

GULLIVER BGK SERIES

The Riello Gulliver BGK series of one stage light oil burners is a complete range of Low NOx products developed to respond to any request for home heating, conforming to the strictest standards regarding the reduction of polluting emissions. The BGK series is available in four models with an output ranging from 17,8 to 73 kW, divided in two different structures.

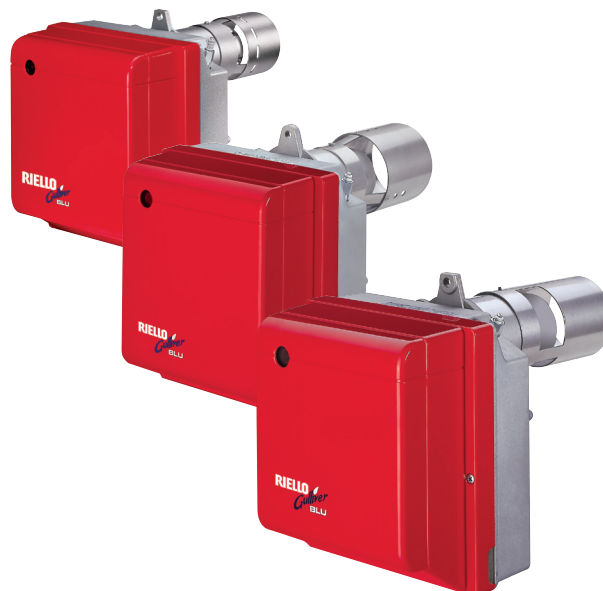
All the models use the same components designed by Riello for the Gulliver series.

The high quality level guarantees safe working. The Gulliver BGK1-2-3 burners are fitted with a microprocessor-based control box, with diagnostic functions.

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

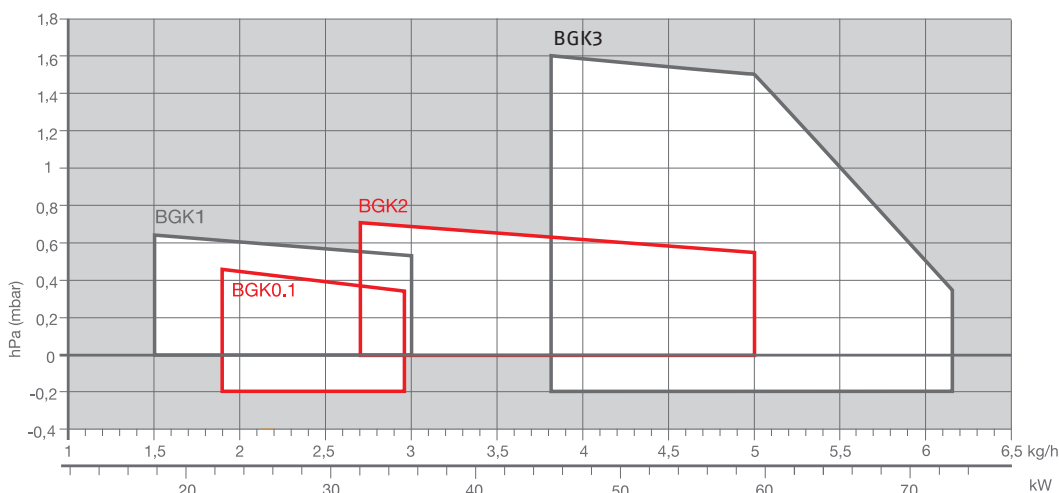
All the models are approved by the European EN 267 Standard and conform to European Directives for EMC, Low Voltage, Machinery and Boiler Efficiency.


All the Gulliver BGK series of burners are fired before leaving the factory.



BGK0.1	22,5 ÷ 35,3 kW
BGK1	17,8 ÷ 35,6 kW
BGK2	32,0 ÷ 59,3 kW
BGK3	45,0 ÷ 73,0 kW

FIRING RATES



 Useful working field for choosing the burner

Test conditions conforming to EN267
 Temperature: 20°C
 Pressure: 1013,5 mbar
 Altitude: 0 m a.s.l.

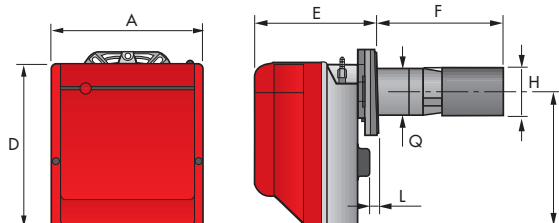
Low NOx One Stage Light Oil Burners

GULLIVER BGK SERIES

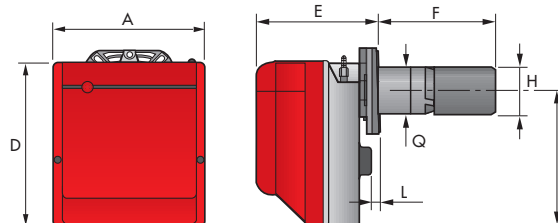
Overall dimensions (mm)

BURNER

BGK0.1



BGK1 - BGK2 - BGK3

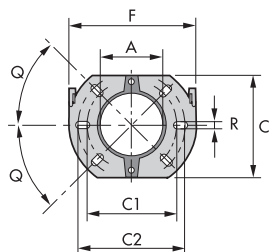


MODEL	A	D	E	F	H	I	L	Q
▶ BGK0.1	234	254	196	191	87	210	4	84
▶ BGK1	255	280	202	192	87	230	10	89
▶ BGK2	255	280	202	197	90	230	10	89
▶ BGK3	300	345	230	222	90	285	12	89

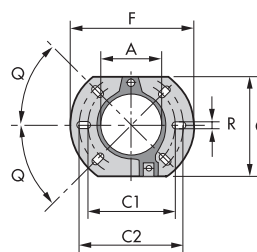
IMPORTANT: Boiler door must have a max. thickness of 70 mm for BGK0.1, 80 mm for BGK1 and 90 mm for BGK2 and BGK3, refractory lining included.

BURNER - BOILER MOUNTING FLANGE

BGK0.1

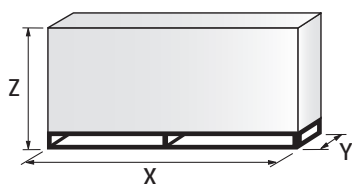


BGK1 - BGK2 - BGK3



MODEL	A	C	C1	C2	F	Q	R
▶ BGK0.1	91	144	130	150	180	45°	11
▶ BGK1	106	166	140	168	189	45°	11
▶ BGK2	106	166	140	168	189	45°	11
▶ BGK3	106	166	140	168	189	45°	11

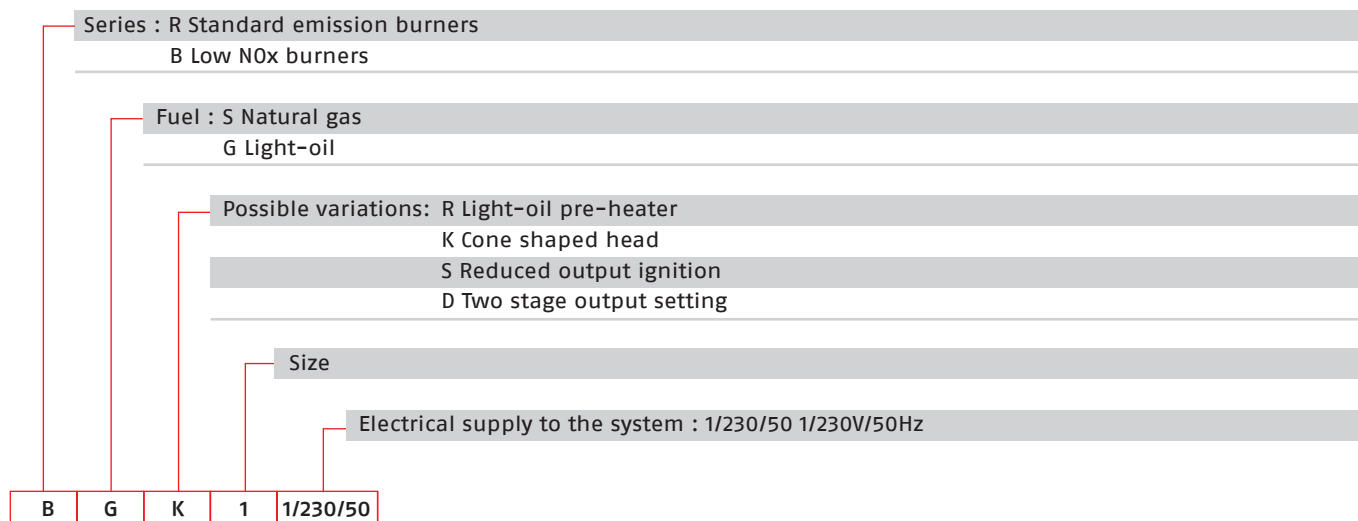
PACKAGING



MODEL	X	Y	Z	kg
▶ BGK0.1	343	268	310	13
▶ BGK1	533	288	340	13
▶ BGK2	533	288	340	13
▶ BGK3	430	345	430	16,5

Specification

DESIGNATION OF SERIES



STATE OF SUPPLY

Completely automatic monobloc light oil burners, with one stage operation fitted with:

- Fan with forward inclined blades
- Sound deadening cover
- Air damper with external adjustment, with no need to remove the cover
- Single phase electric motor 230 V, 50 Hz
- Combustion head, fitted with:
 - stainless steel end cone resistant to high temperatures
 - ignition electrodes
 - flame stability disk
- Geared pump for fuel supply, fitted with:
 - filter
 - pressure regulator
 - connectors for installing a pressure gauge and vacuumeter
 - internal by-pass for preparing for single pipe installation
- Post-ignition of 3 seconds after safety time
- Fuel feed solenoid incorporated in the pump
- Photocell for flame detection with optical fibre
- Microprocessor-based burner safety control box MO 550, with diagnostic and remote control release functions (BGK1 - BGK2 - BGK3 models)
- Protection filter against radio interference (included into burner safety control box)
- Light oil nozzle
- IP X0D (IP 40) electric protection level
- PTC fuel heater.

Standard equipment:

- Flange with insulating gasket
- Screws and nuts for flange
- Recirculating pipe
- Four screws and nuts for flange to be fixed to boiler
- Remote control release kit
- Two flexible oil pipes with nipples
- 7-pin plug kit
- Instruction handbook for installation, use and maintenance
- Spare parts catalogue.

Low NOx One Stage Light Oil Burners

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Available models

CODE	MODEL	HEAT OUTPUT		TOTAL ELECTRICAL POWER (kW)	CERTIFICATION	NOTE
		(kW)	(kg/h)			

MODELS WITH ANALOGIC CONTROL BOX

3737511	BGK0.1 1/230/50	22,5 - 35,3	1,9 - 2,95	0,220	CE - 0036 0329/02	
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MODELS WITH DIGITAL CONTROL BOX MO 550

3737066	BGK1 1/230/50	17,8 - 35,6	1,5 - 3	0,250	CE - 0036 0232/98	
3737456	BGK2 1/230/50	32 - 59,3	2,7 - 5	0,250	CE - 0036 0232/98	
20012189	BGK3 1/230/50	45 - 73	3,8 - 6,15	0,460	-	

Net calorific value: 11,8 kWh/kg; 10200 kcal/kg - Viscosity at 20°C: 4±6 mm²/s (cSt).
The burners of BGK series are in according to EN 267.

Burner accessories

Control box MO 550 and sensor flame



On request, we can supply a more efficient control box with following features:

- Digital technology
- Post-ignition of 3 seconds after safety time (total ignition time of 8 seconds)
- Multi-color LED signalling the various working stage
- Visual or PC interface diagnostic functions through multi-color LED device
- Remote lock-out reset (the connection is supplied with the MO 550 accessory)
- Recycling for 3 attempts if there is flame failure during operation
- Programmable post-purge (up to 6 minutes), continuous purge, long pre-purge (2 minutes)
- Post-combustion lock-out
- Logging of burner operation parameters (for example operating time, number and type of lock-outs)

BURNER	KIT CODE
► BGK0.1	3001168+3007492

PC Interface kit



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

BURNER	KIT CODE
► BGK1 - BGK2 - BGK3	3002731

Light oil filter



For cleaning light oil from dirty particles and impurities filters with the following features are available:

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	60	3006561

Filter made up of aluminium body and stainless steel filtering cartridge; available singularly.

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	60	3075011

Filter made up of aluminium cover, plastic tank and nylon filtering cartridge; available in packaging of 50 pieces.

Light oil filter/degassing unit



To solve problems of air or water in the oil circuit a special filter/degassing unit is available, made up of aluminium cover, plastic tank, stainless steel filtering cartridge, air release cap and water purge valve. It is available singularly.

BURNER	FILTERING DEGREE (µm)	KIT CODE
► All models	100	3000926

7-pin plug kit

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

BURNER	KIT CODE
► All models	3000945