

Glow-worm

Ultimate₃

Range Brochure







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Ultimate₃ combi boiler

The Ultimate₃ combi boiler provides central heating and hot water without the need for a cylinder to store water. The Ultimate₃ combi is available in a choice of 30kW and 35kW models and features high DHW flow rates, flexible flue options and an aluminium heat exchanger for proven reliability and performance. The Ultimate₃ also features a Grundfos modulating pump for reduced energy use and a modern bright LCD display with an easy to use interface.



FREE 5 year guarantee



When registered through Club Energy



ErP A rated



Easy to install and service



Meets Boiler Plus when installed with a Climapro



Features and benefits

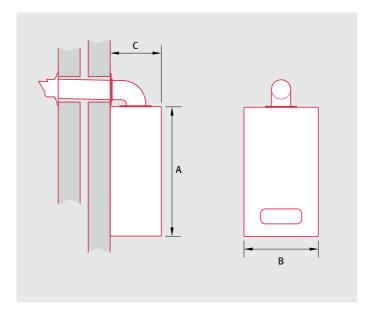
- Modern bright LCD display
 - Excellent clarity of boiler information, making it easy to change and confirm settings in dimly lit areas.
- High efficiency
- ErP 94% A rated boiler that helps reduce energy bills.
- High efficiency modulating Grundfos pump Lower running costs as the pump adapts to actual heating and hot water demand.
- 5 year guarantee Parts and labour guarantee for 5 years with an option to extend*.
- Heat exchanger Made with high grade aluminium for proven and reliable performance.
- Exclusive to City Plumbing Supplies

^{*}when installed through Club Energy



Technical specification

Ultimate₃ combi dimensions



	Boiler dimensions	
Height (A) Width (B) Depth (C)		
740mm	418mm	300mm

Ultimate₃ combi clearances

Boiler clearances					
Тор	Side	Bottom	Front		
300mm	0* 300mm 600mm**				

 $^{^{\}star}\,$ See manual for clearance if side panels are to be removed to assist future service and maintenance

Ultimate ₃	Unit of measure	30с	35с
General	_		
Boiler type		Combi	Combi
Model output		30kW	35kW
Article number		0010021404	0010021405
Gas Council number		47-019-55	47-019-57
Boiler dimensions (H x W x D)	mm	740 x 418 x 300	740 x 418 x 300
Heating			
Nominal heat output range at 50/30°C (Condensing mode)	kW	6.3 - 26.5	7.4 - 26.5
Nominal heat output range at 80/60°C (Non condensing mode)	kW	6 - 25.2	7 - 26.3
Maximum flow temperature	°C	80	80
Flow temperature range	°C	10-80	10-80
Flow temperature factory setting	°C	75	75
Approximate condensate volume at 50/30°C	litres/hr	2.55l/h	2.55l/h
Modulation (max/min)	1 : X	1:4.4	1:3.8
Domestic Hot Water			
Maximum heat output for water generation	kW	30	35
Lowest water pressure to operate boiler	bar	0.2	0.2
Lowest water flow for operation	l/min	1.9	1.9
Lowest water pressure for maximum flow rate	bar	1	1
Domestic hot water flow rate (at DT = Δ 35K)	l/min	12.4	14.4
Hot water output temperature range	°C	35-60°	35-60°
Mechanical			
Expansion vessel size	litres	8	8
Gas inlet connection (pipe size)	mm	15	15
Heating flow and return connections (pipe size)	mm	15	15
Hot and cold water connections (pipe size)	mm	22	22
Heat exchanger material	Stainless/ Aluminium	Aluminium	Aluminium
Boiler lift weight (Dry boiler)	kg	22	22
Performance			
NOx (En 15502-2-1)	mg/kWh	39	39
ErP efficiency (Heating / DHW)		A/A	A/A
ErP efficiency	%	94	94
ErP decibel rating (sound power)	dBa	51	52
PCDB seasonal efficiency	%	89.6	89.7
Flueing options			
Rear flue options	Yes/No	No	No
Maximum horizontal flue length 60/100	m	10	6
Maximum vertical flue length 60/100	m	10	10
Maximum horizontal flue length 80/125	m	25	19
Maximum vertical flue length 80/125	m	25	19
Permissible flue classifications	C13, C33, C43, C53	C13, C33, C43, C53	C13, C33, C43, C53

^{**5}mm if removable panel or door



Ultimate₃ system boiler

The Ultimate₃ system boiler is suitable for homes with high hot water demands. The Ultimate₃ system is a sealed system that comes in a 25kW output and features flexible flue options and an aluminium heat exchanger for proven reliability and performance. The Ultimate₃ also features a Grundfos modulating pump for reduced energy use and a modern bright LCD display with an easy to use interface



FREE 5 year guarantee



When registered through Club Energy



ErP A rated



Easy to install and service



Meets Boiler Plus when installed with a Climapro, & Smart Wiring Centre



Features and benefits

• Modern bright LCD display

Excellent clarity of boiler information, making it easy to change and confirm settings in dimly lit areas.

High efficiency

ErP 94% A rated boiler that helps reduce energy bills.

- High efficiency modulating Grundfos pump Lower running costs as the pump adapts to actual heating and hot water demand.
- 5 year guarantee

Parts and labour guarantee for 5 years with an option to extend*.

 Heat exchanger Made with high grade aluminium for proven and reliable

performance.

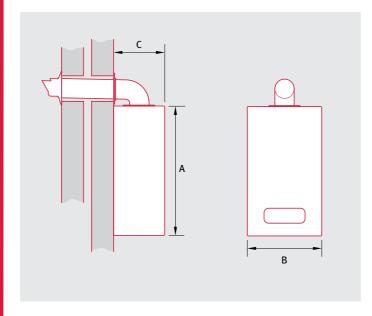
• Exclusive to City Plumbing Supplies

^{*}when installed through Club Energy



Technical specification

Ultimate₃ system dimensions



	Boiler dimensions	
Height (A)	Width (B)	Depth (C)
740mm	418mm	300mm

Ultimate₃ system clearances

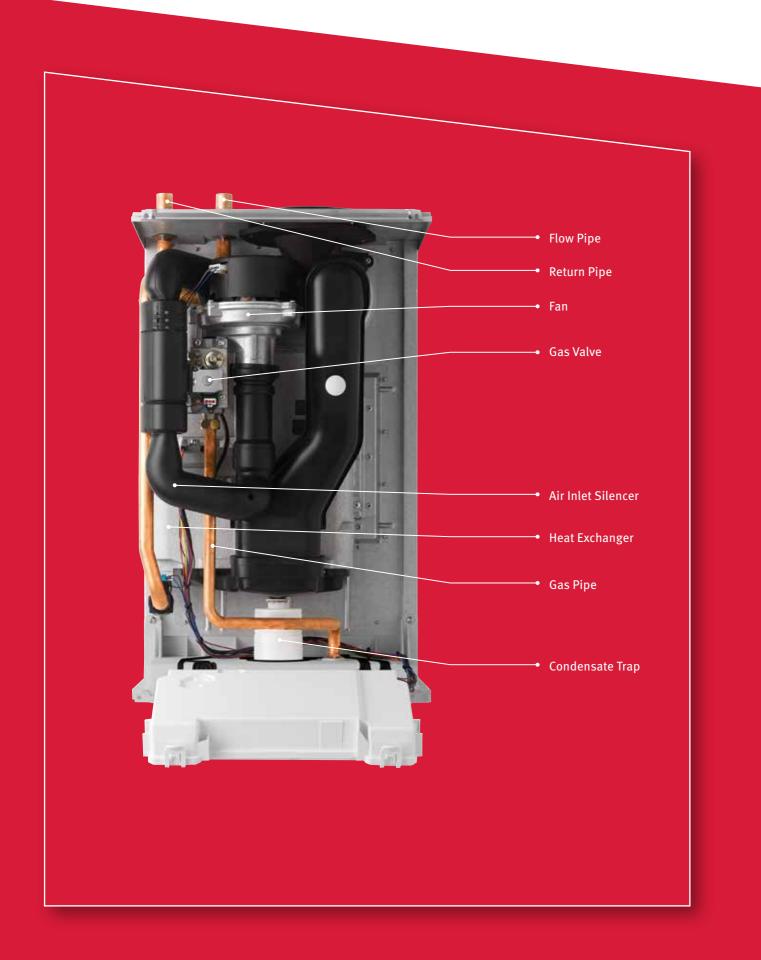
Boiler clearances			
Тор	Side	Bottom	Front
300mm	0*	300mm	600mm**

 $^{^{\}star}\,$ See manual for clearance if side panels are to be removed to assist future service and maintenance

Ultimate ₃	Unit of measure	25s
General		
Boiler type		System
Model output		25kW
Article number		0010021405
Gas Council number		47-019-51
Boiler dimensions (H x W x D)	mm	740 x 418 x 300
Heating		
Nominal heat output range at 50/30°C (Condensing mode)	kW	6.3 - 26.5
Nominal heat output range at 80/60°C (Non condensing mode)	kW	6 - 25.2
Maximum flow temperature	°C	80
Flow temperature range	°C	10-80
Flow temperature factory setting	°C	75
Approximate condensate volume at 50/30°C	litres/hr	2.55l/h
Modulation (max/min)	1:X	1:4.4
Domestic Hot Water		
Maximum heat output for water generation	kW	-
Lowest water pressure to operate boiler	bar	0.2
Lowest water flow for operation	l/min	1.9
Lowest water pressure for maximum flow rate	bar	1
Domestic hot water flow rate (at DT = Δ 35K)	l/min	-
Hot water output temperature range	°C	-
Mechanical		
Expansion vessel size	litres	8
Gas inlet connection (pipe size)	mm	15
Heating flow and return connections (pipe size)	mm	15
Hot and cold water connections (pipe size)	mm	22
Heat exchanger material	Stainless/ Aluminium	Aluminium
Boiler lift weight (Dry boiler)	kg	22
Performance		
NOx (En 15502-2-1)	mg/kWh	39
ErP efficiency (Heating / DHW)		A/-
ErP efficiency	%	94
ErP decibel rating (sound power)	dBa	50
PCDB seasonal efficiency	%	89.7
Flueing options		
Rear flue options	Yes/No	No
Maximum horizontal flue length 60/100	m	10
Maximum vertical flue length 60/100	m	10
Maximum horizontal flue length 80/125	m	10
Maximum vertical flue length 80/125	m	25
Permissible flue classifications	C13, C33, C43, C53	C13, C33, C43, C53

^{**5}mm if removable panel or door

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Ultimate₃ regular boiler

The Ultimate₃ regular (open vent) boiler is suitable for homes with high hot water demands. The Ultimate₃ regular heat only boiler is available in a 25kW output and has been designed to be light and compact with cupboard fit dimensions. The boiler features flexible flue options and an aluminium heat exchanger for proven reliability and performance.



FREE 5 year guarantee



When registered through Club Energy



ErP A rated



Easy to install and service



Meets Boiler Plus when installed with a Climapro₁ & Smart Wiring Centre₂

*when installed through Club Energy



Features and benefits

- Modern bright LCD display
- Excellent clarity of boiler information, making it easy to change and confirm settings in dimly lit areas.
- High efficiency
- ErP 94% A rated boiler that helps reduce energy bills.
- High efficiency modulating Grundfos pump
 Lower running costs as the pump adapts to actual heating and hot water demand.
- 5 year guarantee

Parts and labour guarantee for 5 years with an option to extend*.

Heat exchanger

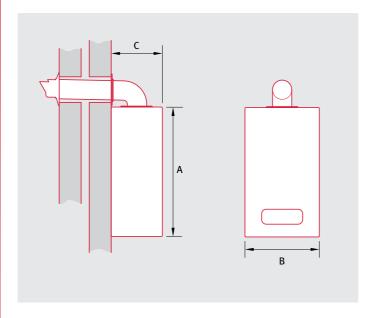
Made with high grade aluminium for proven and reliable performance.

• Exclusive to City Plumbing Supplies



Technical specification

Ultimate₃ regular dimensions



	Boiler dimensions	
Height (A) Width (B) Depth (C)		
740mm	418mm	300mm

Ultimate₃ regular clearances

Boiler clearances			
Тор	Side	Bottom	Front
300mm	0*	300mm	600mm**

 $^{^{\}star}\,$ See manual for clearance if side panels are to be removed to assist future service and maintenance

Ultimate ₃	Unit of measure	25 r
General		
Boiler type		Regular
Model output		25kW
Article number		0010021408
Gas Council number		47-019-52
Boiler dimensions (H x W x D)	mm	600 x 375 x 280
Heating		
Nominal heat output range at 50/30°C (Condensing mode)	kW	6.4 - 26.5
Nominal heat output range at 80/60°C (Non condensing mode)	kW	6 - 25.2
Maximum flow temperature	°C	80
Flow temperature range	°C	10-80
Flow temperature factory setting	°C	75
Approximate condensate volume at 50/30°C	litres/hr	2.55l/h
Modulation (max/min)	1:X	1:4.4
Domestic Hot Water		
Maximum heat output for water generation	kW	-
Lowest water pressure to operate boiler	bar	0.2
Lowest water flow for operation	l/min	1.9
Lowest water pressure for maximum flow rate	bar	1
Domestic hot water flow rate (at DT = $\Delta 35K$)	l/min	-
Hot water output temperature range	°C	-
Mechanical		
Expansion vessel size	litres	8
Gas inlet connection (pipe size)	mm	15
Heating flow and return connections (pipe size)	mm	15
Hot and cold water connections (pipe size)	mm	22
Heat exchanger material	Stainless/ Aluminium	Aluminium
Boiler lift weight (Dry boiler)	kg	22
Performance		
NOx (En 15502-2-1)	mg/kWh	39
ErP efficiency (Heating / DHW)		A/-
ErP efficiency	%	94
ErP decibel rating (sound power)	dBa	51
PCDB seasonal efficiency	%	89.6
Flueing options		
Rear flue options	Yes/No	No
Maximum horizontal flue length 60/100	m	10
Maximum vertical flue length 60/100	m	10
Maximum horizontal flue length 80/125	m	10
Maximum vertical flue length 80/125	m	25
Permissible flue classifications	C13, C33, C43, C53	C13, C33, C43, C53

^{**5}mm if removable panel or door

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Accessories

Part number	New Description	Range
0020219523	Horizontal flue kit DN 60/100	60/100
0020219524	Horizontal telescopic flue kit DN 60/100	60/100
0020219528	Horizontal flue kit 1.7m DN 60/100	60/100
0020219526	Rear telescopic flue kit DN 60/100	60/100
0020219538	Flue terminal kit, black	60/100
0020209763	Vertical flue adaptor DN 60/100	60/100
0020230604	Vertical flue terminal, black	60/100
0020199443	Flat roof flashing	60/100
0020258676	Pitched roof flashing	60/100
0020257007	Extension 0.5m DN 60/100 PP	60/100
0020257008	Extension 1m DN 60/100 PP	60/100
0020257445	Extension 2m DN 60/100 PP	60/100
0020267682	Extension 4m DN 60/100 PP	60/100
0020257009	Elbow 87 deg DN60/100 PP	60/100
0020257010	Elbow 45 deg DN60/100 PP (2 pieces)	60/100
0020267923	Flue support clips 200mm DN100 (5 pieces)	60/100
2000460487	Sliding sleeve DN 60/100	60/100
0020267683	Extension 0.5 to 0.8m telescopic 60/100 PP	60/100
A2043800	Ridge tile terminal (black)	60/100
0020267924	Flue support clips 100mm (pack of 5)	60/100
0020219531	Plume Management Kit black	PMK
0020219532	Plume Management Kit, white	PMK
0020219535	Plume deflector kit, black	PMK
0020219536	Plume deflector kit, white	PMK
0020219541	PMK extension 1m, black	PMK
0020219542	PMK extension 1m, white	PMK
0020219545	PMK elbow 87 deg, black	PMK
0020219550	PMK elbow 87 deg, white	PMK
0020219553	PMK elbow 45 deg, (2 off) black	PMK
0020219554	PMK elbow 45 deg, (2 off) white	PMK
0020257018	Horizontal air/flue duct & elbow & terminal	80/125
0020257016	Roof terminal black DN80/125 PP	80/125
0020257019	Extension 0.5m DN80/125 PP	80/125
0020257020	Extension 1m DN80/125 PP	80/125
0020257021	Extension 2m DN80/125 PP	80/125
0020257023	Elbow 87 deg DN80/125 PP	80/125
0020257024	Elbow 45 deg DN80/125 PP (2 pieces)	80/125
0020257022	Sliding sleeve DN80/125 PP	80/125
0020104559	Flue support clips (5 off) DN 60/100	80/125
0020209764	Vertical flue adaptor DN 80/125	80/125
0020193649	Pipe cover, large	ALL
0020193659	Pipe cover, small	ALL
0020193660	Spacing frame, small	ALL
0020193663	Upward piping kit	ALL
A2044800	Condensate pump	ALL
0020082851	Spacing frame, large	ALL
0020193661	Universal analogue timer	СОМВІ

Boiler Plus

The new Boiler Plus legislation has been designed to ensure that all households in the UK are energy efficient. Boiler Plus is the biggest piece of legislation since 2005 when the UK became the first country to become "all-condensing".

All new boilers from April 2018 must have a minimum ErP efficiency of 92% with time and temperature controls fitted if they aren't already present and working correctly.

Also combi boilers, the most popular boiler type in the market require one of four additional requirements. Each will need to suit each individual homeowner's circumstances. The measures available are:

- Load compensation the ability to use the current room temperature to modulate the flow temperature, this needs the control and boiler to intelligently communicate.
- Weather compensation the ability to use outdoor sensors to monitor the outside temperature and modulate the flow temperature from the boiler.
- **Smart control** An internet connected control that provides automated heating, hot water and optimised boiler efficiency.

From the feature-rich MiGo personal heating assistant to the very simple and cost-effective Climastat room thermostat, Glow-worm offers a wide range of intelligent and easy to use solutions to meet Boiler Plus.

Load Compensating Control	Weather Compensating Control	Smart Control
Climastat and Analogue Timer	Climapro ₁ and Outdoor Sensor*	MiGo Smart Control
220°	20.5 	20.5 = 15 = 15 = 15 = 15 = 15 = 15 = 15 =
Climapro ₁	Climapro ₂ and Outdoor Sensor*	
20.5 20.5	Section 1975	
Climapro ₂		
Service Co.		

^{*}Wired controls must always be paired with the wired outdoor sensor.

^{*}Wireless controls must always be paired with the wireless outdoor sensor.

Intelligent controls

All Glow-worm controls have been designed to work with the Ultimate₃ boiler range, so they are simple to install and your customer will get the ultimate in running efficiency, convenience and comfort. Adding any of our intelligent controls to your boiler will mean you are complying with the Boiler Plus legislation.

Climastat Thermostat

- Can be used in conjunction with a analogue plug in timer
- Wall mounted Climastat connects using simple low voltage eBus
- eBus connected Climastat means the boiler will modulate to manage heating in the most efficient way possible
- · Heating & hot water mode on indicator
- Service, fault and maintenance indication
- Clear digital display with 0.5°C temperature intervals
- Wide temperature range 5 30°C

Climapro₁ Wired & Wireless Programmable Thermostat

- Secure wall mounted thermostat is wired using simple low voltage eBus
- User friendly design with bright backlight
- Clear straightforward menus to set heating & hot water programmes
- Annual service reminder and auto daylight saving time
- eBus connected Climapro₁ means the boiler will modulate to manage heating in the most efficient way possible
- · Weather compensation using a simple wired or wireless outdoor sensor
- Climapro₁ RF wireless version available
- Climapro, wired version can be used with the smart wiring centre to offer two heating and one hot water zone. (S Plan Plus)
- · Automatic daylight saving time

Climapro₂ RF Wireless Programmable Thermostat

- Wireless thermostat works anywhere in the home
- Wall bracket for base location and secure storage
- RF receiver slots into the boiler, simple wireless setup, no electrician required
- · User friendly design with bright backlight
- Clear straightforward menus to set heating & hot water programmes
- Annual service reminder and auto daylight saving time
- eBus connected Climapro, RF means the boiler will modulate to manage heating in the most efficient way possible
- Weather compensation using a simple wireless outdoor sensor



Room Thermostat	✓
Programmable Room Thermostat	
Wireless Controls	
Load Compensation	✓

Weather compensation not possible



/
✓
\checkmark
\checkmark
\checkmark

- *When an outdoor sensor is included
- **Class VI possible when used with outdoor sensor



Room Thermostat	
Programmable Room Thermostat	\checkmark
Wireless Controls	\checkmark
Load Compensation	\checkmark
Weather Compensation*	\checkmark

- *When an outdoor sensor is included
- **Class VI possible when used with outdoor sensor

Wired & Wireless Outdoor Sensor

- Enables weather compensation when paired with Climapro, & Climapro,
- Works on indirect sunlight which re-charges the small PV cells
- Simple and quick to install
- No batteries required

MiGo Smart Control

- Smart phone app for Apple & Android devices to manage heating & hot water on the go
- · Simple & straightforward installation Installed and running in less than 30 minutes
- Easy & intuitive interface Fast and straightforward temperature control
- Self learning MiGo automatically learns the energy requirements of your home
- Installation assistant Seriously simple step by step pairing process
- Internet weather compensation MiGo only ever uses your energy as and when it needs to without an outside temperature sensor
- Energy consumption monitoring Gas and electricity consumption for both heating and DHW
- eBUS communication MiGo and Glow-worm boilers speak the same 'language'!
- · One heating circuit and DHW management DHW and central heating control
- In room thermostat can be wall mounted or a portable table top version
- Electronic paper display Clear display with low energy consumption
- Multi user sharing and multi-home control You and your family can manage several heating systems for the same or different locations





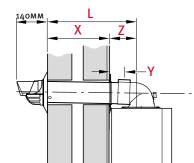
Room Thermostat	
Programmable Room Thermostat	\checkmark
Wireless Controls	\checkmark
Smartphone App controls	\checkmark
Load Compensation	\checkmark
Weather Compensation	\checkmark



Product	Article number
Analogue Timer	0020193661
Climastat	0020035402
Climapro ₁	0020118077
Climapro ₁ RF	0020118078
Climapro ₂ RF	0020085221
Wired Outdoor Sensor	0020040796
Wireless Outdoor Sensor	0020093880
MiGo Connected Combi Pack	0020223275
MiGo Connected System Pack	0020223276
Smart Wiring Centre ₂	0020135101

Flueing options

Horizontal top side flue (standard)



- L = Flue length, measured from outside wall face to centre line of flue outlet.
- X = Wall thickness.
- Y = Distance from wall to edge of air duct on flue elbow.
- Z = Distance from centre line of flue outlet to inside wall face.

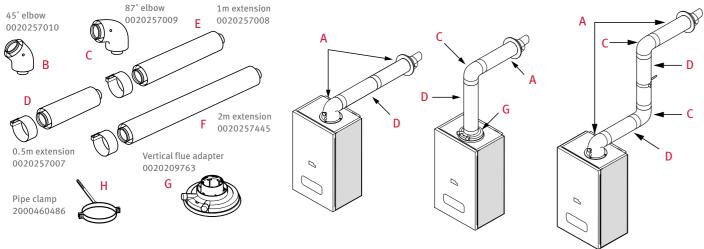
The maximum flue length with extensions must not be exceeded (refer to L in table below). For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for each 87°

	W	Model		X (mm)		Y (mm)	Z (mm)	Horizontal standard flue
			extensions	Min	Max	, ,	, ,	0020219523*
00		Ultimate ₃ 30c Ultimate ₃ 35c Ultimate ₃ 25s Ultimate ₃ 25r	10m 6m 10m 10m	75	645	65	150	ON A

^{*} white terminal as standard, for black terminal use 0020219538

Horizontal Accessories





Horizontal top side flue (standard)

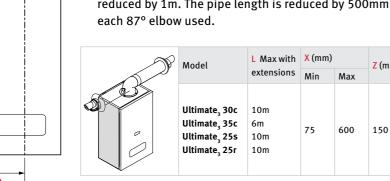


- L = Flue length, measured from outside wall face to centre line of flue outlet.
- X = Wall thickness.
- Y = Distance from the side of the boiler to the inside wall face.
- Z = Distance from centre line of flue outlet to the side of the boiler.

The maximum flue length with extensions must not be exceeded (refer to L in table below). For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for

Horizontal standard flue

0020219523*

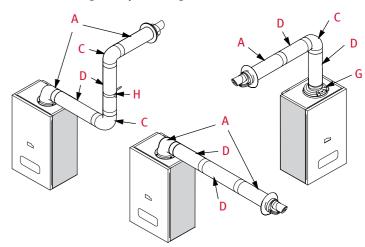


* white terminal as standard, for black terminal use 0020219538

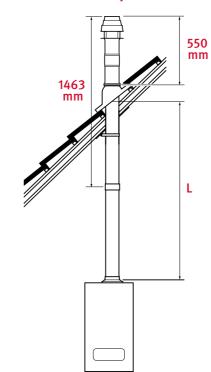
Horizontal Accessories

45° elbow 0020257009 0020257010 1m extension 2m extension 0020257445 0.5m extension Vertical flue adapter 0020257007 0020209763 Pipe clamp 0020267923

Flueing examples using extensions and bends



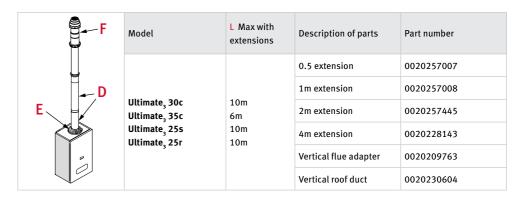
Vertical flue options



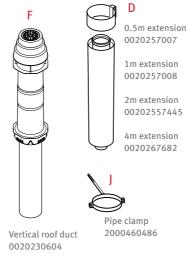
L = Flue length, measured from the top of the boiler to the underside of the roof flashing Maximum flue length is 10m plus external vertical roof terminal.

The maximum flue length must not be exceeded (refer to L in table below). For each additional 90° or 2 x 45° bends fitted, the maximum flue length must be reduced by 1m. The pipe length is reduced by 500mm for each 45° elbow and 1m for each 87° elbow used. Vertical flue options use the same 100mm diameter flue components as the horizontal

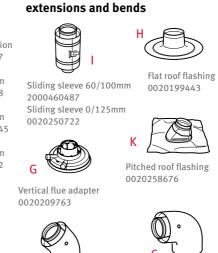
The vertical flue adaptor G is required for vertical installations.



Vertical Accessories



Flueing examples using



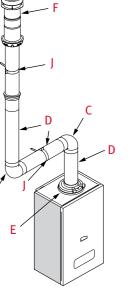


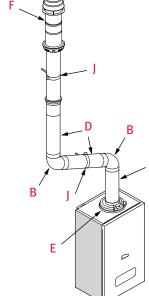




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Training

Glow-worm offer a range of centre based training facilities covering the complete Glow-worm range. To find out more please call us on 0345 601 8885, email training@glow-worm.co.uk or visit our website.

Support

Expert advice and support from installation to maintenance.

Technical help

• If you have a technical question simply call our technical help line on 0330 100 7679, email technical@glow-worm.co.uk or visit our website for a straightforward answer

Genuine high quality spares

- Spares availability for up to 15 years after production ends
- Nationwide spares stockists with over 500 locations
- Next day delivery service for emergency orders contact spares on 01773 881383 or spares@glow-worm.co.uk

Nationwide after sales service



clubenergy

The award winning loyalty programme from Glow-worm

Enjoy great member benefits when you register your Ultimate, installations including...



Option to extend guarantee to 7, 10 or 15 years



Business Development Free tools to grow your business



Cash Rewards On Glow-worm purchases



Training Free Training



Business Tools Including instant Gas Safe notifications

Plumbing Toolbox - The industry leading installer app for Club Energy members

Designed to make your working life easier!

The Plumbing Toolbox app includes loads of useful stuff...



Register your



Installs



Benchmark Completion Complete Benchmark and email it to your customers



Every Manual Wherever you are, right there in your pocket



Service Reminders Helping to keep you organised



To find out more about how you can benefit from Club Energy or join free today visit www.clubenergy.co.uk or call 03306 781414

Fault Finder



Literature for your customers

There are a number of easy ways for you to access Glow-worm product and homeowner literature:

- · Via our installer app Plumbing Toolbox
- Via telephone 01773 596 105
- · Available to download online at www.glow-worm.co.uk
- Via email literature@glow-worm.co.uk



Glow-worm

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