

# HeatMaster® 71-101

High performance combined boiler and water heater with fully modulating burner technology.

The HeatMaster is a high performance hot water producer: its annular Tank-in-Tank holds a volume of hot water for peak demand. This combines the advantages of a hot water producer with integrated storage and of an instantaneous water heater, while avoiding the disadvantages of space, cost and efficiency.

The HeatMaster has a primary circuit and can therefore also be used as a central heating boiler.

### **Exceptional Performance**

The MCBA electronic controller regulates the boiler (start-up, safety, modulation), the shunt pump and the heating pump in response to hot water and heating demand. The MCBA offers numerous advanced features:

- A large burner modulation range down to less than 30%
- Extremely accurate hot water priority: even very small draw-offs are immediately detected
- The hot water tank is always kept at an optimum temperature
- Excellent hot water performance
- Energy efficiency is optimised in both hot water and heating modes.

#### **Product Features**

- High performance **fully modulating** combined boiler and water heater
- · Stainless steel Tank-in-Tank design
- Low-NOx premix natural gas/LPG modulating hurners
- Can also be used as a stand-alone water heater
- Anti-Legionellae: hot water stored at a consistently high temperature
- Built-in primary circuit shunt pump
- Fully insulated with rigid polyurethane foam
- · Stove enamelled casing
- Control panel including digital MCBA controller complete with self diagnostic system and combined temperature and pressure gauge
- Vented or unvented use, with mains pressure SystemPaks available



#### **Modulating Burner**

The HeatMaster 71 and 101 are fitted with the BG2000-M modulating burner, which has a metal fibre (NIT) flame tube and smooth and near-silent ignition and operation - ideal for use in applications where burner noise must be kept to a minimum.

		HeatMaster® 71	HeatMaster® 101
Fuel		Natural gas/LPG	Natural gas/LPG
Burner options	type	BG2000-M	BG2000-M
Input	kW	20 to 69.9	25 to 107/22 to 110
Maximum output	kW	18.4 to 63	23 to 96.8/20.2 to 99
Primary capacity	L	108	130
Total capacity	L	239	330
Heating surface area	m²	3.14	3.95
Primary circuit pressure drop	mbar	46	83
DHW tank pressure drop	mbar	45	180
Flue circuit pressure drop	mbar	0.6	1.4
DHW connection (male BSP)	Ø	1"	1"
Primary connection (female BSP)	Ø	1 <sup>1</sup> /2"	1 <sup>1</sup> /2"
Flue connection	Ø mm	150	150
Burner air intake connection	Ø mm	80 (BG2000-M)	100 (BG2000-M)
Flue connection options	type	B23/C13/C33/C53	B23/C13/C33/C53
Weight empty	Kg	282	335
Weight full	Kg	521	665
Minimum working gas pressure	mbar	20(Nat Gas)/37(LPG)	20(Nat Gas)/37(LPG)
Gas flow rate	m³/h	2.12 to 7.4(Nat Gas/0.82 to 2.86 (LPG)	2.65 to 11.32(Nat Gas/0.9 to 4.5(LPG
Maximum operating temperature	°C	90	90

Maximum operating pressure Primary: 3 bar Secondary: 10 bar

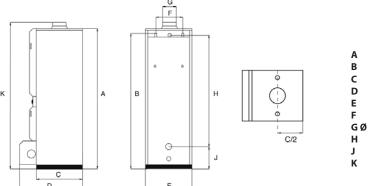
Gas connection - HM101: 1" - HM71:  $^{3}/_{4}$ "

#### **Performance Data**

		HeatMaster® 71	HeatMaster® 101
Litres in first 10 minutes	40°C	646	905
Litres in first 10 minutes	45°C	543	777
Litres in first 10 minutes	60°C	346	514
Litres in first hour	40°C	2133	3172
Litres in first hour	45°C	1794	2680
Litres in first hour	60°C	1219	1813
Continuous flow 40°C	Ltrs/hr	1835	2776
Continuous flow 45°C	Ltrs/hr	1573	2379
Continuous flow 60°C	Ltrs/hr	1067	1665
Reheat time to 60°C	Min	16	13

**Note:** The above performances are based on the hot water being blended at point of use, with a boiler temperature of  $90^{\circ}$ C and a domestic cold water inlet of  $10^{\circ}$ C.

## Dimensions



	HeatMaster® 71	HeatMaster® 101
Α	1743mm	2093mm
В	1630mm	2030mm
C	680mm	680mm
D	937mm	937mm
E	680mm	680mm
F	390mm	390mm
GØ	150mm	150mm
Н	1289mm	1693mm
J	285mm	285mm
K	1720mm	2120mm