

Selas Oxy Conical Flame Burner SOCF 00500

Selas Oxy Conical Flame 00500

The Selas Oxy Conical Flame Burner is designed to provide a luminous flame with highly radiative heat transfer to the load. The nozzle design promotes delay in mixing of the gas and oxygen increasing the cracking and soot generation in the flame thus increasing the radiative heat flux.

The nozzle design promotes stable mixing of the gas and oxygen so that the overall flame remains constant as fuel use varies.

Selas Oxy Conical Flame Burner	Capacity mm Btu			Capacity KW		
	Min	Mid	Max	Min	Mid	Max
SOCF 00500	0.125	0.313	0.500	36.6	91.6	146.5

Model	N. Gas Flow Nm ³ /hr		N. Gas Press mBar		Oxygen Flow Nm ³ /hr		Oxygen Press mBar	
	Min	Max	Min	Max	Min	Max	Min	Max
SOCF 00500	3.5	13.4	0.97	33.4	6.7	26.8	1.0	19.2

Model	N. Gas Flow SCFH		N. Gas Press IWC		Oxygen Flow SCFH		Oxygen Press IWC	
	Min	Max	Min	Max	Min	Max	Min	Max
SOCF 00500	125	500	0.39	13.4	250	1000	0.4	7.7

Notes:

1. N. Gas calorific value assumed at 1028 Btu/Cu. Ft.; 9170 Kcal/M³
2. Oxygen ratio is shown at 2.0. Operating ratio can vary based on actual gas and oxygen purities.
3. Pressures shown as reference only should not be used for control. Measured on the header before connection to burner and will vary based on actual conditions and equipment.
4. The burner is available with various options including:
 - a. Tip sizes to alter flame length or velocity
 - b. Extended block / burner to accommodate furnace size variation
 - c. BSPT threading, quick couplers and accessories
 - d. Flame ignition / safety
 - e. Ability to stage the oxygen to the burner
5. Contact your Selas representative for further information.



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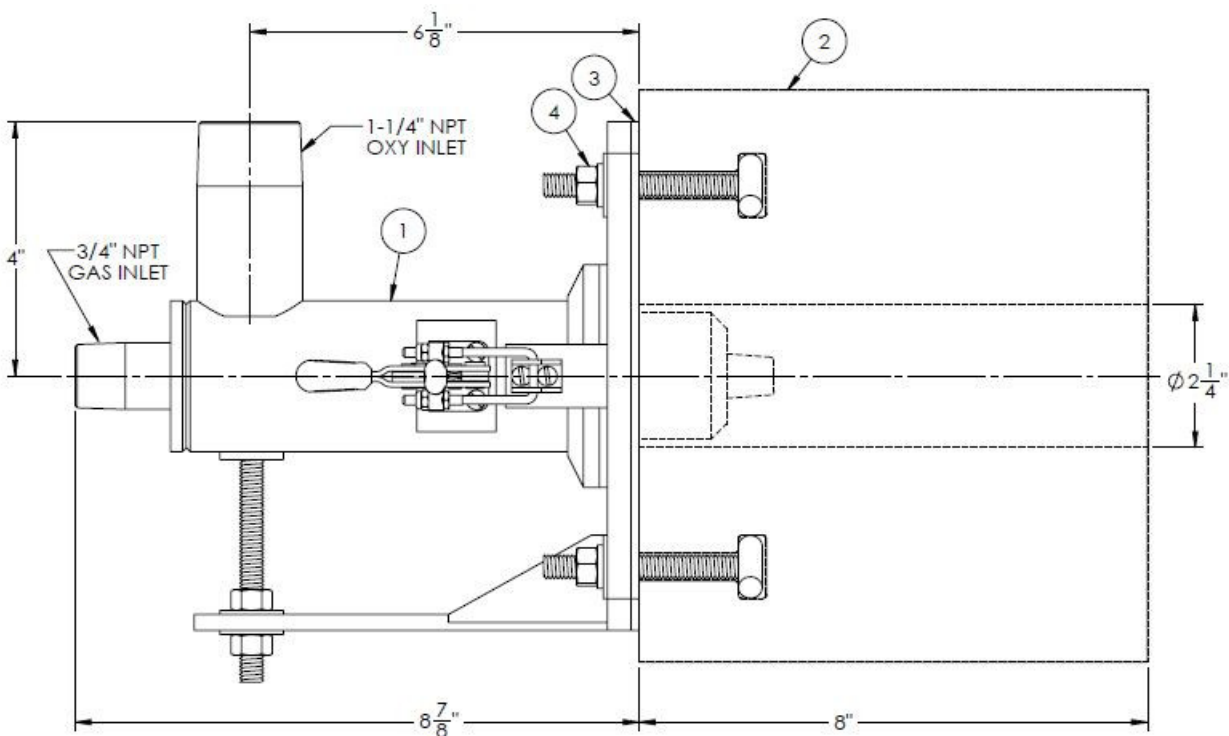
Conical Flame Burner Layout and Dimensions

Oxygen Inlet Options:

1. Straight up
2. Elbow to left or right
3. Elbow to left or right with elbow down

Gas Inlet Options:

1. Straight back
2. Elbow down or up
3. Elbow to left or right

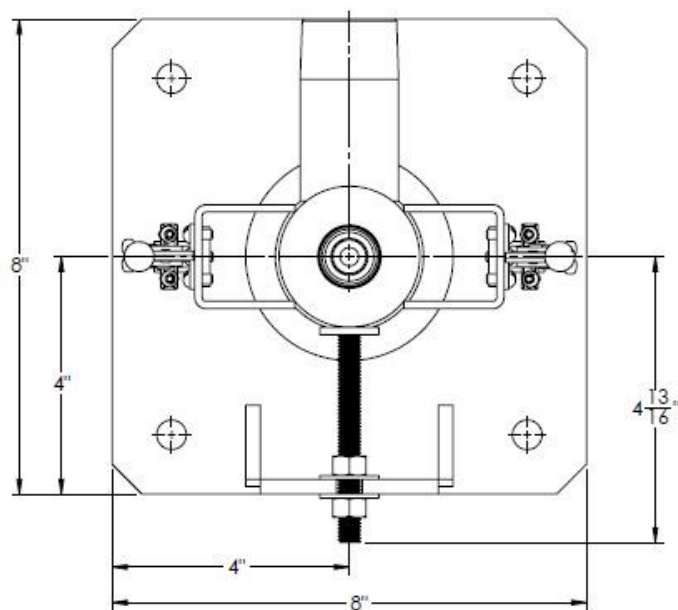


Item	Part Number	Description	QTY.
1	95914851	BURNER AND BRACKET ASS'Y	1
2	95914901	OXY CF BURNER BLOCK	1
3	95915188	BURNER BLOCK GASKET	1
4	95905932	T-BOLT ASS'Y	4

SOCF 00500	Lbs.	KG
Burner Weight with Fittings:	20	9.1
Block Weight	72	32.7
Note: Weight can vary based on burner set up		



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Block Size

Burner Block Dim. Inches			
SOCF	H	W	D
00500	9.0	9.0	8.0

Burner Block Dim. mm			
SOCF	H	W	D
00500	228.6	228.6	203.2

Pipe Size

Pipe Dim. Inches		
SOCF	N. Gas	Primary O2
00500	0.75	1.25

Pipe Dim. mm		
SOCF	N. Gas	Primary O2
00500	19.1	31.8

Approx. Flame Dim.

SOCF	00500	
MM Btu	L (Inch)	L (mm)
0.250	28.0	711
0.500	32.0	813
0.750	36.0	914
1.000	40.0	1016

Width is about 9" - 12" or 228 - 305 mm



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General Items

Safety

Good safe oxygen and natural gas safety, operational and engineering practices should be adhered to in the installation and operation of this equipment and all combustion equipment. If assistance is needed with review of engineering codes, systems, piping and general combustion safety practices, please contact your Selas representative for further assistance.

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