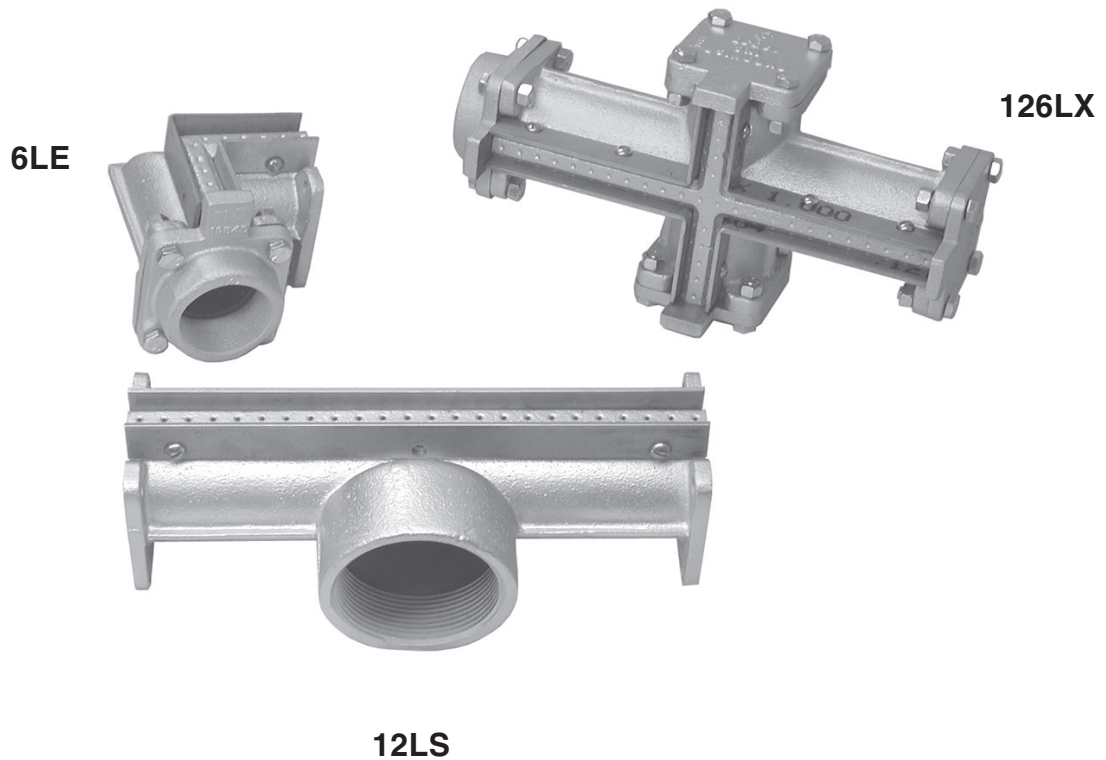


PYRO-LINE™ BURNERS

MODEL: 3201

Revision: 0

BULLETIN
3201



DESCRIPTION

PYRO-LINE Burners are cast iron, drilled port continuous line burners with alloy side rails. The unique mounting of the side rails improves flame retention and allows cooler burner operation under higher ambient temperature.

Burners are available in 12", 6", and 3" Straights and 12" Bottom or Side Inlets. The 12" x 6" Cross and 3" x 3" 90° Elbow make possible almost any arrangement of burner assemblies.

PYRO-LINE Burners will operate at mixture pressures up to 20" w. c. and perform is best with 70% to 80% aeration, but other air-gas ratios can be used.

At normal mixture pressures burner flames are very stable in air stream velocities up to 5000 f.p.m. Where the burner must be operated below 1" w. c. mixture pressure limit the air velocity to 1200 f.p.m.

Flame travel is instantaneous from section to section, without the necessity of crossover strips.

The Universal Pilot Mounting Bracket bolts to any flange on either side of the burner. This provides the location for single point spark ignition and flame protection.

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.



pyronics
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APPLICATIONS

PYRO-LINE Burners are used where heat is to be distributed in continuous flame patterns.

The burners may be installed horizontal or vertical in single sections or groups.

PYRO-LINE Burners in air heating ducts will occupy 0.30 sq. ft. per foot of flame length. See Table I.

When installing PYRO-LINE Burners in assembled groups do not fasten down. Burners must be free to move to allow for normal expansion due to temperature changes.

USES

1. Oven and makeup air heating
2. Glass lehrs--glass polishing
3. Kettle and tank heating
4. Textile drying and singeing
5. Core baking and mold drying
6. Spot heating
7. Brazing, , soldering, annealing
8. Flame curtains
9. Fume incineration
10. Ink drying
11. Food processing

BURNER SELECTION

1. Knowing the mixture pressure, desired capacity, and number and type of sections, select the correct style below.

TABLE I

Cat. No.	Description	Equiv. Length Ft.	1000 BTU/HR/Section at various mixture pressures - 75% primary air							
			0.5"	2"	4"	6"	8"	10"	12"	16"
3L-A	STYLE "A" 3" Straight	0.25	7.5	7.5	22.5	27.5	32.5	35	40	45
6L-A	6" Straight	0.5	15	15	45	55	65	70	80	90
12L-A	12" Straight	1	30	65	90	110	130	145	160	185
12LB-A	12" Bott. Inlet	1								
12LS-A	12" Side Intlet	1								
66LX-A	Cross	1								
6LE-A	90° Elbow	0.5	15	30	45	55	65	70	80	90
126LX-A	Cross	1.5	45	95	135	165	195	215	240	275
3L-B	STYLE "B" 3" Straight	0.125	15	32.5	45	55	65	72.5	80	95
6L-B	6" Straight	0.25	30	65	90	110	130	145	160	190
12L-B	12" Straight	1	65	130	185	225	260	290	320	370
12LB-B	12" Bott. Inlet	1								
12LS-B	12" Side Intlet	1								
66LX-B	Cross	1								
6LE-B	90° Elbow	0.5	30	65	95	110	130	145	160	190
126LX-B	Cross	1.5	95	195	275	335	390	435	480	550
3L-C	STYLE "C" 3" Straight	0.125	25	50	70	85	100	112.5	122.5	140
6L-C	6" Straight	0.25	50	100	140	170	200	225	245	280
12L-C	12" Straight	1	100	200	280	345	400	450	490	560
12LB-C	12" Bott. Inlet	1								
12LS-C	12" Side Intlet	1								
66LX-C	Cross	1								
6LE-C	90° Elbow	0.5	50	100	140	170	200	225	245	280
126LX-C	Cross	1.5	150	300	420	515	600	675	735	840

2. Knowing the available air pressure, determine the mixture pressure at the burners.

TABLE II

Air Pressure - Ounces	2	4	6	8	10	12	14	16	18	20	24	32
Mixture Pressure Inches W. C.	1	2	3	4	5	6	7	8	9	10	12	16

PYRO-LINE BURNERS

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3. When multiple inlets are required the number and size are determined using information below.

TABLE III

Inlet Pipe Size	Max. Capacity of Inlet at 75% Aeration	
	4" Mixture Press.	8" Mixture Press.
2" (Inlet End Flange)	500,000 BTU/HR	700,00 BTU/HR
3" (Bottom or Side Inlet)	850,00 BTU/HR	1,200,000 BTU/HR
4" (Cross Section or Bottom Inlet)	2,000,000 BTU/HR	2,800,000 BTU/HR

TABLE IV
Recommended Pilot Selection

Manual Pilot		Spark Pilot (Blast Only)
Atmospheric	Blast	#2 PBS (Bulletin 3280)
#43 AP Pilot Torch (Bulletin 3274)	#2 PB (Bulletin 3280)	
Pilot Mounting Brackets		
#LPHS-1 - Pilot Mounts @ 90° Angle to Burner		
#LPHS-2 - Pilot Mounts @ 45° Angle to Burner		
*Opening for Flame Electrode is always @ 45 to pilot		

Burner Port Drillings

Style	Pilot Ports	Main Ports
A	#50 drill	#50 drill
B	#50 drill	#28 drill
C	#50 drill	#12 drill
R (runner flame capacity 30% style A)	#50 drill	None
S	#50 drill	Special
P	#50 drill	None
LC	#52 drill	None

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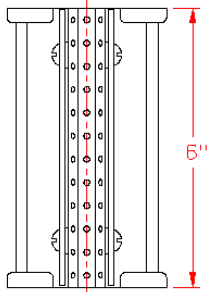


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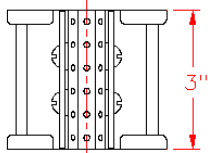
PYRO-LINE BURNERS

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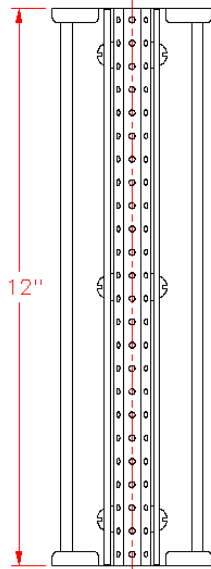
DIMENSIONS



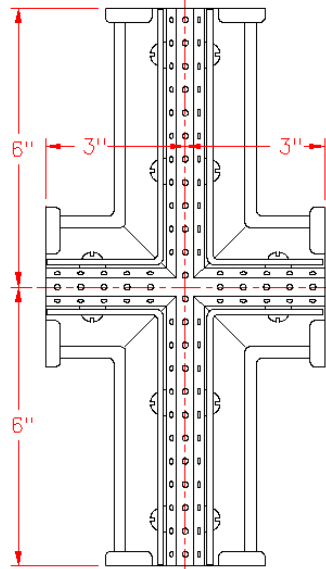
6L
WEIGHT 5 LBS



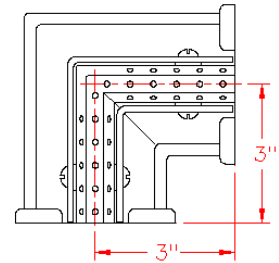
3L
WEIGHT 3 LBS



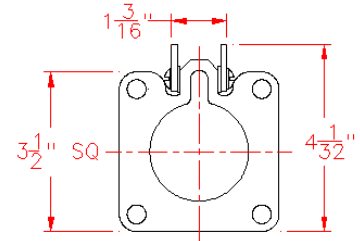
12L
WEIGHT 9 LBS



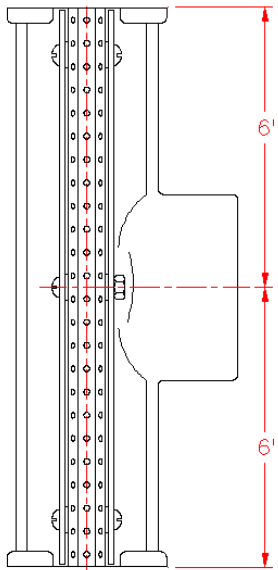
126LX
WEIGHT 12 LBS



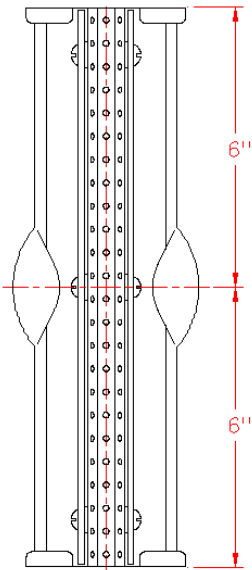
6LE
WEIGHT 5 LBS



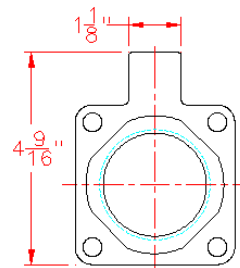
TYPICAL END VIEW



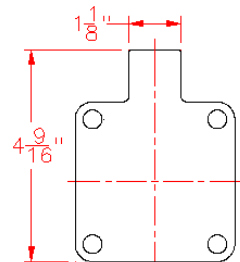
12LS
WEIGHT 11 LBS



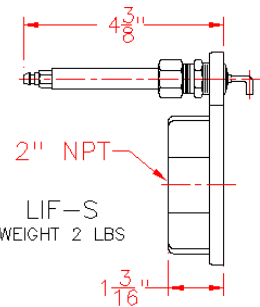
12LB
WEIGHT 10.5 LBS



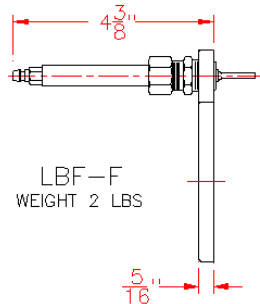
LIF
WEIGHT 1.5 LBS



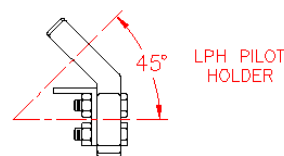
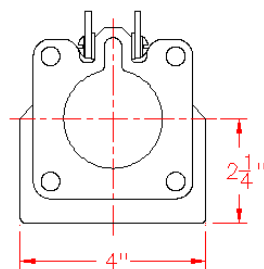
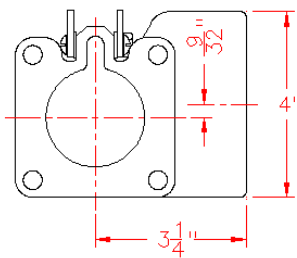
LBF
WEIGHT 1.5 LBS



LIF-S
WEIGHT 2 LBS

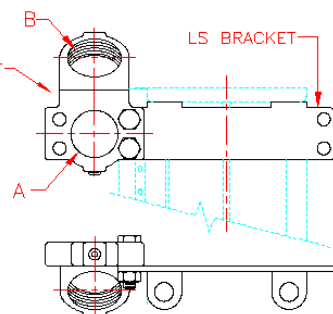


LBF-F
WEIGHT 2 LBS



LPHS-1
A = 1-1/64" DIA.
B = 1" NPT

LPHS-2
A = 3/4" NPT
B = 1-1/64" DIA.
WEIGHT 12 OZS



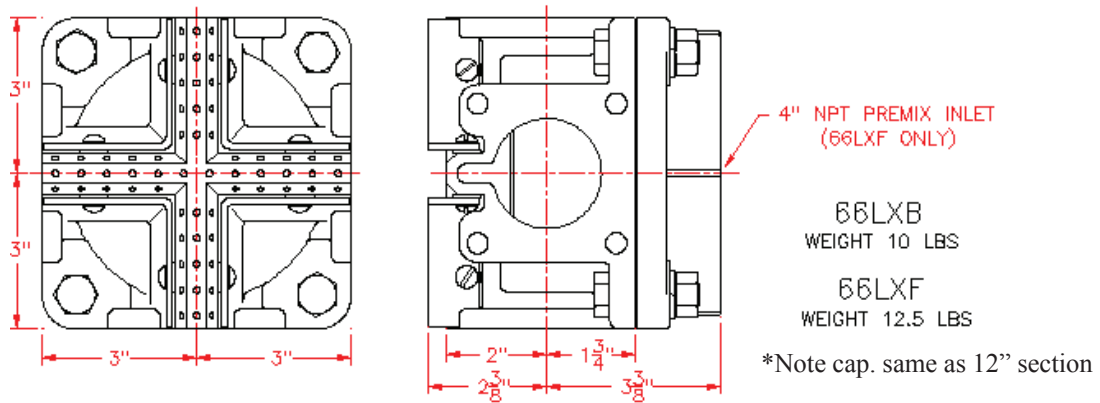
PYRO-LINE BURNERS

BOTTOM INLET CROSS

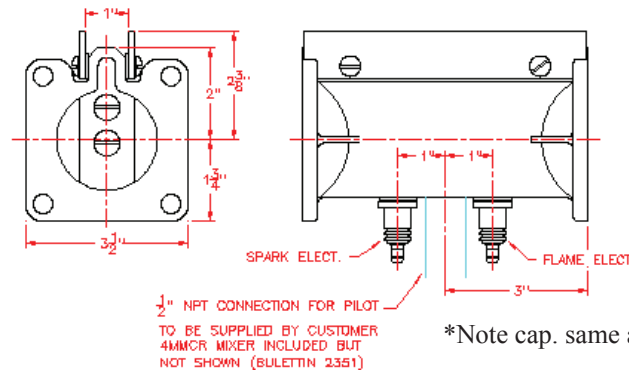
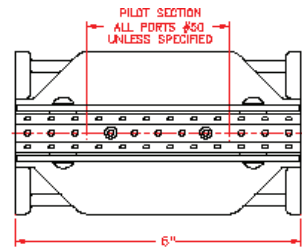
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HIGH CAPACITY BOTTOM INLET CROSS

- Simplified mixture piping.
- Instantaneous flame travel in four directions.
- Flanged 4" inlet connection.
- Mixture pressure tap.
- Alloy air-cooled ignition rails.
- Precision drilled ports.
- Heavy cast iron construction.



6PL
6PLS
6PLF
WEIGHT 7 LBS



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PYRO-LINE BURNERS

EXPANSION & 1" SECTION

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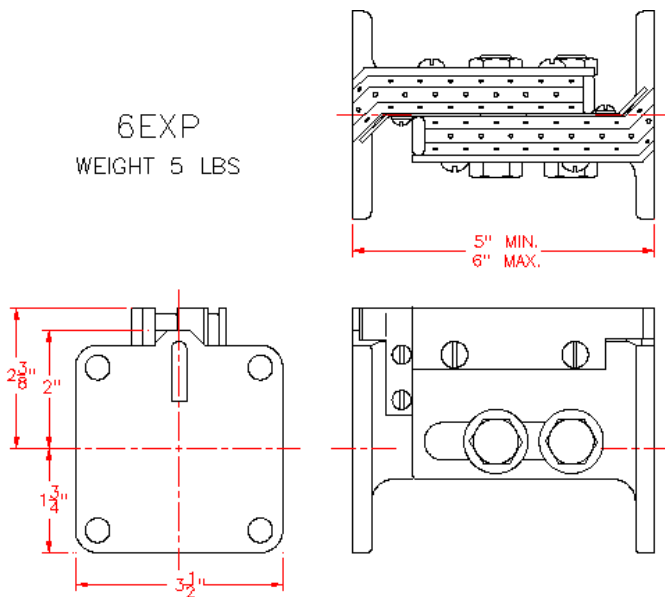
6L-EXP EXPANSION SECTION

DESCRIPTION

The 6EXP Pyro-line Expansion Section provides continuous flame travel from one section of Pyro-line Burners to another. The 6EXP is designed to accommodate any expansion that may occur under firing conditions. They may be used as separators between two assembled lengths of burners. Two basic castings with bolts, washers and a unique rail design make-up this section.

CAPACITY: Two-thirds of a 126-LX-A Pyro-line Section (A Drilling only).

DIMENSIONS



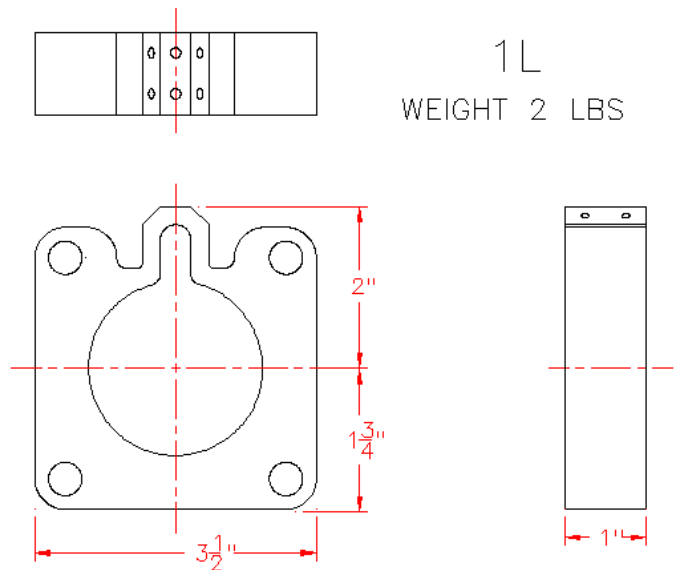
1L - 1" LONG SECTION

DESCRIPTION

The 1L-A, B or C Pyro-line Section, one (1) inch long, is used where length requirements are less than six (6) inch increments. The rails of adjoining burners are extended one (1) inch to accommodate this section.

CAPACITY: One twelfth (1/12) of a 12L-A, B or C Pyro-line Section.

DIMENSIONS



ORDERING INFORMATION

1. Number and Style of Sections required.
2. Number of Inlet and Blank Flanges.
3. If Special Drilling required, Specify Capacity, Mixture Pressure and Application.
4. Size Mixer.
5. Size Zero Regulator.
6. Type and Catalog Number of Pilot.