297	14,300	386	2,000	29	737	5.0	127
03X	16,500	446	21,500	581	2,000	36	914	6.0	152

*Recommend limit for U.V. monitoring be 700% excess air.

Catalog No. 1480-	Air Flow @ 10.5" WC* (26 mBar) Firing		Air Flow @ 10.5" WC* (26 mBar) Not Firing		Excess Air Capability (%) @ 10.5" WC* (26 mBar)	Flame Length 10% Excess Air		Flame Diameter 10% Excess Air	
	SCFH	Nm ³ /hr	SCFH	Nm ³ /hr		inches	mm	inches	mm
040	20,000	536	26,000	697	1000	48	1219	18	459
04X	30,950	830	40,200	1078	1000	60	1524	21	533

*Not recommended above 10.5" WC (26 mBar)

Note: Due to the substantially higher airflow through the burner when not firing, combustion air fans must be sized for the non-firing airflow to prevent overloads.

DIRECT SPARK IGNITOR

Catalog No. 1480-	Direct Spark Igniter
015	3500-148
020	3500-148
025	3500-148
030	3500-148
03X	3500-148
040	3500-148
04X	3500-148

NOTE: GENERAL DIMENSION INFORMATION. SEE BLOOM REPRESENTATIVE FOR CERTIFIED DIMENSIONS FOR CONSTRUCTION.

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PARTS LIST FOR ALL BURNERS

Part Number	Description
01	Body
02	Baffle
03	Gas Nozzle Assembly
05	Gasket (gas nozzle)
06	Observation Port (not shown)
07	Gas Orifice
15	Gasket (burner body)
16	Clamp
20	Gas Adapter Flange
32	Pilot (not shown)
33	Mounting Plate and Block Assembly – 9" Wall
34	Mounting Plate – 9" Long Block
35	Block – 9" Wall
36	Mounting Plate and Block Assembly – 6" Wall
37	Mounting Plate – 6" Long Block
38	Block – 6" Wall
39	Mounting Plate and Block Assembly – 4 ½" Wall
40	Mounting Plate – 4 ½" Long Block
41	Block – 4 ½" Wall
42	Wedge Bolt

Part number must be preceded by catalog number.
 Example: To order Block Part 35 for 1480-030 Burner
 Specify 1480-030 -- 35
 (catalog number) (part number)

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