

Selas Oxy Conical Flame Burner SOCF 01000

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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 01000	0.250	0.625	1.000	73.3	183.2	293.1

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 01000	7.1	28.3	0.65	21.9	14.2	56.7	1.4	36.7

Model	N. Gas Flow SCFH		N. Gas Press IWC		Oxygen Flow SCFH		Oxygen Press IWC	
	Min	Max	Min	Max	Min	Max	Min	Max
SOCF 01000	250	1000	0.26	8.8	500	2000	0.58	14.75

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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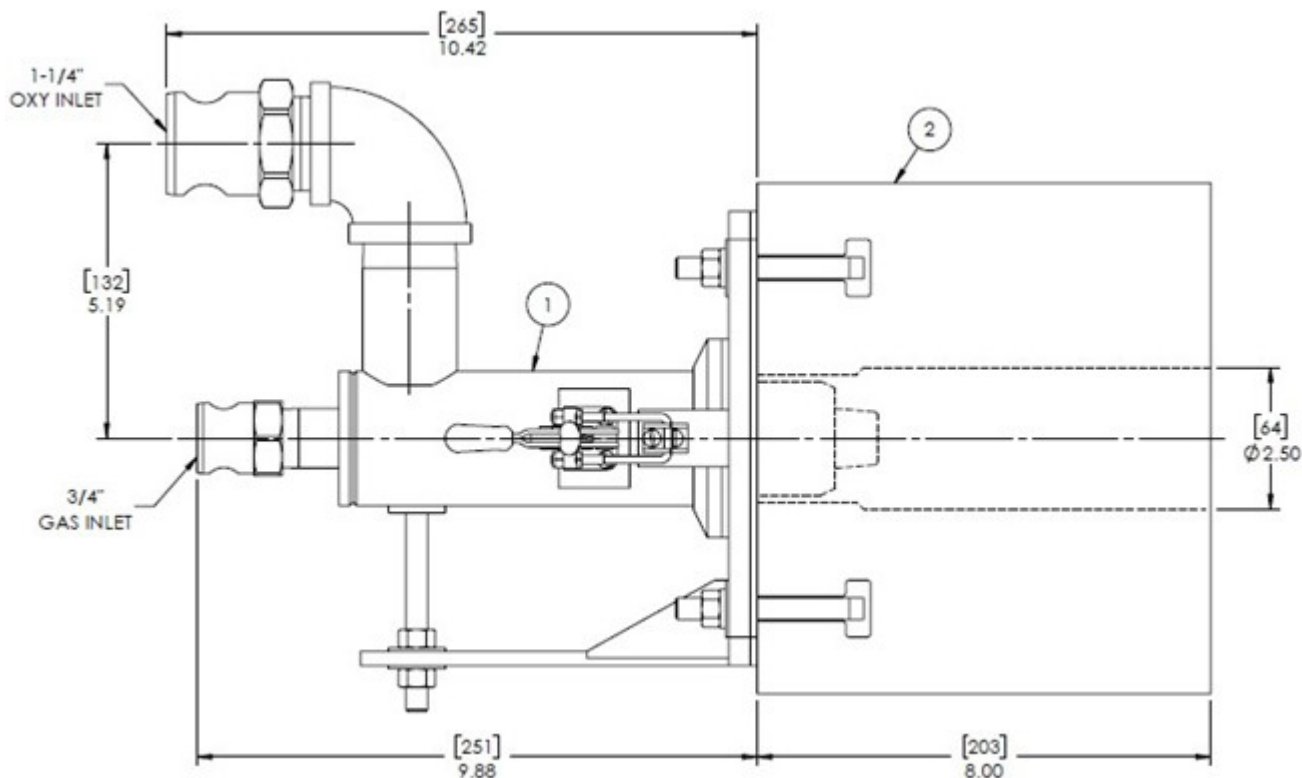
Conical Flame Burner Layout and Dimensions

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

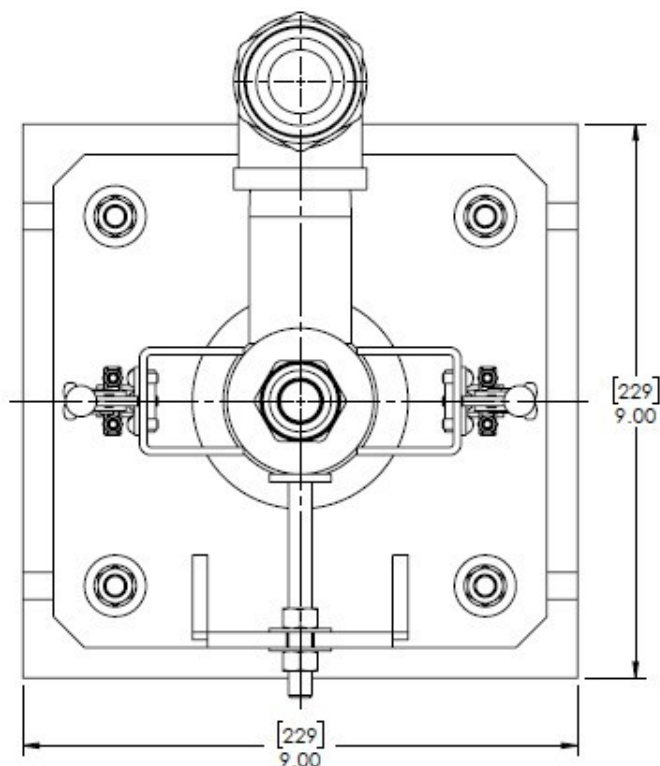


Item	Part Number	Description	QTY.
1	95914854	OXY CF 2.38, 1MM, BNR/BRKT W/ FTGS	1
2	95914921	OXY CF 2.38, 1MM, BNR BLK	1

SOCF 01000	Lbs.	KG
Burner Weight with Fittings:	20	9.1
Block Weight	68	30.9
Note: Weight can vary based on burner set up		



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Block Size

	Burner Block Dim. Inches		
SOCF	H	W	D
01000	9.0	9.0	8.0

	Burner Block Dim. mm		
SOCF	H	W	D
01000	228.6	228.6	203.2

Pipe Size

	Pipe Dim. Inches	
SOCF	N. Gas	Primary O2
01000	0.75	1.25

	Pipe Dim. mm	
SOCF	N. Gas	Primary O2
01000	19.1	31.8

Approx. Flame Dim.

SOCF	01000	
MM Btu	L (Inch)	L (mm)
0.250	36.0	914
0.500	43.0	1092
0.750	50.0	1270
1.000	57.0	1448

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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