

# PIPE BURNERS ATMOSPHERIC TYPE

MODEL: PB

Revision: 1

BULLETIN  
3260, 3261

## DATA SHEET

Pipe burners are widely used atmospheric gas burners made in many sizes, lengths, and capacities. They are designed with correctly spaced ports properly sized for the gas to be burned.

## APPLICATIONS

Drilled port pipe burners are used for the heating of vats, kettles, tanks and other containers which permit the burners to be installed underneath. They are also used for oven and furnace heating for many applications where materials may be heated by direct contact. Ambient temperatures should be limited to 600°F.

## SPECIFICATIONS

Pipe burners are made from standard steel pipe, capped at one end and drilled with the required number of ports in single or double rows. Ports are uniformly spaced and rows are straight.

A Lojector complete with gas cock and drilled orifice is furnished with an elbow for connection to the inlet end of the burner. 3/4", 1", 1-1/4", and 1-1/2" burners are standard with adjustable gas orifices. Sizes 2" and 2-1/2" are available with adjustable orifices where specified.

About 1/3 to 1/2 of the total air required for combustion is entrained by the gas in the Lojector. The balance of the air must be uniformly available along the entire pipe burner length to permit complete combustion.

If the burner does not get enough air, the flames will "float" or go out entirely. Combustion chambers should have adequate air openings below the burner and distributed over its length for safe and satisfactory operation.

There should be enough total flue area to relieve the products of combustion and to promote the entry of secondary air. A recommended figure is one square inch of flue area per 6000 BTU/hr of burner capacity.

Recommended head room above the burner is 4 to 8 inches depending on type of flames. Pipe burners should not be operated in a vertical position. Minimum "low-fire" adjustability is approximately 1/4 of maximum ratings.



## PILOTS

Pipe burners can be lighted at any point. The flame will immediately run the length of the burner.

3275 - 24AP Series Pilots are designed for mounting on the burner at the inlet end. The pilots include mounting hardware, 3 feet of tubing and pilot gas cock. Burners are drilled and tapped for mounting the pilot when both are supplied on the same order.

Specify 3275 - 24AP for plain pilot; 3275 - 24APS for pilot fitted for spark ignition; a 3275 - 24APP for pilot with Baso thermal element.

## ELECTRODES

3262-SEFE electrode used in place of pilot. Can be used for either spark or flame electrode. Spark electrode is mounted on inlet side, and flame electrode on opposite side if required.

**CAUTION:** Operation of combustion equipment can be hazardous resulting in bodily injury or equipment damage. Each burner should be supervised by a combustion safeguard and only qualified personnel should install, make system adjustments and perform any required service.



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## CAPACITY TABLE

Capacity BTU/hr.	10000	15000	20000	25000	30000	40000	50000	60000	70000	80000	90000
Model Number	6PB	8PB	8PB	10PB	10PB	12PB	16PB	16PB	16PB	20PB	20PB
Pipe Size	3/4"	1"	1"	1-1/4"	1-1/4"	1-1/2"	2"	2"	2"	2-1/2"	2-1/2"
Flame Length - Inches	6	- 6D-10									
	12	- 12D-10	- 12D-15	- 12D-20							
	18	18S-10 -	- 18D-15	- 18D-20	- 18D-25	- 18D-30					
	24	24S-10 -	24S-15 -	- 24D-20	- 24D-25	- 24D-30	- 24D-40				
	30	30S-10 -	30S-15 -	30S-20 -	- 30D-25	- 30D-30	- 30D-40	- 30D-50			
	36		36S-15 -	36S-20 -	- 36D-25	- 36D-30	- 36D-40	- 36D-50			
	42		42S-15 -	42S-20 -	42S-25 -	42S-30 42D-30	- 42D-30	- 42D-50	- 42D-60	- 42D-70	
	48			48S-20 -	48S-25 -	48S-30 -	- 48D-40	- 48D-50	- 48D-60	- 48D-70	- 48D-80
	54				54S-25 -	54S-30 -	54S-40 54D-40	- 54D-50	- 54D-60	- 54D-70	- 54D-80
	60				60S-25 -	60S-25 -	60S-40 60D-40	- 60D-50	- 60D-60	- 60D-70	- 60D-80
	66				66S-25 -	66S-30 -	66S-40 -	66S-50 66D-50	- 66D-60	- 66D-70	- 66D-80
	72				72S-25 -	72S-30 -	72S-40 -	72S-50 72D-50	- 72D-60	- 72D-70	- 72D-80
	84					84S-30 -	84S-40 -	84S-50 -	84S-60 84D-60	- 84D-70	- 84D-80
	96						96S-40 -	96S-50 -	96S-60 -	- 96D-70	- 96D-80
	108						108S-40 -	108S-50 -	108S-60 -	108S-70 108D-70	108S-80 108D-80
	120							120S-50 -	120S-60 -	120S-70 -	120S-80 120D-90

Model Number	100000 20PB	120000 20PB
Pipe Size	2-1/2"	2-1/2"
Flame Length - Inches	60	- 60D-100
	66	- 66D-100
	72	- 72D-100
	84	- 84D-100
	96	- 96D-100
	108	- 108D-100
	120	- 120D-100
	132	- 132D-100

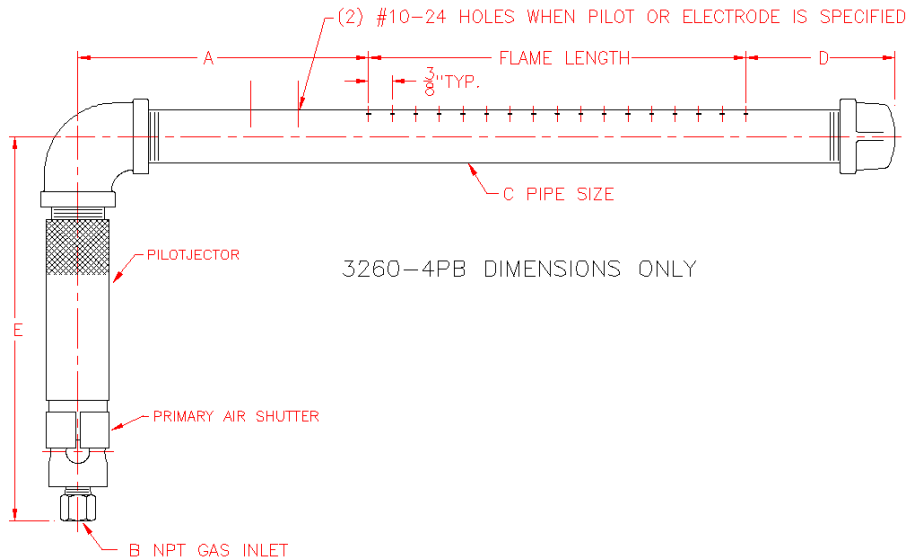
NOTE : Capacity for 4pb not listed consult factory

Note: Burner capacities shown are 60% greater when using Mfg. gas.

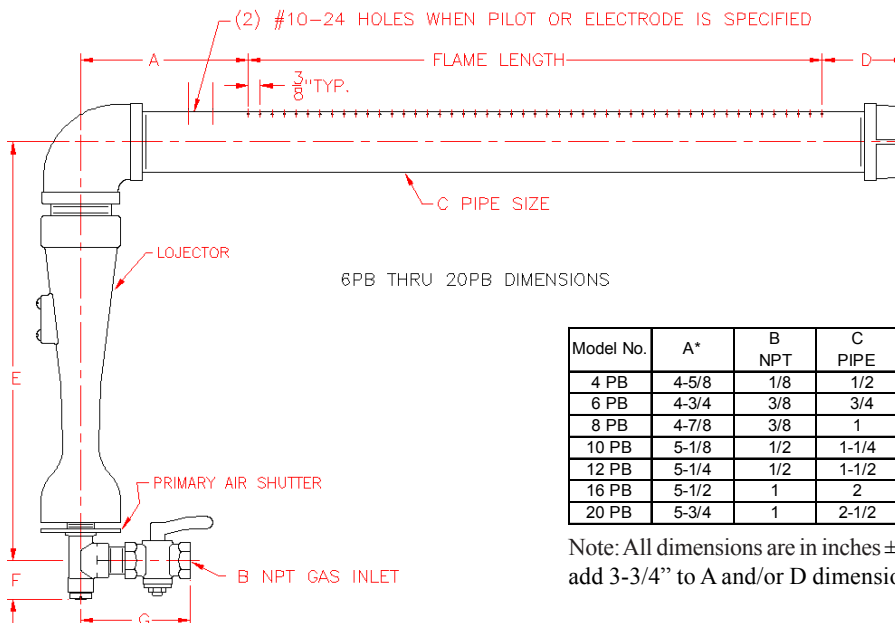
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## DIMENSIONS



3260-4PB DIMENSIONS ONLY



6PB THRU 20PB DIMENSIONS

Model No.	A*	B NPT	C PIPE	D	E	F	G
4 PB	4-5/8	1/8	1/2	2-3/8	6-1/8	-	-
6 PB	4-3/4	3/8	3/4	2-1/2	9	2	2-1/2
8 PB	4-7/8	3/8	1	2-1/2	9-1/8	2	2-1/2
10 PB	5-1/8	1/2	1-1/4	2-5/8	12-7/8	1-1/4	3-1/2
12 PB	5-1/4	1/2	1-1/2	2-5/8	13-1/8	1-1/4	3-1/2
16 PB	5-1/2	1	2	2-3/4	18-1/4	1-5/8	4-3/4
20 PB	5-3/4	1	2-1/2	2-3/4	21-1/4	1-5/8	4-3/4

Note: All dimensions are in inches  $\pm 1/8$ . \*If SEFE electrode is required add 3-3/4" to A and/or D dimension.

## ORDERING INFORMATION

1. Select catalog number from tables on page 2.
2. Specify pilot, direct spark or manual ignition.

Example:

16PB - 120 - S - 50 - LP

Model No. (Pipe Size)

Flame Length

S- Single Row

D - Double Row

Type of Gas:

N - Natural

M - Mfg.

LP - Propane

BTU x 1000

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