Low NOx flat flame burner SFFF





GUANGZHOU SINON COMBUSTION EQUIPMENT CO., LTD.

(**?**) 020-84581309

© 020-84507159

www.gzsinon.net

CHARACTERISTICS

- Burner SFFF: flat flame, high radiation temperature, no air scouring when burning, the maximum preheating air temperature up to 600 °C.
- The burner burns quickly to obtain better radiation. In addition, uniform flame temperature distribution thanks to the secondary air structure, reduces the generation of NOx.
- 4 specifications are available within the capacity of 250~800 kW; the recommended furnace temperature is 850~1300 °C.
- Turn down ratio: 1:3
- Fuel: natural gas, LPG, town gas and other fuel gases.

APPLICATIONS

SFFF series flat burners are mostly used for the furnace with direct/radiant heating and centralized air heat exchanger, such as trolley furnace, chamber furnace or ring furnace and other directly heated industrial furnace



CONFIGURATION

- The burner is composed of a burner insert, an air housing and a burner block.
- A double-flange orifice plate is required in the gas pipeline for gas pressure measurement.
- The air inlet is equipped with a double-flange orifice plate by default.
- The SFFF burner is ignited by a pilot burner and adopts UV detection, or only detect the flame signal of pilot burner and without detecting the main burner.

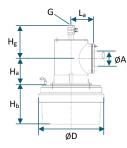
SPECIFICATION

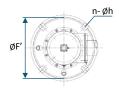
Type table

| Туре | | | | SFFF | 500 | N | -350 |
|-----------------|----------------|--------|-------------|------|-----|---|------|
| Rated capacity | 200 300 | 500 | | | | | |
| Fuel | N: natural gas | P: LPG | T: town gas | | | | |
| Block thickness | 350: 350mm | | | | | | |

Please contact us for other rated capacity.

Dimensions





Unit: mm

| Type | Rated capacity /kW | А | G | La | Hg | Ha | Нь | D | F′ | n | h |
|------|--------------------------|-----|------------------|-----|-----|-----|-----|-----|-----|---|----|
| 200 | 200 | 89 | $Rp1^{1}/_{4}$ " | 206 | 523 | 230 | 345 | 585 | 540 | 4 | 18 |
| 300 | 300 | 89 | $Rp1^{1}/_{4}$ " | 206 | 558 | 230 | 345 | 585 | 540 | 4 | 18 |
| 500 | 500 | 114 | $Rp1^{1}/_{2}$ " | 206 | 558 | 230 | 345 | 585 | 540 | 4 | 18 |



SOLUTIONS

Usually used in double-cross limit flow control, or direct on/off pulse control. Can also be used in continuous control system with an actuator and an air/gas proportional valve.

INSTALLATION

- When installing, the end of burner block and furnace inner wall must be purged, or the inner wall of the furnace wall must be fixed with a gentle excess area according to the angle of burner Access pressure block. Hanging rings for hanging installation.
- In order to measure a stable pressure, a straight pipe segment with 5*DN without any other resistance elements is required in front of the air and gas inlet.
- The pipeline must be purged before connected to the burner to prevent welding slag or other wastes from

Access Pressure/mbar Main burner air 50 Main burner gas 50 Pilot burner air 60 Pilot burner gas 50

entering the burner. If a pipe welding is required after installing the burner, ensure that no slag or fuses falls into the pipe or burner during welding.

OPERATION

Attention

- During start-up, keep the heating rate below 100°C/hour, no holds required. When the furnace temperature is lower than 750°C, a large excess air coefficient greater than 1.5 is required.
- If the burner needs to be shut off, the air flow rate must be maintained about 20 m³/h to maintain a positive pressure inside the burner to prevent burner from being damaged by furnace chamber hot gas backflow.

Maintenance

Maintenance: SiC ceramic tubes, spark insert, flame state and others. At least once every six months. Increase the times of maintenance, as appropriate.