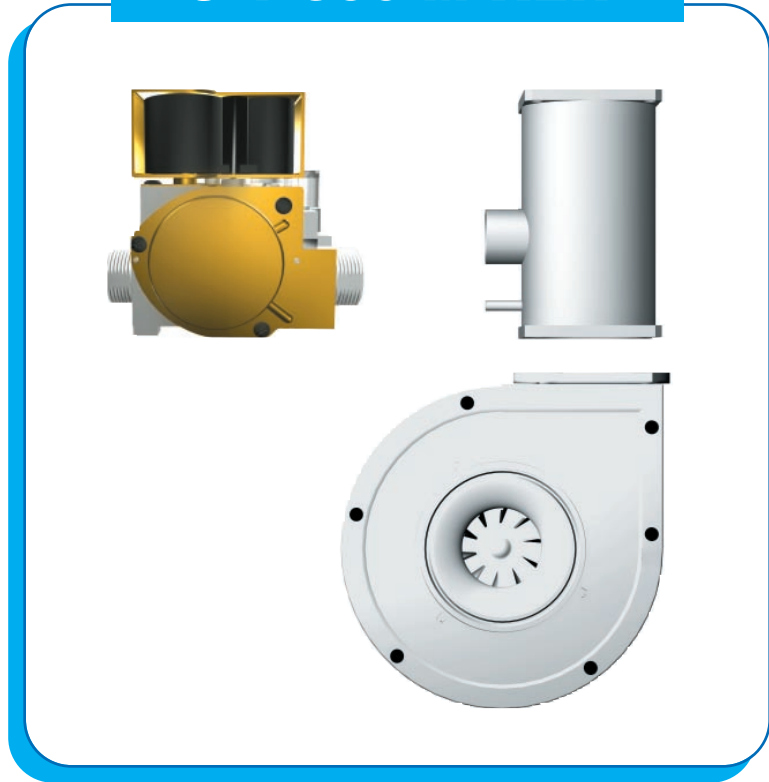




SIT Group

## SIT 390 MIXER



### INTEGRATED SYSTEM PERFORMING THE GAS/AIR FLOW CONTROL AND MIXING

#### Application

Fan assisted gas fired appliances with premix burner. 390 MIXER is particularly suitable for modulating condensing boilers.

#### Main features

Two heat-input models.  
Wide modulation range.



## GENERAL DATA

### CONSTRUCTION CHARACTERISTICS

- Die casting aluminium body
- Air signal to the gas/air control connection

### USE SPECIFICATION

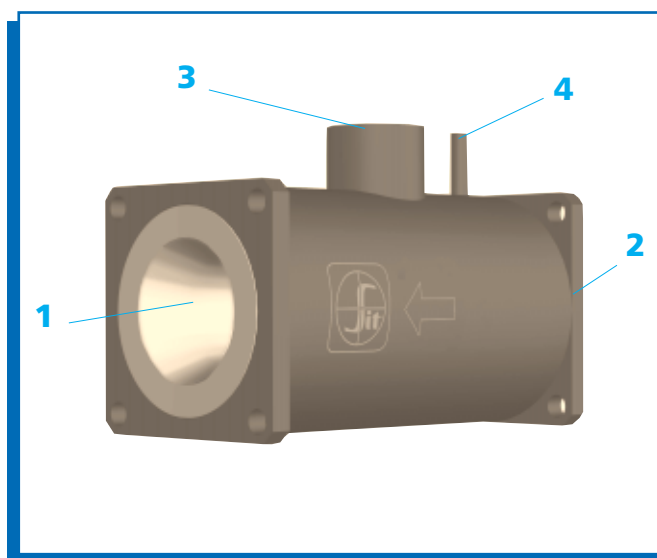
- |                       |                                                                                                    |
|-----------------------|----------------------------------------------------------------------------------------------------|
| • Mounting Position   | Downstream of the fan                                                                              |
| • Gas families        | 2nd and 3rd                                                                                        |
| • Ambient temperature | No inconvenience in operation within standard working condition of gas appliances (-20....+100 C°) |

### MECHANICAL CONNECTIONS

- |                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| • Air inlet and mixture outlet | M5 (4) Flanges                                          |
| • Gas inlet                    | G 3/4 ISO 228<br>or: Rp 1/2 ISO 7<br>or: M4 (4) Flanges |
| • Air signal                   | ø 6.5 mm                                                |

## DESCRIPTION

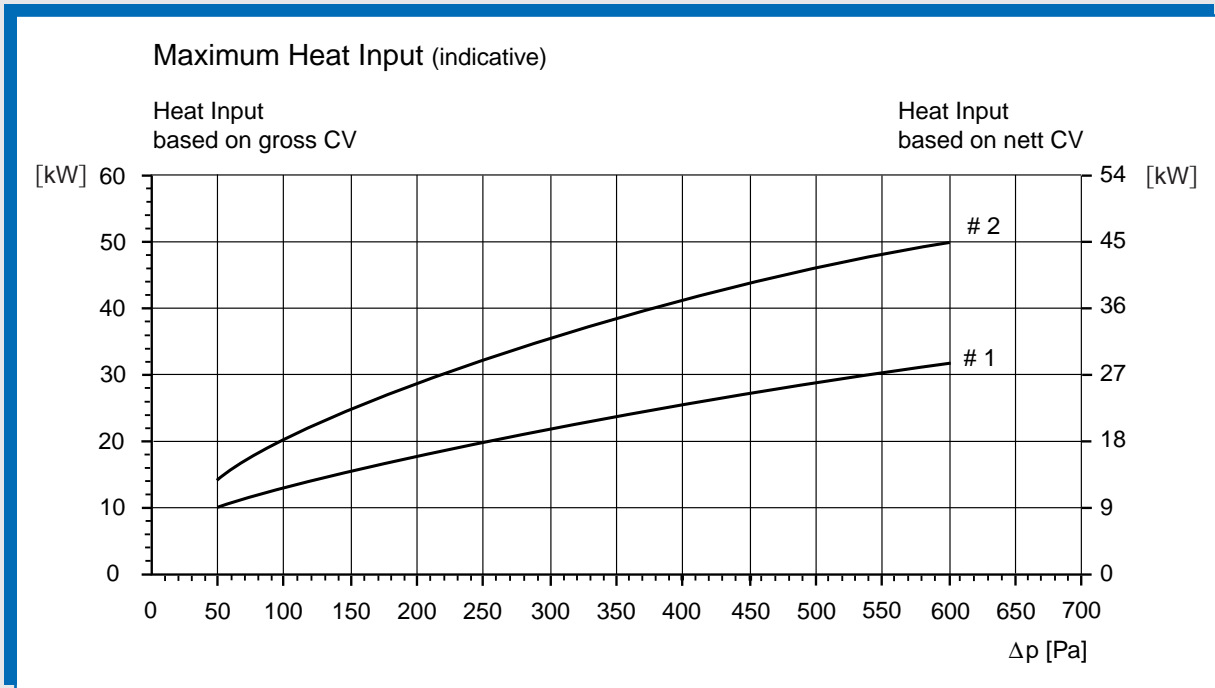
- 1 Gas/Air mixture outlet.
- 2 Air Inlet.
- 3 Gas Inlet.
- 4 Air signal connection.



# CAPACITY

## MAXIMUM HEAT INPUT

Maximum heat input available with reference to the pressure drop between the outlet and the inlet of the 390 MIXER in operating condition.  
Reference conditions: gas G20.



	Model MIXER	Reference Heat Input
# 1	390. 0xx	25 kW
# 2	390. 1xx	35 kW

## MINIMUM HEAT INPUT

The minimum available heat input is strictly related to the appliance characteristics. As a general guideline the minimum heat input is 20% of the maximum (modulation range 1:5).

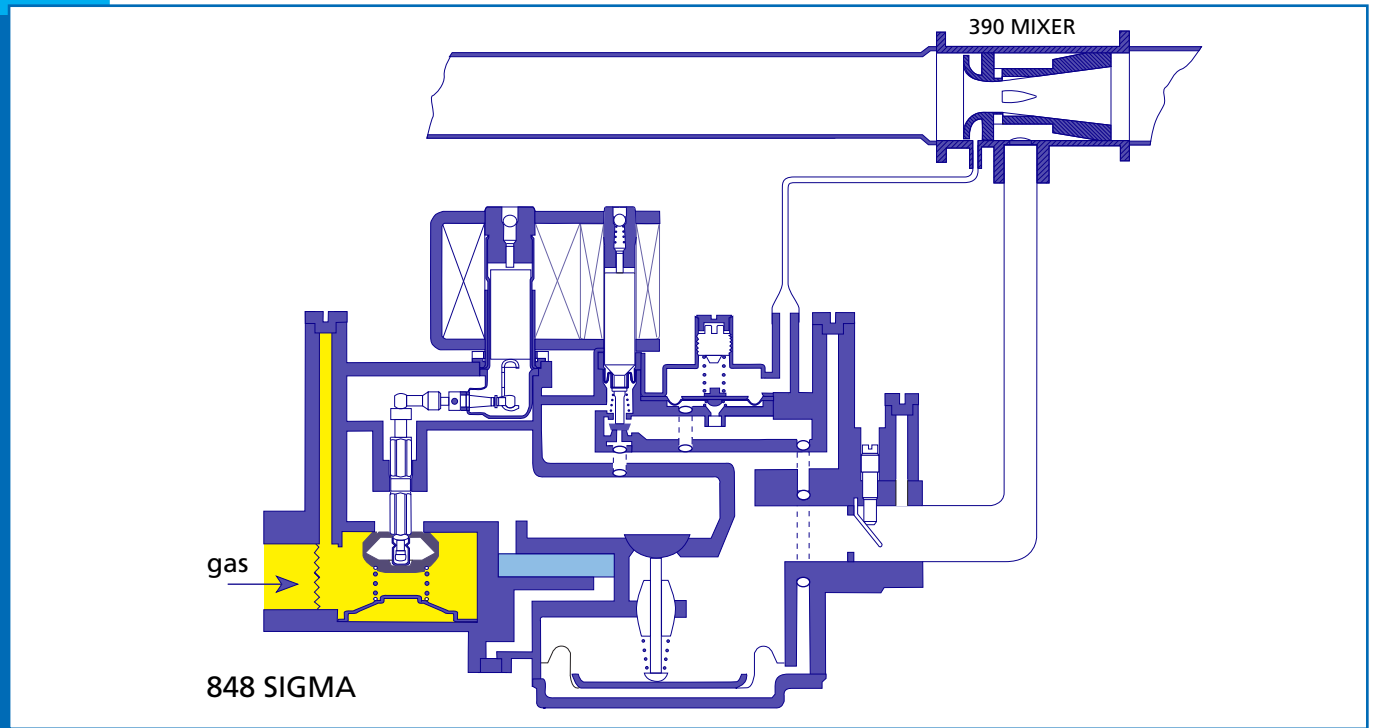
In the following table the nominal value of the minimum heat input, when the minimum pressure drop between the inlet of 390 MIXER and gas injection section is 50 Pa, is reported.

Reference conditions: gas G20, gross calorific value.

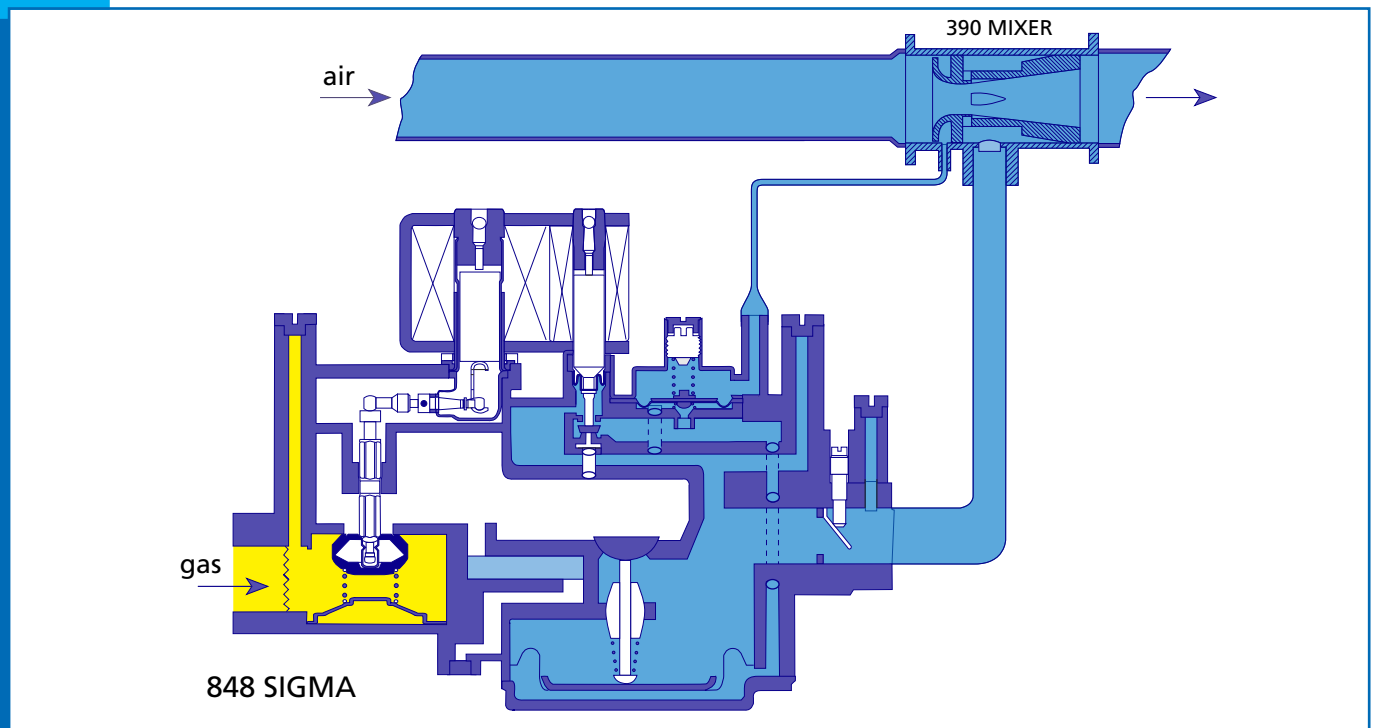
Model MIXER	Minimum Heat
390. 0xx	5 kW
390. 1xx	7 kW



## OPERATION

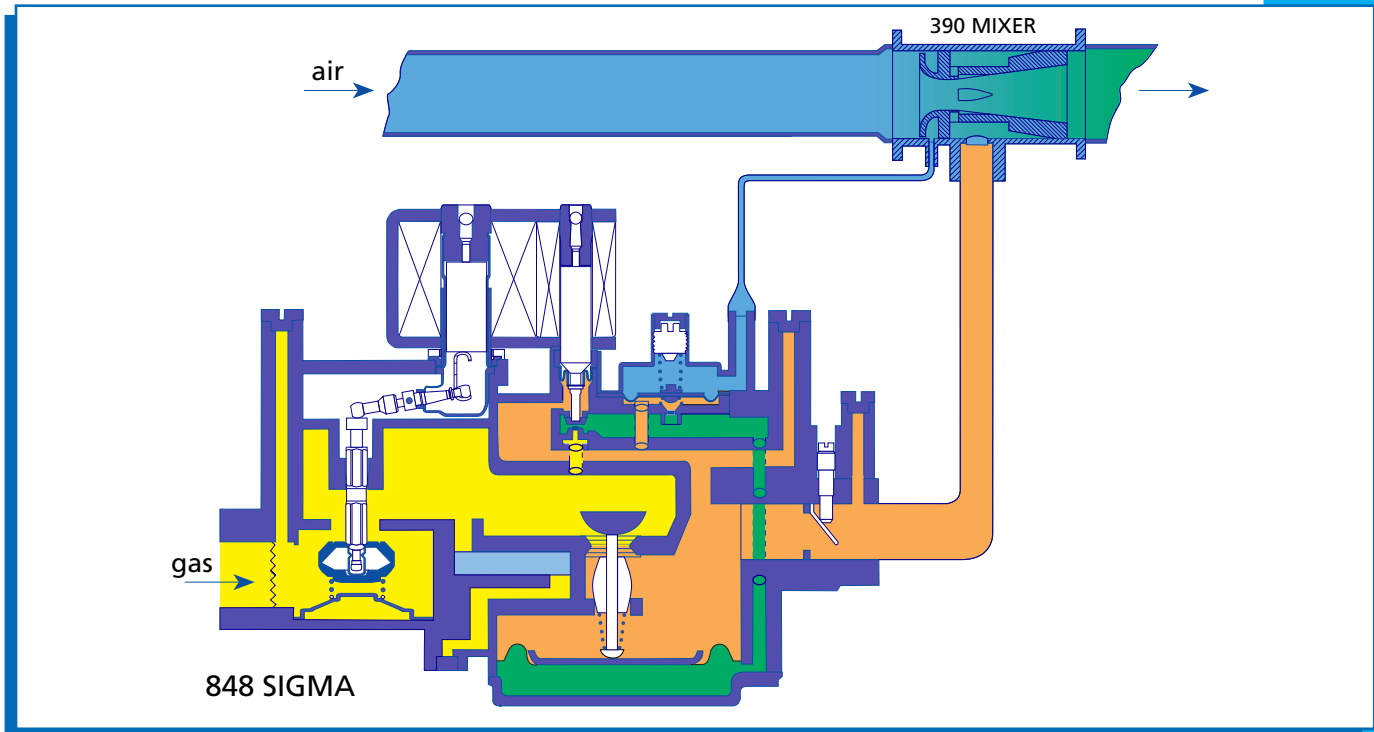


**Stand by** - With the appliance in not-operating condition there is no air flow and the gas is closed by the gas/air control valves.



**Pre-purge** - When the appliance is in pre-purge condition there is air flow through MIXER.

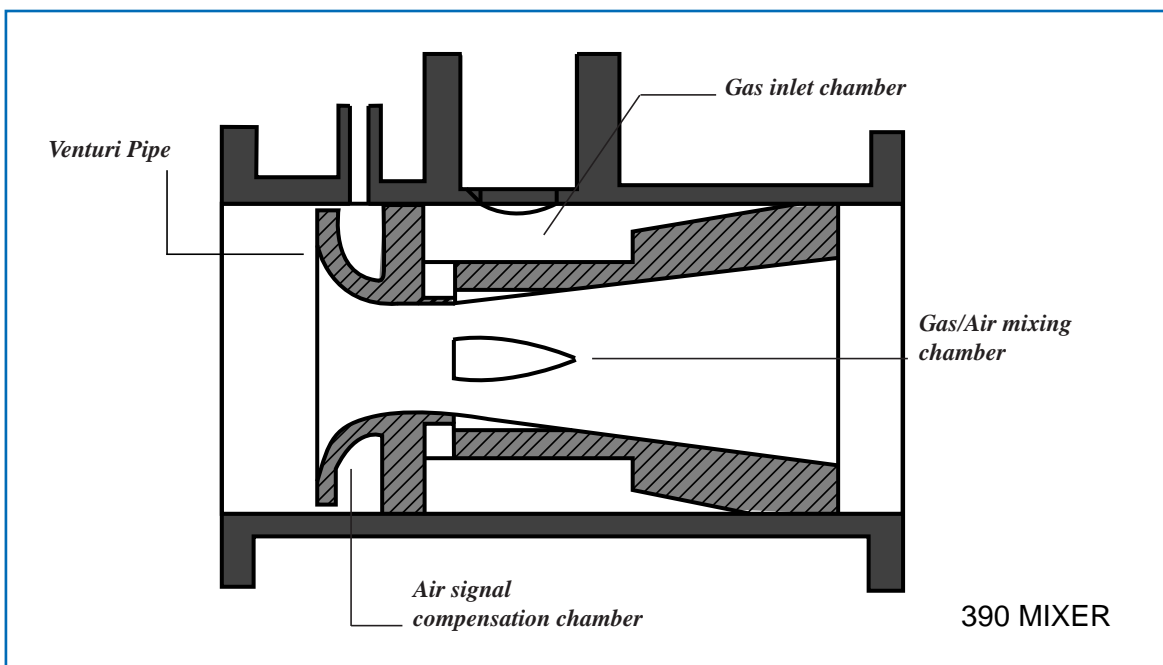
# OPERATION



**Operating** - Automatic shut off valves open. The gas flows through the control and it is injected inside the MIXER in the mixing chamber. Then the gas/air mixture leaves the MIXER and goes to the burner.

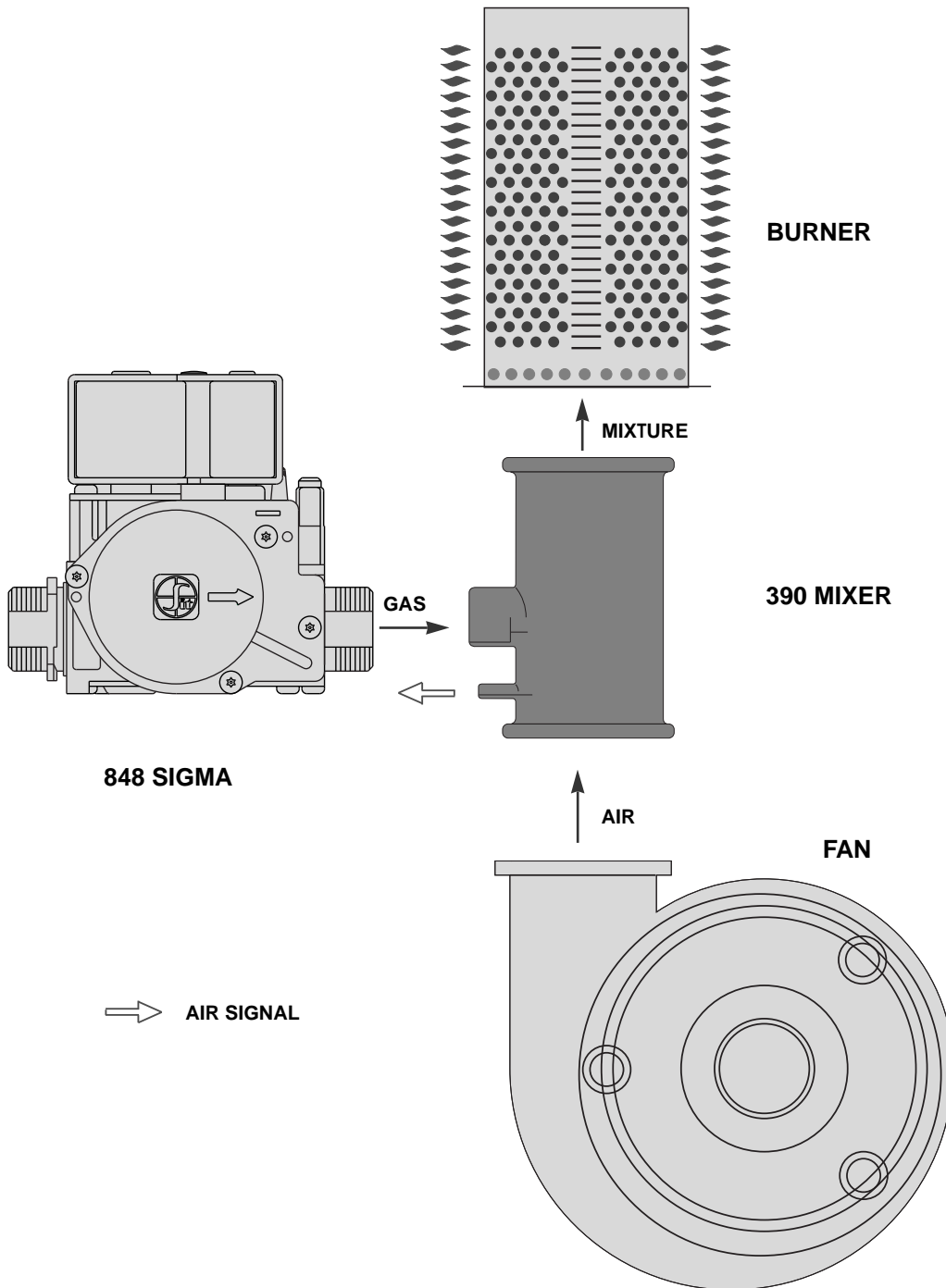
## INNER VIEW

The inner profiles of MIXER are designed and realised in order to ensure the mixing functions and to increase the modulating range.

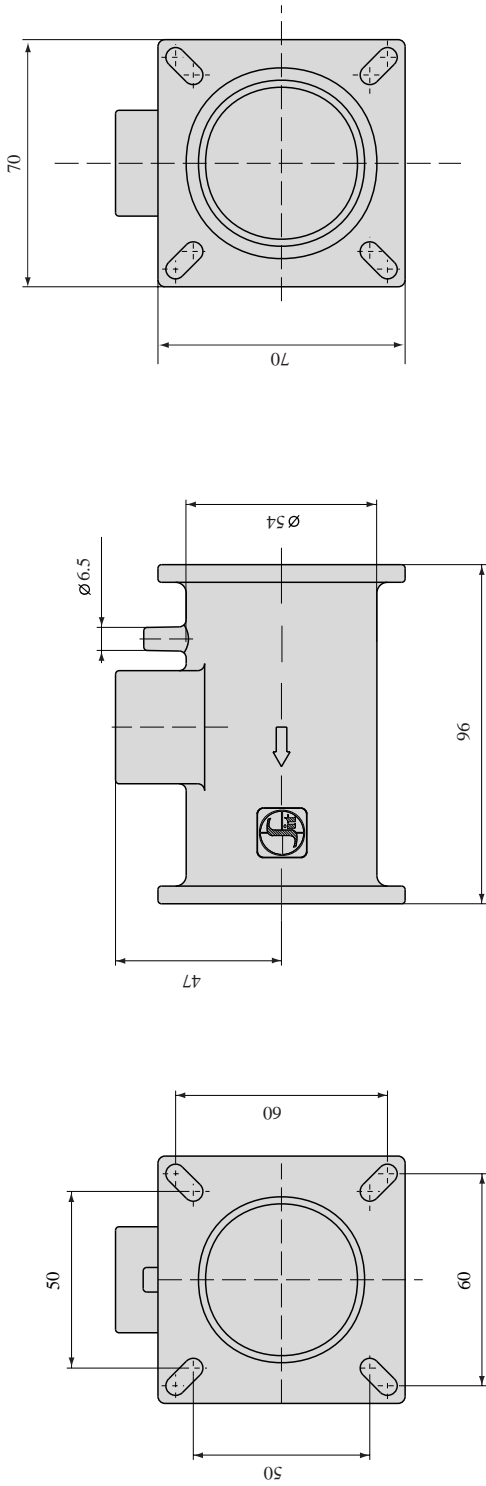




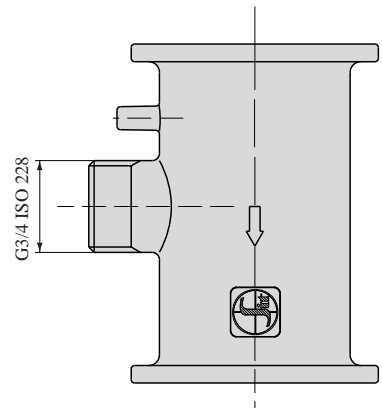
# LAY-OUT ASSEMBLING



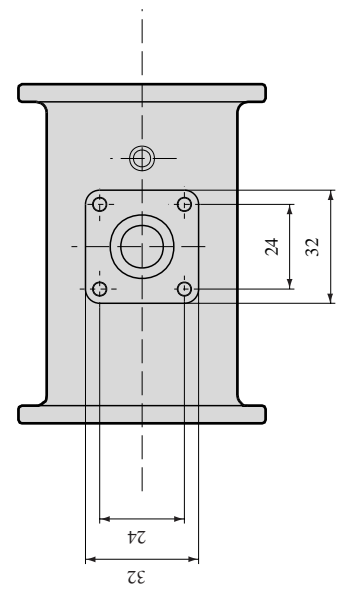
# DIMENSIONS



Gas Connection: G 3/4 version



Gas Connection: Flanges version





SIT GROUP

[www.sitgroup.it](http://www.sitgroup.it) - e-mail: [mkt@sitgroup.it](mailto:mkt@sitgroup.it)

---