



## TWO STAGE GAS BURNERS

### ▶ RIELLO 40 GSD SERIES

▶ GS10D	29/41 ÷ 106 kW
▶ GS20D	58/81 ÷ 220 kW



The Riello 40 GSD series of two stage gas burners, is a complete range of products developed to respond to any request for home heating. The Riello 40 GSD series is available in two different models, with an output ranging from 29 to 220 kW, divided in two different structures.

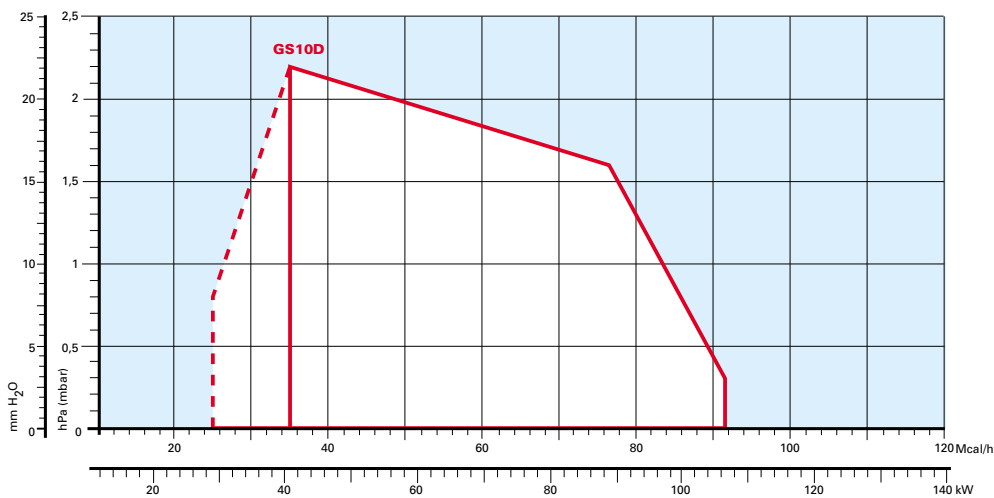
All the models use the same components designed by Riello for the Riello 40 GSD series. The high quality level guarantees safe working.

In developing these burners, special attention was paid to reducing noise, to the ease of installation and adjustment, to obtaining the smallest size possible to fit into any sort of boiler available on the market.

All the models are approved by the EN 676 European Standard and conform to European Directives for EMC, Low Voltage, Gas Appliance and Boiler Efficiency.

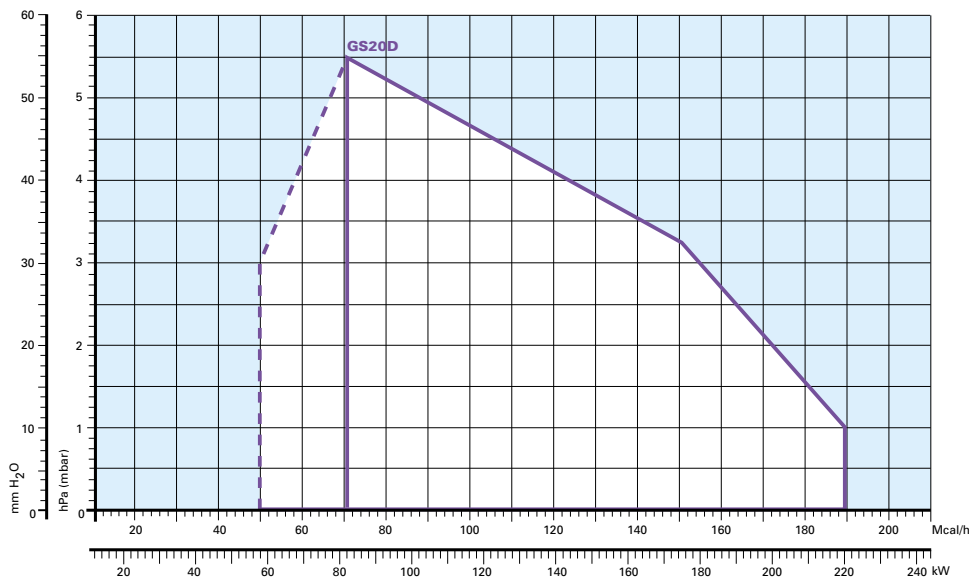
All the Riello 40 GSD burners are tested before leaving the factory.

## FIRING RATES



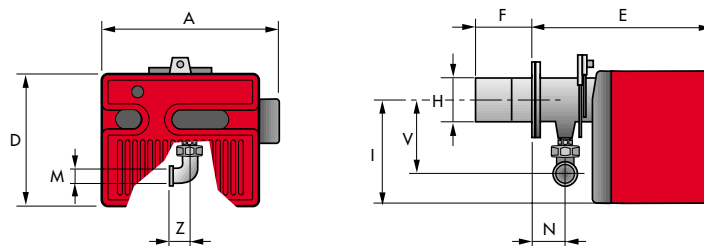
□ Useful working field for choosing the burner  
 - - - 1<sup>st</sup> stage operation range

**Test conditions conforming to EN 676:**  
 Temperature: 20°C  
 Pressure: 1013 mbar  
 Altitude: 0 m a.s.l.



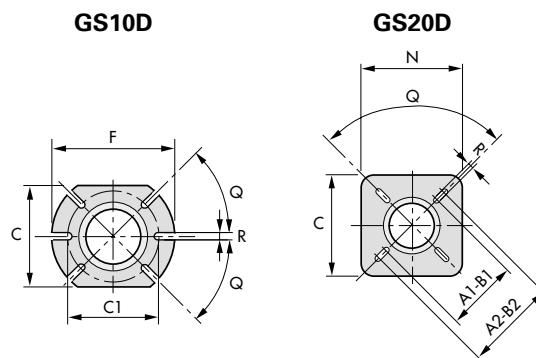
## RIELLO 40 GSD series - OVERALL DIMENSIONS (mm)

### BURNER



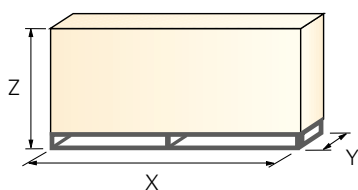
Model	A	D	E	F	H	I	M	N	V	Z
▶ GS10D	368	262	346	110	105	204	Rp 3/4"	61	142	33
▶ GS20D	413	298	389	120	125	230	Rp 3/4"	67	152	33

### BURNER - BOILER MOUNTING FLANGE



Model	A1	A2	B1	B2	C	C1	F	Q	R
▶ GS10D	-	-	-	-	160	130	185	45	11
▶ GS20D	155	200	155	200	170	-	170	90	11

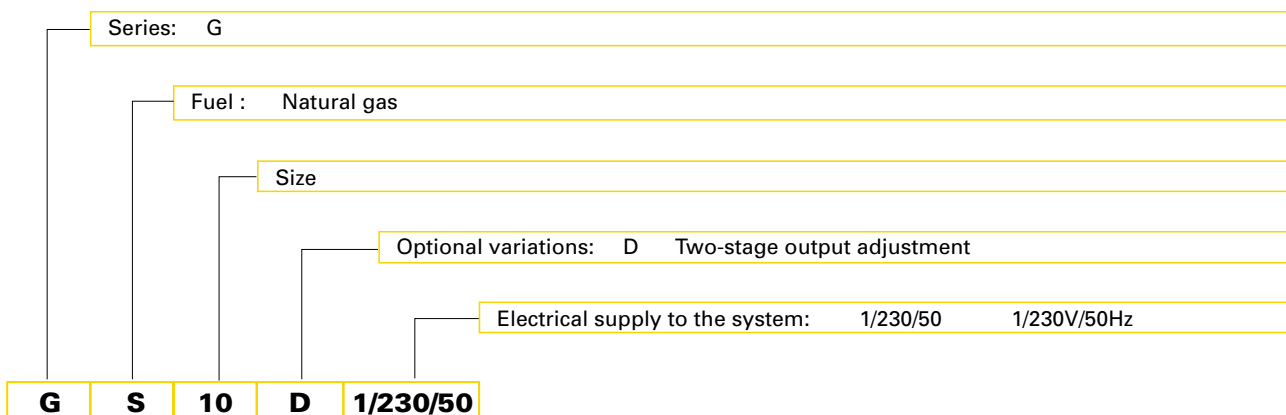
### PACKAGING



Model	X	Y	Z	kg
▶ GS10D	495	483	330	17
▶ GS20D	535	535	375	22

# RIELLO 40 GSD series - SPECIFICATION

## DESIGNATION OF SERIES



## RIELLO 40 GSD series - STATE OF SUPPLY

Monoblock, gas burners, completely automatic, two stage operation, made up of:

- Fan with forward curve blades
- Cover lined with sound-proofing material
- Air damper, completely closed in stand by, driven by an electric servomotor
- Air damper with 1st and 2nd stage adjustment
- Single phase electric motor 230 V, 50 Hz
- Combustion head fitted with:
  - stainless steel head cone, resistant to high temperatures
  - ignition electrodes
  - ionisation probe
  - gas distributor
  - flame stability disk
  - flame inspection window
- Adjustable air pressure switch, with graduated selector, to guarantee burner lock out in the case of insufficient combustible air
- Protection filter against radio interference
- IP X0D (IP 40) electric protection level.

### Standard equipment:

- Flange insulation screen
- Screws and nuts for fixing the flange to the boiler
- 7-pole socket
- 4-pole socket
- Hinge
- Grommet
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

## RIELLO 40 GSD series - AVAILABLE BURNER MODELS

Code	Model		Heat output		Total electrical power (kW)	Certification	Note	Price
			(kW)	Natural Gas (Nm <sup>3</sup> /h)				
3757615	GS10D	1/230/50	29/41 – 106	2,9/4,1 – 10,6	0,130	CE – 0063 AP6680	(1)	
3757714	GS20D	1/230/50	58/81 – 220	5,8/8,1 – 22	0,250	CE – 0063 AP6680	(1)	

Net calorific value G20: 10 kWh/Nm<sup>3</sup> - Density: 0,71 kg/Nm<sup>3</sup>

The burners of GSD series are in according to EN 676

(1) With plug and socket.

## RIELLO 40 GSD series - AVAILABLE GAS TRAIN MODELS

MULTILOC GAS TRAINS	Gas train code *	Gas train model	Natural gas		LPG		Note	Gas train price
			Burner (type)	Adapter (code)	Burner (type)	Adapter (code)		
	3970084	MBZRDLE 405	GS10D		GS10D		(1) (2)	
	3970537	MBZRDLE 407	GS10D – GS20D		GS10D – GS20D		(1) (3)	
	3970534	MBZRDLE 410	GS20D		GS20D		(1)	

\* Gas train are 230V/50Hz - 220V/60Hz electrical supply

(1) With installed plug

(2) GS10D ≤ 80 kW with natural gas

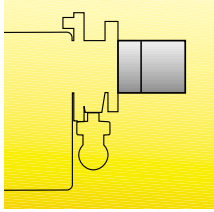
(3) GS20D ≤ 180 kW with natural gas

The following table shows the frequently matching between the burners and the gas train, referred to different inlet gas pressure.

Burner	Reference combustion chamber pressure (mbar)	Natural gas G20 (20 mbar)		Natural gas G20 (150 mbar)		LPG (35 mbar)		LPG (150 mbar)	
		Gas train	Reference output (kW)	Gas train	Reference output (kW)	Gas train	Reference output (kW)	Gas train	Reference output (kW)
GS10D	1,65	MBZRDLE 407	84,2	MBZRDLE 407	84,2	MBZRDLE 405	84,2	MBZRDLE 405	84,2
GS20D	3,3	MBZRDLE 410	173,6	MBZRDLE 410	173,6	MBZRDLE 407	173,6	MBZRDLE 407	173,6

## RIELLO 40 GSD series - BURNER ACCESSORIES

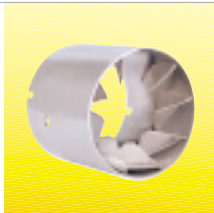
### Extended head kit



Burner	Standard head length (mm)	Extended head length (mm)	Kit code	Price
GS10D	100	170	3000864	
GS20D	120	280	3000873	

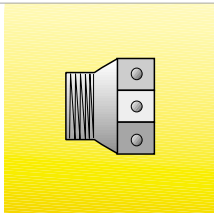
Burners "standard head" can be transformed into "extended head" versions by using the special kit. Here the KITS available for the various burners are listed, showing the original and the extended lengths.

### End cone with turbulator disk



Burner	Projection (mm)	Kit code	Price
GS10D	+18	3000918	
GS20D	+23	3000919	

### Town gas kit



Burner	Kit code	Price
GS10D	3000891	
GS20D	3000893	

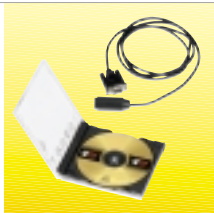
### LPG kit



Burner	Kit code for standard head	Kit code for extended head	Price
GS10D	3000884	3000884	
GS20D	3000886	3000886	

For burning LPG gas, a special kit is available to be fitted to the combustion head on the burner, as shown in the following table.

### Interface adapter kit



Burner	Kit code	Price
GS10D - GS20D	3002719	

To connect the flame control panel to a personal computer for the transmission of operation, fault signals and detailed service information, an interface adapter with PC software are available.

### Ground fault interrupter kit



A "Ground fault interrupter kit" is available as a safety device in case of electrical system fault. It is supplied with burners with pin plug.

Burner	Kit code	Price
GS10D - GS20D	3001180	

### 7-pin plug kit

If necessary a 7-pin plug kit is available (in packaging of n. 5 pieces).

Burner	Kit code	Price
GS10D - GS20D	3000945	

### Continuous ventilation kit for RMG control box

If the burner requires continuous ventilation in the stages without flame, a special kit is available as given in the following table.

Burner	Kit code	Price
GS10D - GS20D	3000901	

## RIELLO 40 GSD series - GAS TRAIN ACCESSORIES

### Seal control kit



To test the valve seals on the gas train a special "seal control kit" is available.

Burner	Kit code	Price
GS10D - GS20D	3010123	