



The SFFG Flat Flame gas burner produces a wall hugging, circular pattern flame, giving extremely even heat distribution with minimal forward flame projection. The burner is ideally suited to any application where flame impingement is detrimental to product quality or where a very high radiation element is beneficial such as heat treatment furnaces or galvanising tanks etc.

The burners are available in six capacities, from 58 to 730 kW.

Typical Applications

- Galvanising tanks
Plate heating furnaces
Heat treatment furnaces
Billet heating furnaces

Capacities and Specifications

Table with 6 columns: Model No., Capacity (kW), Pressures @ 15°C (mbar) (Air*, Gas*), and Flame characteristics (Approx dia**, Min tile to work distance***).

* Minimum required at burners, based on a neutral combustion chamber pressure.
** The normal minimum burner to burner centre to centre is the same as the flame diameter. Burners may be positioned closer to each other but there will be some flame interference.
*** Recommended minimum tile to work distance should be maintained to maximise temperature uniformity.

SFFG – Features

- 6:1 turndown
Max excess air – 250%
Max excess gas – 10%
Round or square refractory tiles
Easy to fit in furnace roof or walls
Pre-heated air up to 350°C
Burns any clean industrial gas
Excellent flame stability

Burner Design

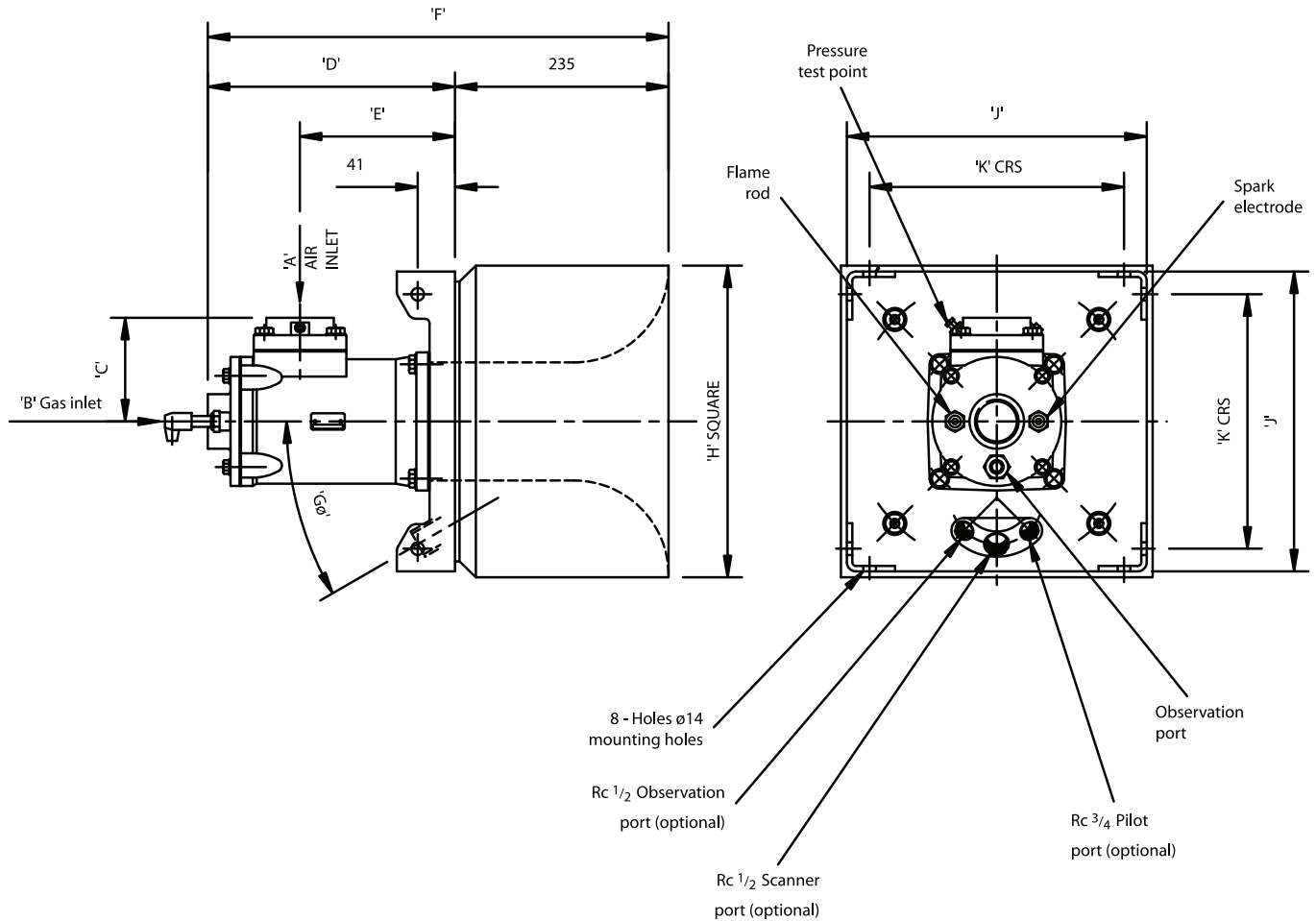
The SFFG series of burners employs the rapidly rotating action of the burning gases to produce, in combination with the specially shaped tile, a flat flame with minimal axial velocity but a very high radial velocity. The spinning action is generated at the nozzle where the fuel and air mix – the result is a more efficient rotation and hence the flat flame characteristic of the burners are maintained throughout the turndown range.

The standard burner is supplied with either a rectangular or round refractory tile and employs direct spark ignition and ionisation electrodes for flame monitoring. Pilot ignition may be employed and flame monitoring by UV scanners on selected models – contact FNAC.

The SFFG burners are suitable for use with automated ignition and flame supervision systems and can accept pre-heated combustion air up to 350°C.

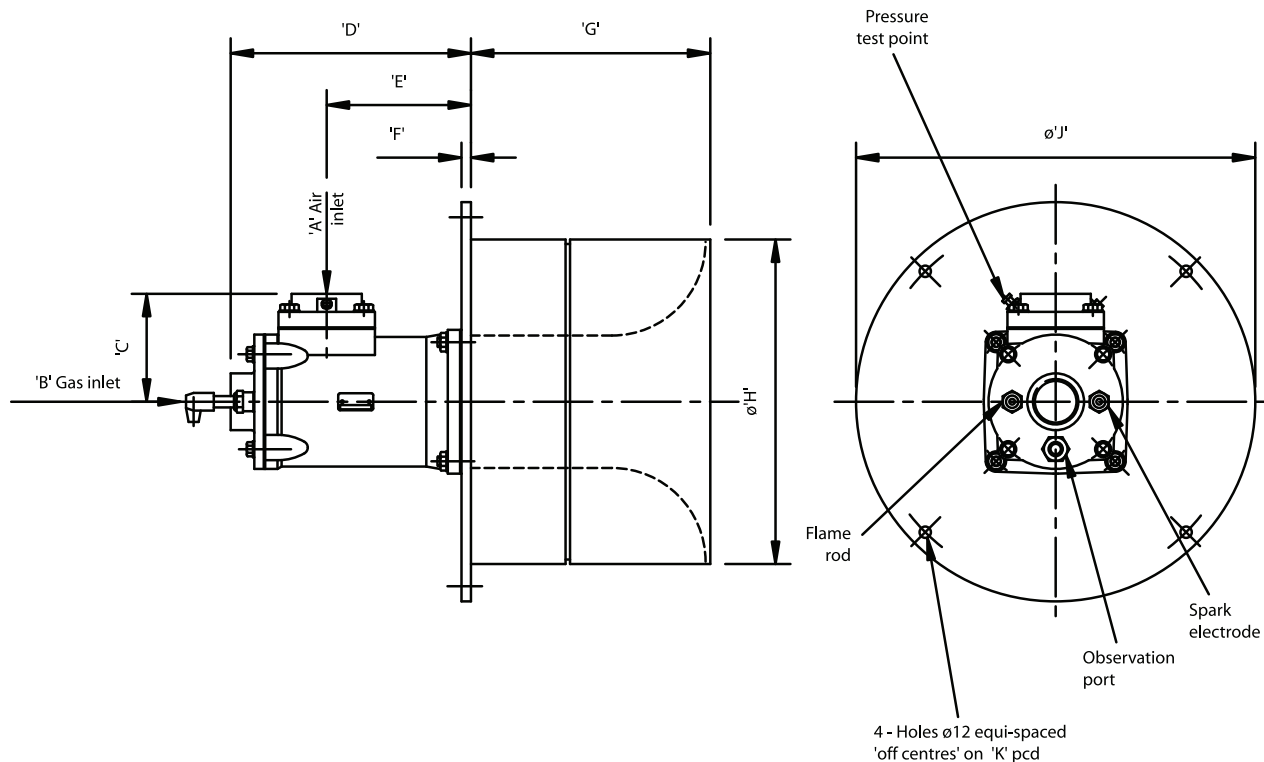


SFFG Series Flat Flame Burners Square Refractory Tile version



Model No.	Part No.	Dimensions mm										Weight (kg)
		A	B	C	D	E	F	G	H	J	K	
SFFG 1	3.25.135SQ	Rc1 $\frac{1}{2}$	Rc $\frac{3}{4}$	102	254	160	489	27°	230	224	174	40
SFFG 2	3.25.136SQ	Rc2	Rc1	89	254	160	489	27°	230	224	174	40
SFFG 3	3.25.137SQ	Rc2 $\frac{1}{2}$	Rc1	116	260	160	495	30°	343	330	280	78
SFFG 4	3.25.138SQ	Rc2 $\frac{1}{2}$	Rc1 $\frac{1}{4}$	116	260	160	495	30°	343	330	280	78
SFFG 5	3.25.139SQ	Rc4	Rc1 $\frac{1}{4}$	155	348	224	583	30°	343	330	280	84
SFFG 6	3.25.140SQ	Rc4	Rc1 $\frac{1}{2}$	155	348	224	583	30°	343	330	280	84

SFFG Series Flat Flame Burners Round Refractory Tile version



Model No.	Part No.	Dimensions mm										Weight (kg)
		A	B	C	D	E	F	G	H	J	K	
SFFG 1	3.25.135R	Rc1 ¹ / ₂	Rc ³ / ₄	102	249	152	10	255	ø229	ø307	275	38
SFFG 2	3.25.136R	Rc2	Rc1	89	249	152	10	255	ø229	ø307	275	38
SFFG 3	3.25.137R	Rc2 ¹ / ₂	Rc1	116	255	152	10	255	ø343	ø422	390	74
SFFG 4	3.25.138R	Rc2 ¹ / ₂	Rc1 ¹ / ₄	116	255	152	10	255	ø343	ø422	390	74
SFFG 5	3.25.139R	Rc4	Rc1 ¹ / ₄	155	345	216	10	255	ø343	ø422	390	80
SFFG 6	3.25.140R	Rc4	Rc1 ¹ / ₂	155	345	216	10	255	ø343	ø422	390	80

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 SFFG