

The Synerjet is designed to provide clean combustion with reliable ignition and operation, on oil or gas, using direct spark ignition and UV flame detection. The burners, with thermal outputs between 120 and 600kW in three sizes, use low pressure combustion air as the oil atomising medium – eliminating the need for costly compressed air.

The Synerjet can be used with a refractory tile, an alloy or a silicon carbide flame tube, delivering outlet velocities of between 80 – 120m/s. The burner gives quick and easy changeover from one fuel to another as the oil lance remains within the burner. On-ratio combustion to 300% excess air capability is available with the Synerjet burner, which will also accept preheated combustion air up to 350°C.

Synerjet – Features

- Burns all clean fuel gases and light oil
- Discharge velocities up to 120m/s
- Uses oil or gas without burner alteration
- Preheated air up to 350°C
- Low pressure air atomisation
- No requirement for compressed air
- 300% excess air levels
- UV flame sensing
- Direct spark or pilot ignition

Applications

The flexibility of the Synerjet burner range makes it an ideal choice for a wide variety of uses both in high and low temperature applications such as:

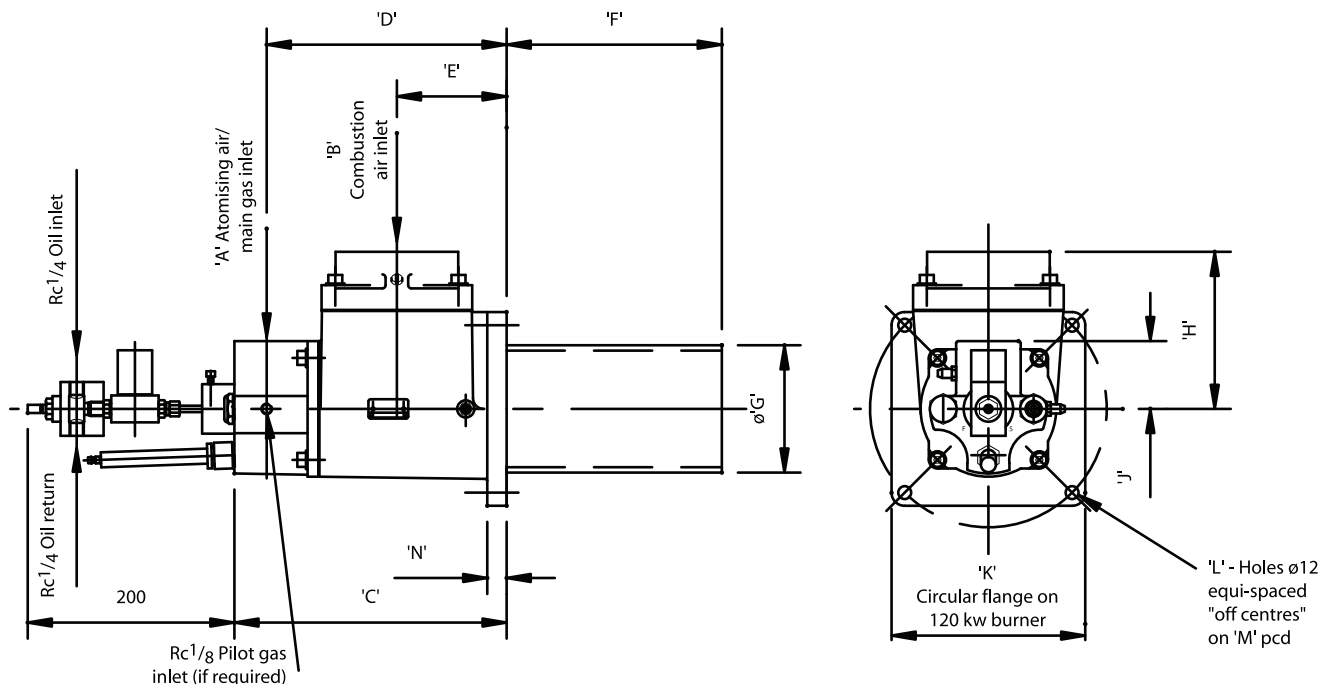
- Forge Furnaces
- Ceramic Kilns
- Heat Treatment Furnaces
- Air Heaters
- Drying and Curing Ovens
- Hot Gas Generators
- Ladle Heating and Drying
- Glass Lehrs
- Aluminium Melters and Holders
- ... plus many more.

Capacities and Specifications

Model No.	Thermal Output (kW)	Burner Air Inlet Press (mbar)	Atomising Air Pressure at Burner (mbar)	Oil Pressure (bar)	Gas Pressure (mbar)	Turn Down		Discharge Velocity (m/s)	
						Gas	Oil	low	medium
S 120	120	60	70	4	30	8:1	6:1	80	120
S 350	350	70	70	4	28	8:1	6:1	80	120
S 600	600	70	70	4	25	8:1	6:1	80	120

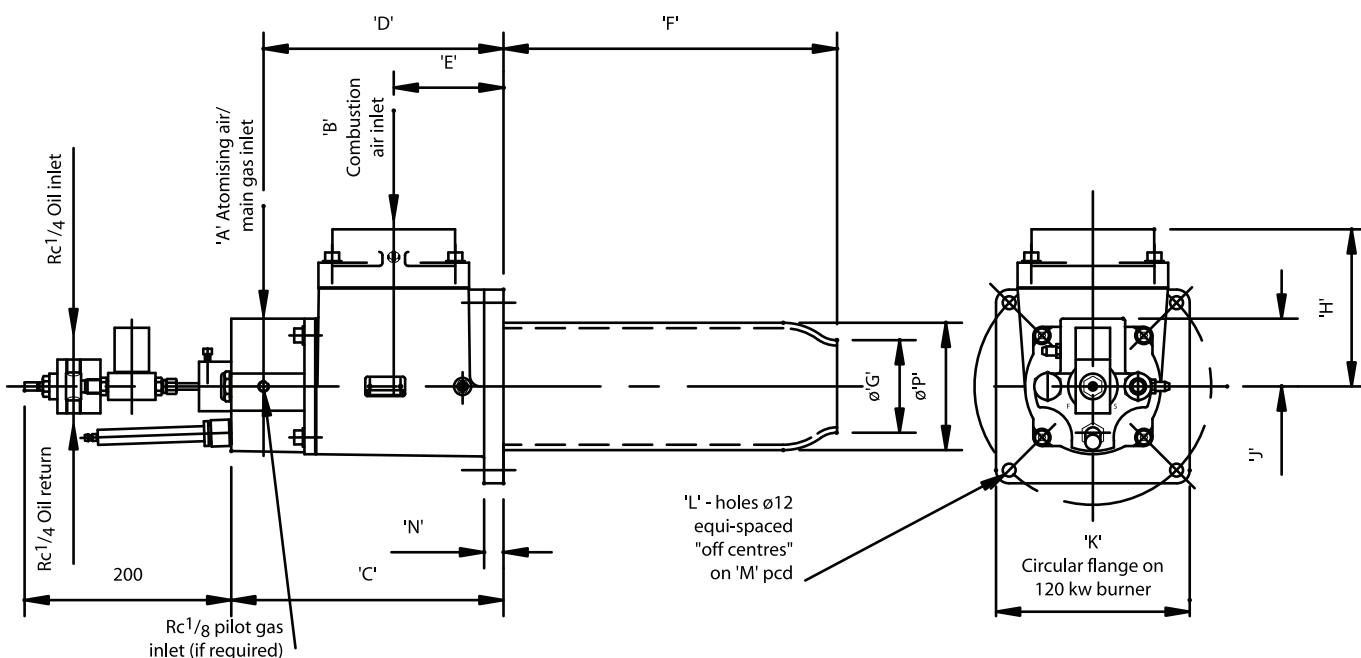
Burner air based on 5% excess air for gas and 8% on oil firing, at rate.
Maximum oil viscosity: 4.5 cSt.

Dimensions - Low Velocity SiC Burner



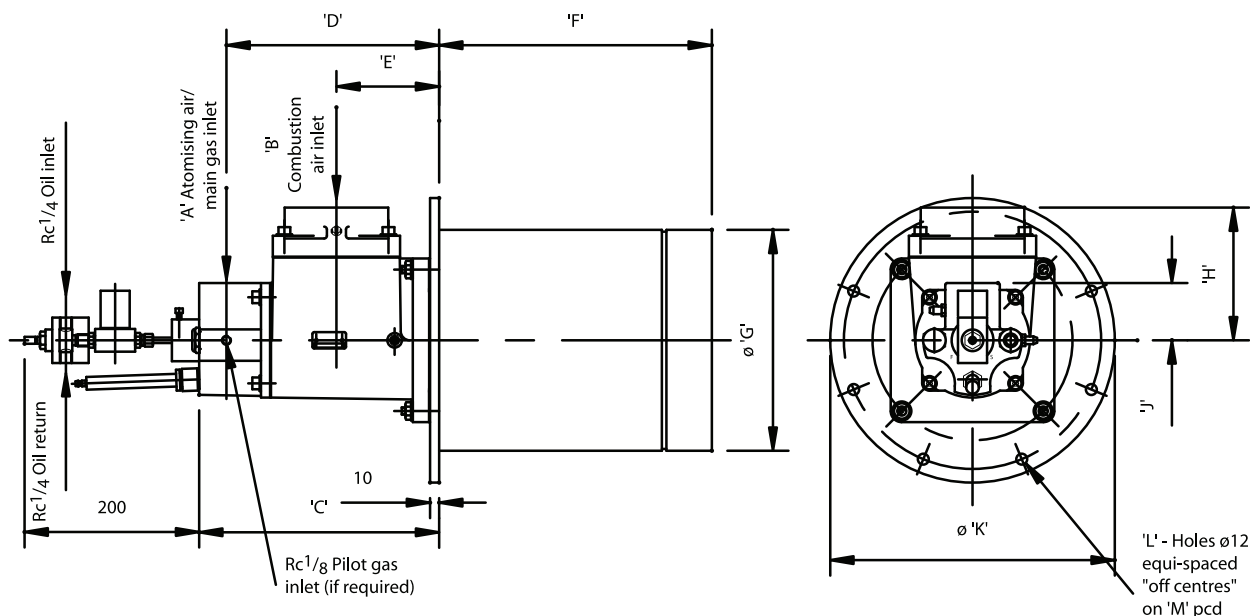
Model No.	Part No.	A	B	C	D	E	F	G	H	J	K	L	M	N	Weight (kg)
S120	6.02.213	Rp1	Rp2	216	179	83	200	93	111	52	193	4	170	13	14
S350	6.02.214	Rp1	Rp4	254	224	102	200	119	150	63	180	4	220	13	17
S600	6.02.215	Rp1 1/2	Rp4	260	230	108	200	145	150	63	180	4	220	19	22

Dimensions - Medium / High Velocity SiC Burner



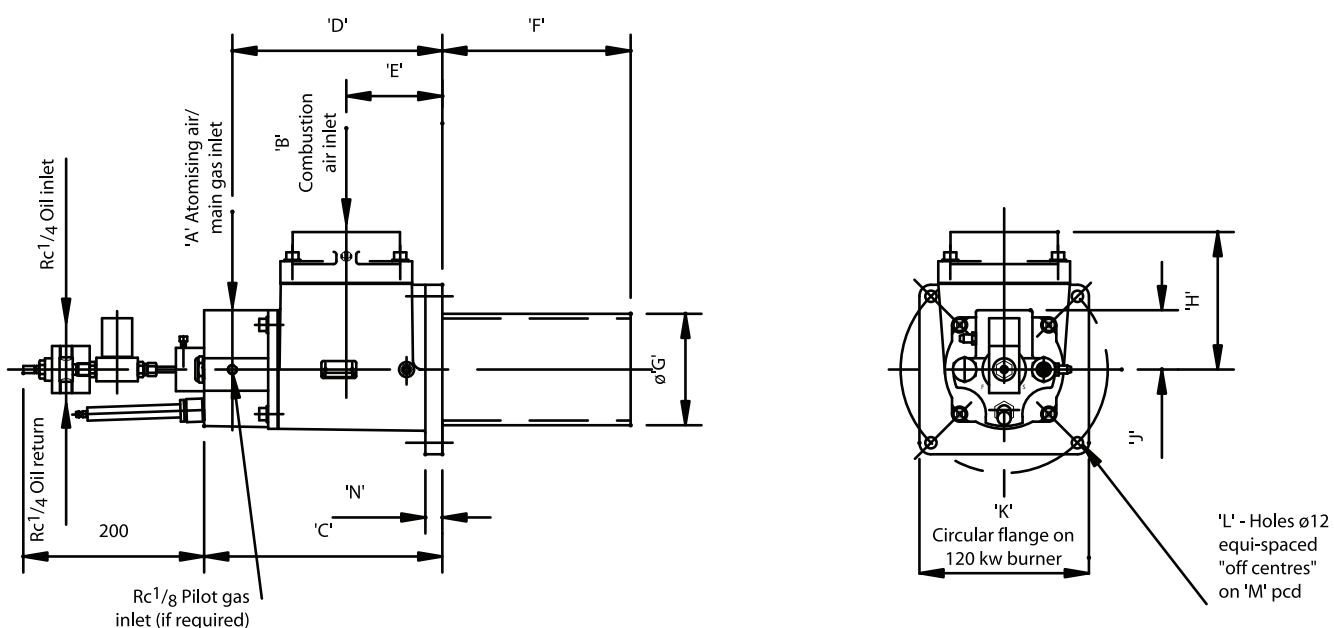
Model No.	Part No.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Weight (kg)
S120	6.02.216	Rp1	Rp2	216	179	83	250	64	111	52	193	4	170	13	93	15
S350	6.02.217	Rp1	Rp4	254	224	102	310	86	150	63	180	4	220	13	119	18
S600	6.02.218	Rp1 1/4	Rp4	260	230	108	310	114	150	63	180	4	220	19	145	23

Dimensions - Refractory Quarl Burner



Model No.	Part No.	A	B	C	D	E	F	G	H	J	K	L	M	Weight (kg)
S120	6.02.204	Rp1	Rp2	228	191	95	200	192	111	52	262	4	232	32
S350	6.02.205	Rp1	Rp4	266	236	114	300	243	150	63	313	8	283	52
S600	6.02.206	Rp1 1/2	Rp4	272	242	120	300	264	150	63	330	8	300	55

Dimensions - Low Velocity Alloy Tube Burner



Model No.	Part No.	A	B	C	D	E	F	G	H	J	K	L	M	N	Weight (kg)
S120	6.02.219	Rp1	Rp2	216	179	83	200	89	111	52	193	4	170	13	15
S350	6.02.220	Rp1	Rp4	254	224	102	200	115	150	63	180	4	220	13	18
S600	6.20.221	Rp1 1/4	Rp4	260	230	108	200	141	150	63	180	4	220	19	23

WARNING: The data outlined is for information only and does not form part of any contract. Our policy is one of continuous improvement and we therefore reserve the right to modify specifications or dimensions without prior warning. Situations dangerous to personnel and property can develop from incorrect installation and operation of combustion equipment. Fives North American Combustion UK, Ltd urges compliance with International, National and Local Safety Standards and that installation is carried out by properly qualified personnel.

Fives North American Combustion UK, Ltd.

Heath Mill Road, Wolverhampton WV5 8BD England Tel +44 (0) 1902 891200 Fax +44 (0) 1902 895552

FNAC 8/2009 SYN