

# Fusar Bassini Astorre e C. Snc HIGH VELOCITY BURNERS "HV" SERIES



#### APPLICATIONS

The burner "HV" series is suitable for applications to industrial furnaces, for combustion with stoichiometric ratio or with excess of air; particularly indicates for applications on furnaces for the heat treatment of the metals, with directed heat.

#### **CAPACITY**

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	BURNER TYPE	CAPACITY KW	CAPACITY Kcal/h									
$\triangleright$	HV-5	50	43000									
$\nabla$	HV-12	120	100000									
$\triangleright$	HV-35	350	300000									
$\triangleright$	HV-72	720	620000									

## TECHNIQUE OF IMPULSES COMBUSTION

The impulses combustion produces flames with high atmosphere circulation in the furnace, such to optimize the distribution of the heat, the evenness of temperature and the rendering; the adoption of combustion groups using the technique pressure combined average velocity represents the best solution for the furnace for heat treatment with directed heat: the impulses allows short interference duration in single zone of the furnace increasing the precision of the thermal contribution's regulation, while the mid velocity optimizes the re-mixing of the atmosphere in the furnace for means of the elevated possessed kinetic energy, concurring the evenness of temperature also with not homogenous charges of materials or having complicated shapes.

#### GENERAL

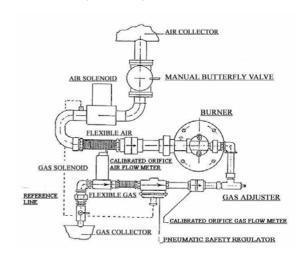
The burner "HV" series can burns natural gas or industrial LPG. The comburent air and the combustible gas are mixed in the burner head avoiding in such way the phenomenon "backfire" and allowing a wide ratio of choking with a good flame stability. The refractory tile burner's internal shape made of high temperature refractory stiff flame generates one, with elevated kinetic energy. The combustion are clean and complete. The ignition HV burners must always be completed in the minimum position, through the built-in electrode of ignition. The flame detection can be carried out with electrode detection probe or detector UV; The burner and the automatic burner control unit must be designed, installed and setted meeting the law regulations in force.



The burner "HV" series can be automatically controlled by regulating and controlling the comburent air and the combustible gas. The required air-gas ratio can be maintained by use a pneumatic safety regulator. The predisposition of the wished ratio air-gas to the burner comes easier if the capacities of air and combustible gas are known, that can be measured through the diaphragms calibrates positioned respective on the feedings of air and gas.

#### TECHNICAL CHARACTERISTICS

- Intense combustion
- Elevated kinetic flame energy
- · Mixing head
- · High flame stability
- Automatic ignition with ignition electrode
- · Micrometric gas metering device



CAUTION: The combustion system must be designed and installed meeting the law regulations in force. If the installation, the use and the maintenance are not carried out correctly, severe damages to things or persons might

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GAS BURNERS AND COMPONENTS FOR COMBUSTION SYSTEMS

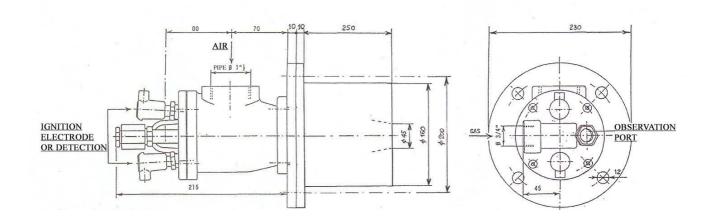
Via P.M. Ferrè, 14 -26013 CREMA (CR) Tel/Fax 0373-257594 web: www.fusarbassini.it e-mail: info@fusarbassini.it



 $\triangleright$ 



# Fusar Bassini Astorre e C. Snc **HV-5 BURNER**



## **HV-5 BURNER**

\* Natural gas **GASES**:

\* Lliquid gas – LPG

to be specified with order

**GAS PRESSURE**: 500 mm H<sub>2</sub>O

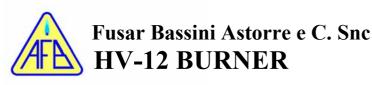
**CAPACITY:** The burner capacity depends EXCLUSIVELY by air pressure, gauged upstream of the burner

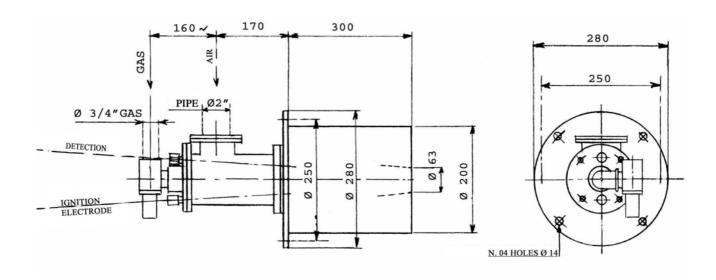
BURNER CAPACITY Kcak/h WITH AIR PRESSURE IN mm H2O												
AIR PRESSURE	10	25	50	100	150	200	250	300	400	500	600	700
NATURAL GAS	12500	20500	28500	41000	50000	58000	65000	71000	82000	92000	100000	108000
LPG	11500	18500	26000	38000	46000	53000	60000	65000	75000	85000	92000	100000

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## **HV-12 BURNER**

**GASES:** \* Natural gas

to be specified with order

\* Lliquid gas – LPG

**GAS PRESSURE**: 500 - 600 mm H<sub>2</sub>O

**CAPACITY:** The burner capacity depends EXCLUSIVELY by air pressure, gauged upstream of the burner

	BURNER CAPACITY Keak/h WITH AIR PRESSURE IN mm H2O												
AIR PRESSURE	10	25	50	100	150	200	250	300	400	500	600	700	
NATURAL GAS	25000	41000	57000	82000	100000	115000	129000	142000	164000	183000	200000	216000	
LPG	23000	37000	52000	75000	92000	106000	119000	131000	151000	169000	185000	200000	

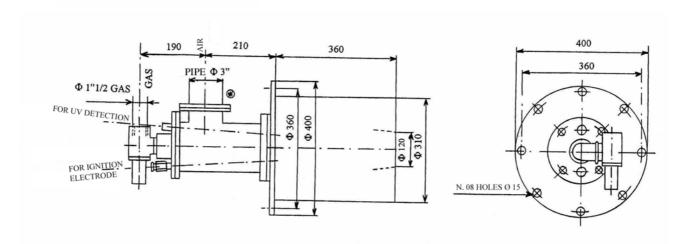
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# Fusar Bassini Astorre e C. Snc **HV-35 BURNER**



## **HV-35 BURNER**

**GASES:** \* Natural gas

to be specified with order

\* Liquid gas – LPG

**GAS PRESSURE**: 500 - 600 mm H<sub>2</sub>O

**CAPACITY:** The burner capacity depends EXCLUSIVELY by air pressure, gauged upstream of the burner

BURNER CAPACITY Keak/h WITH AIR PRESSURE IN mm H2O													
AIR PRESSURE	10	25	50	100	150	200	250	300	400	500	600	700	
NATURAL GAS	51000	81000	114000	162000	198000	229000	256000	281000	324000	363000	397000	429000	
LPG	47000	75000	105000	150000	183000	212000	237000	260000	300000	336000	367000	397000	

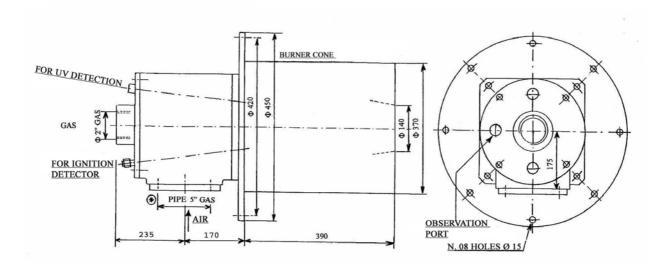
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# Fusar Bassini Astorre e C. Snc **HV-72 BURNER**



# **HV-72 BURNER**

\* Natural gas **GASES:** 

to be specified with order

\* Liquid gas – LPG

**GAS PRESSURE:** 500 - 600 mm H<sub>2</sub>O

**CAPACITY:** The burner capacity depends EXCLUSIVELY by air pressure, gauged upstream of the burner

BURNER CAPACITY Kcak/h WITH AIR PRESSURE IN mm H2O													
AIR PRESSURE	10	25	50	100	150	200	250	300	400	500	600	700	
NATURAL GAS	136000	215000	30500	431000	528000	610000	682000	747000	863000	965000	1057000	1142000	
LPG	125000	199000	282000	399000	488000	564000	631000	691000	799000	893000	978000	1057000	

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