

FASTflo

Continuous flow wall hung balanced flue water heaters for Natural Gas and Propane
WH42, WH56, WHX56, LWH56, WHX56, LWHX56, WHC56, LWHC56



Please read and understand these instructions before commencing installation and leave this manual with the customer for future reference.

Andrews. Built to perform.



Reproduction of any information in this publication by any method is not permitted unless prior written approval has been obtained from Andrews Water Heaters.

Andrews Storage Water Heaters have been designed and manufactured to comply with current international standards of safety. In the interests of the health and safety of personnel and the continued safe, reliable operation of the equipment, safe working practices must be employed at all times. The attention of UK users is drawn to their responsibilities under the Health and Safety Regulations 1993.

All installation and service on Andrews Water Heaters must be carried out by properly qualified personnel and, therefore, no liability can be accepted for any damage or malfunction caused as a result of intervention by unauthorised personnel.

Andrews Water Heaters' policy is one of continuous product improvement and, therefore, the information in this manual, whilst completely up to date at the time of publication, may be subject to revision without prior notice.

Further information and assistance can be obtained from:

Customer support

Monday - Friday

8am - 5pm

Sales: 0345 070 1055

Technical: 0345 070 1057

Email: service@baxicommercialdivision.co.uk

Website: www.andrewswaterheaters.co.uk

Twitter: [@andrewsWH](https://twitter.com/andrewsWH)

Copyright Andrews Water Heaters 2016

Contents

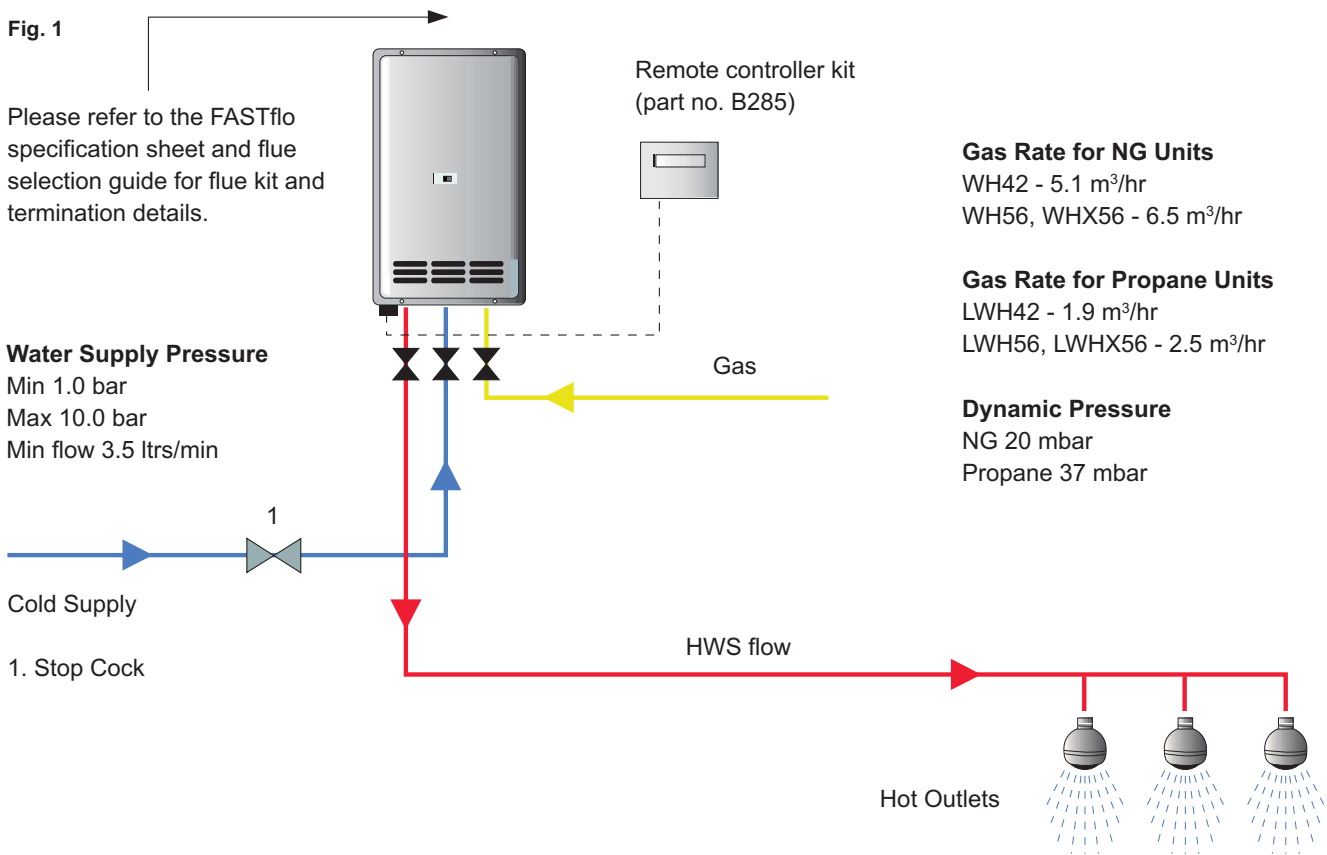
FASTflo Installation design guide for WH and WHX model water heaters

| | | |
|----------|---|----------|
| 1 | Installations | 4 |
| 1.1 | WH and WHX single water heater installation without secondary return | 4 |
| 1.2 | WH and WHX single water heater installation with secondary return | 4 |
| 1.3 | WH and WHX multiple water heater installation without secondary return | 5 |
| 1.4 | WH and WHX multiple water heater installation with quick connect cord kit | 5 |
| 1.5 | WH and WHX multiple water heater installation with secondary return | 6 |
| 1.6 | WH56 and WHX56 multiple water heater installation with system controller kit | 6 |
| 1.7 | WH and WHX single water heater installation with ST range storage cylinder | 7 |
| 1.8 | WH and WHX multiple water heater installation with ST range storage cylinder, quick connect cord kit and secondary return | 7 |
| 2 | Water flow rates | 8 |
| 2.1 | WH and WHX water flow rates | 8 |
| 3 | Controller kit | 9 |
| 3.1 | System controller kit (part no. B287) for WH56, LWH56 and WHX56 | 9 |

1 Installations

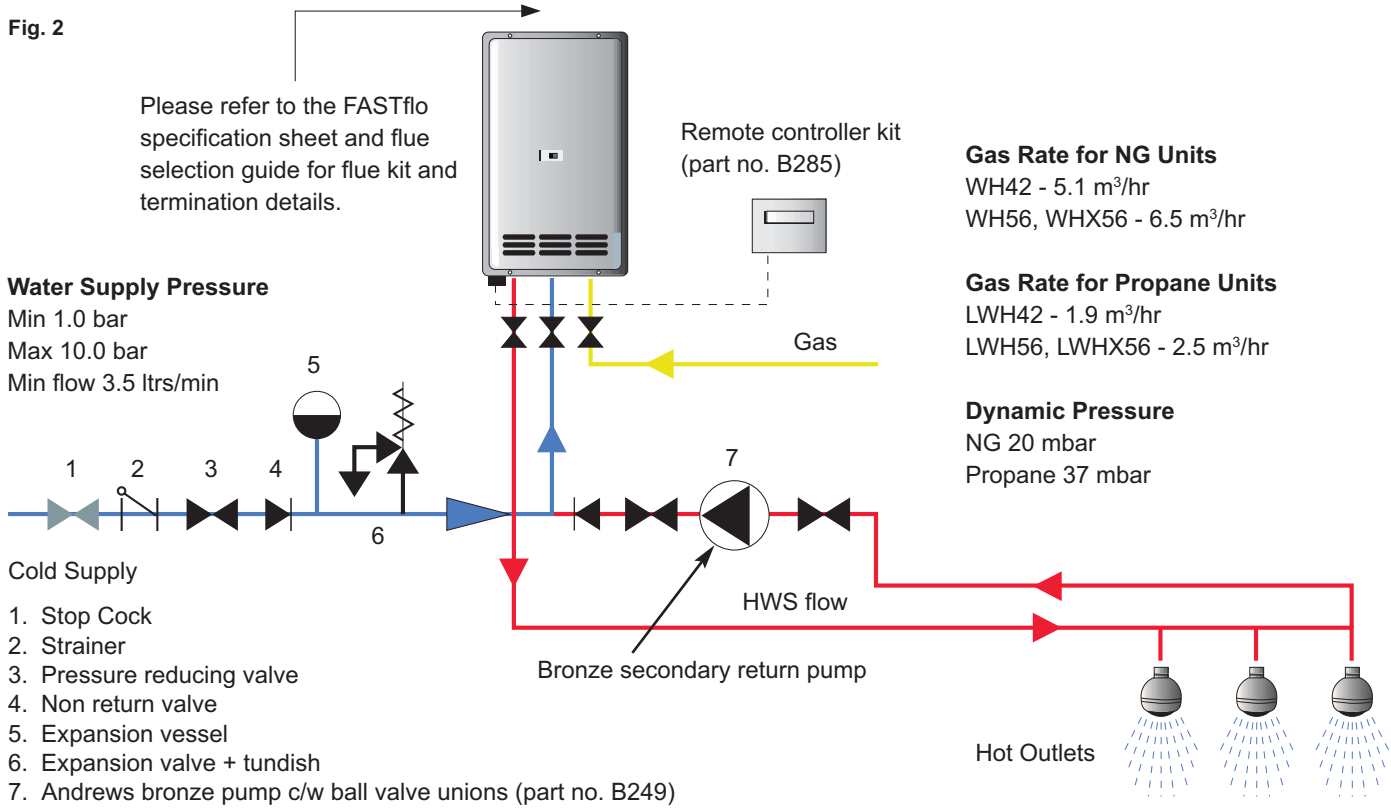
1.1 WH and WHX single water heater installation without secondary return

Fig. 1

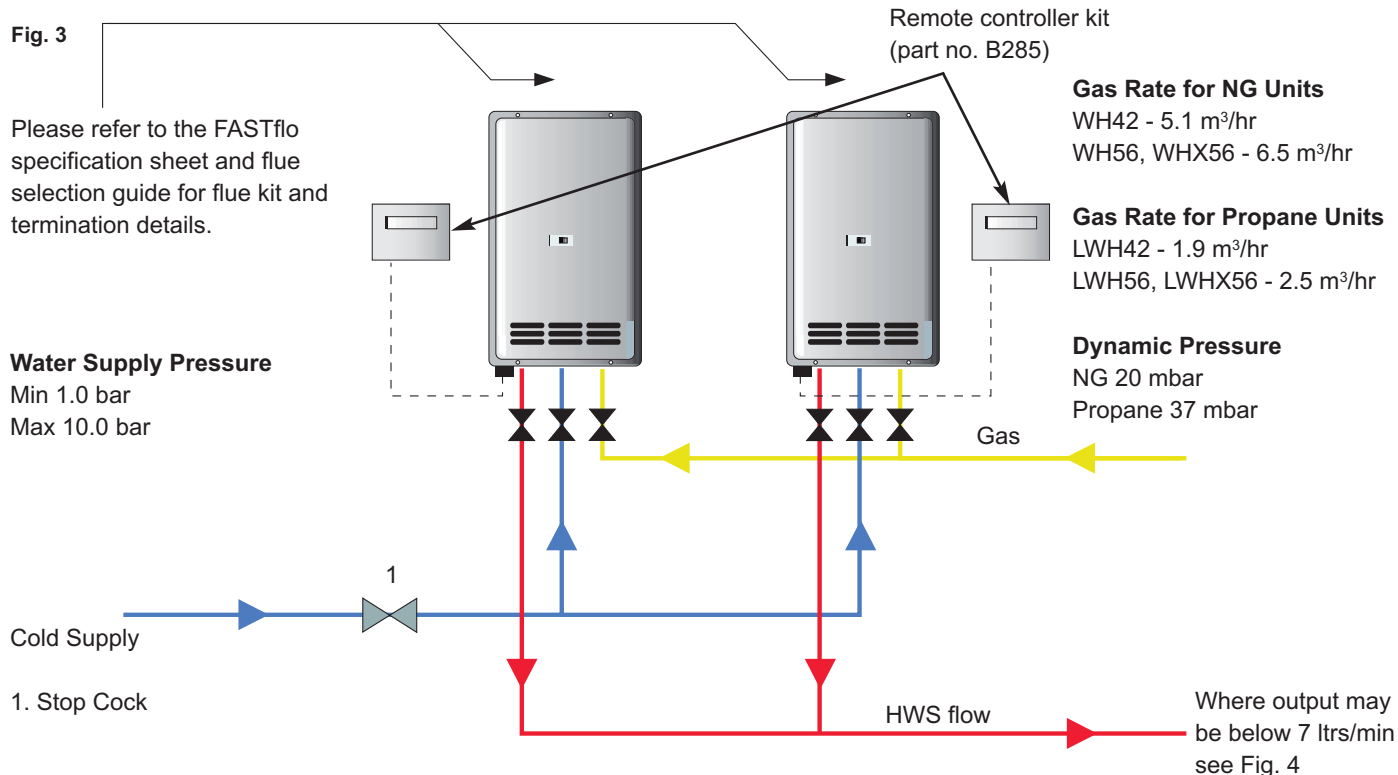


1.2 WH and WHX single water heater installation with secondary return

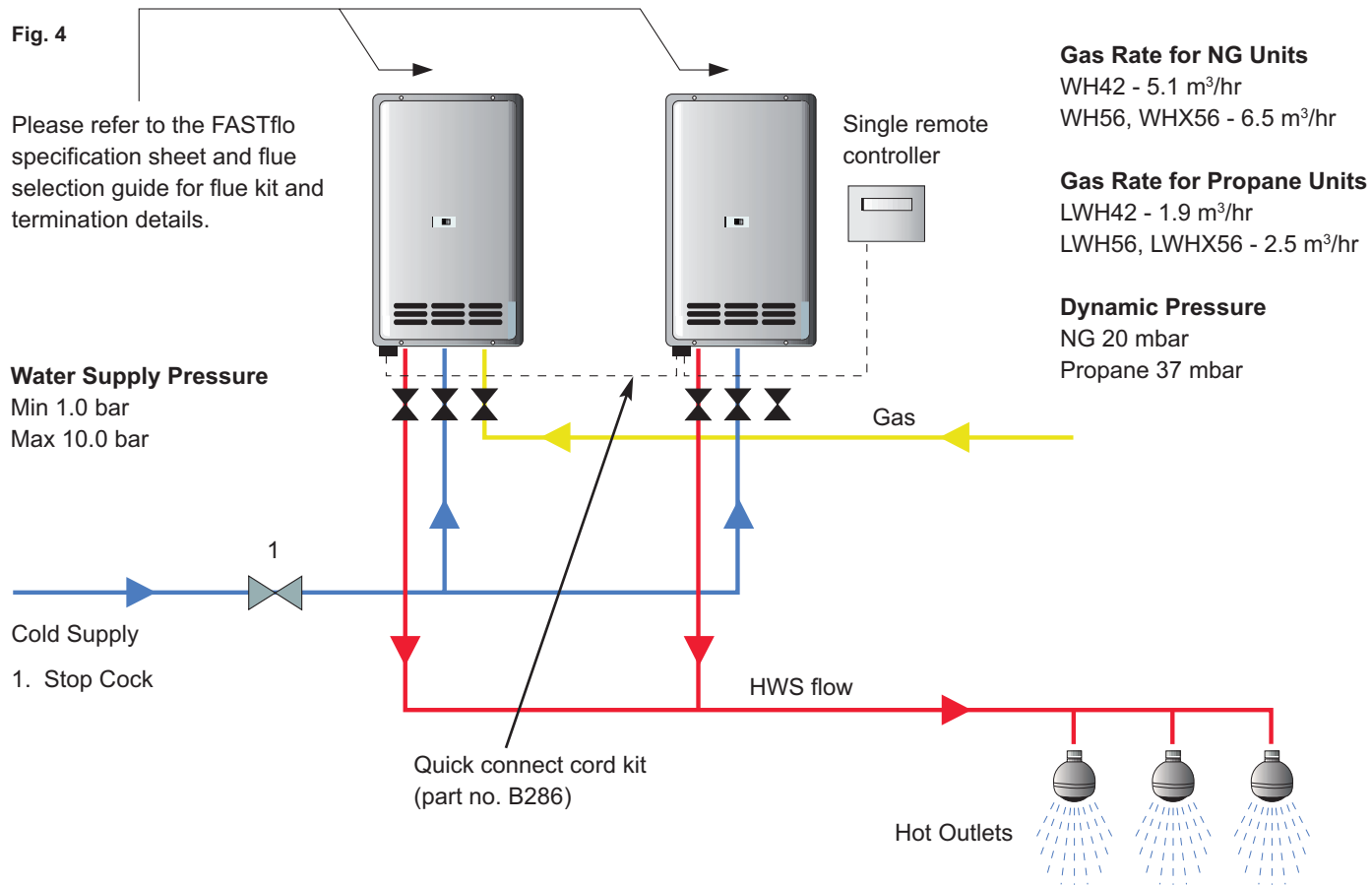
Fig. 2



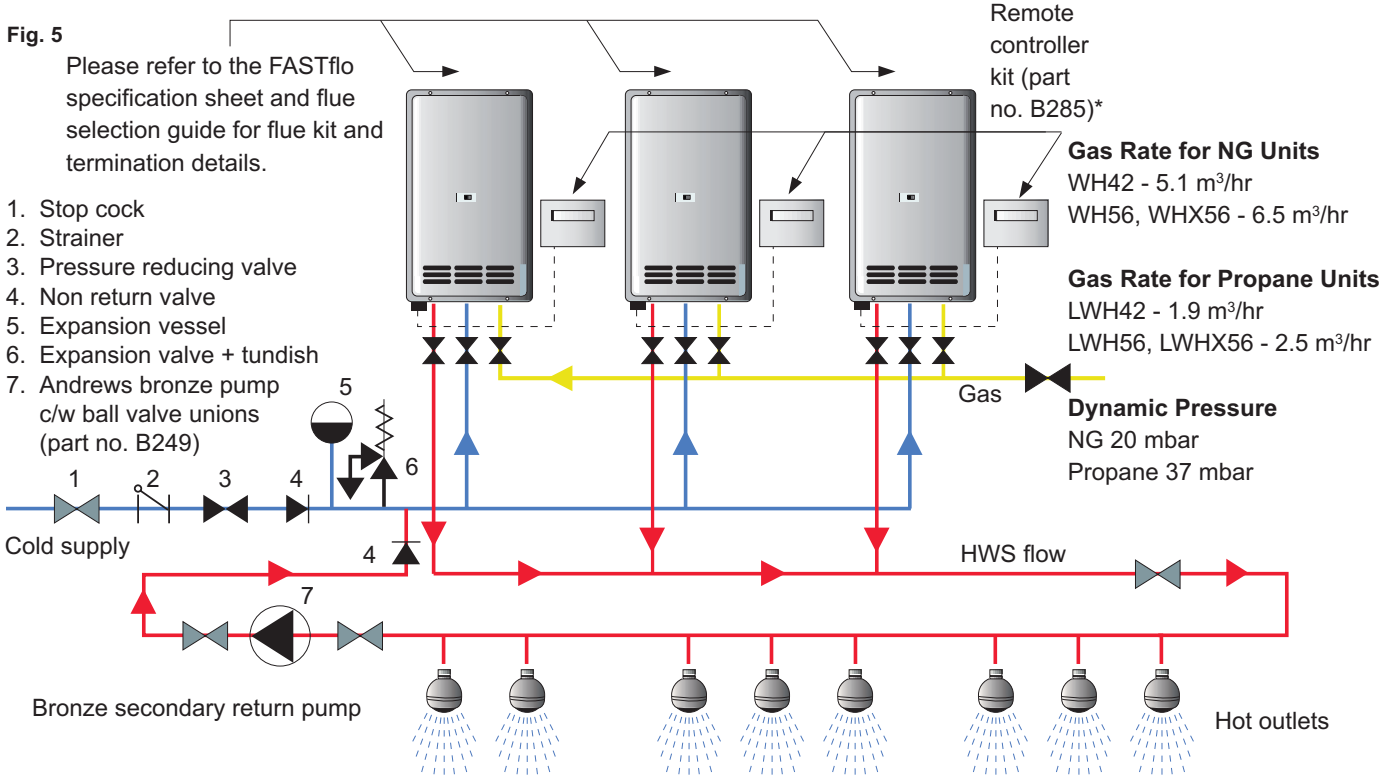
1.3 WH and WHX multiple water heater installation without secondary return



1.4 WH and WHX multiple water heater installation with quick connect cord kit

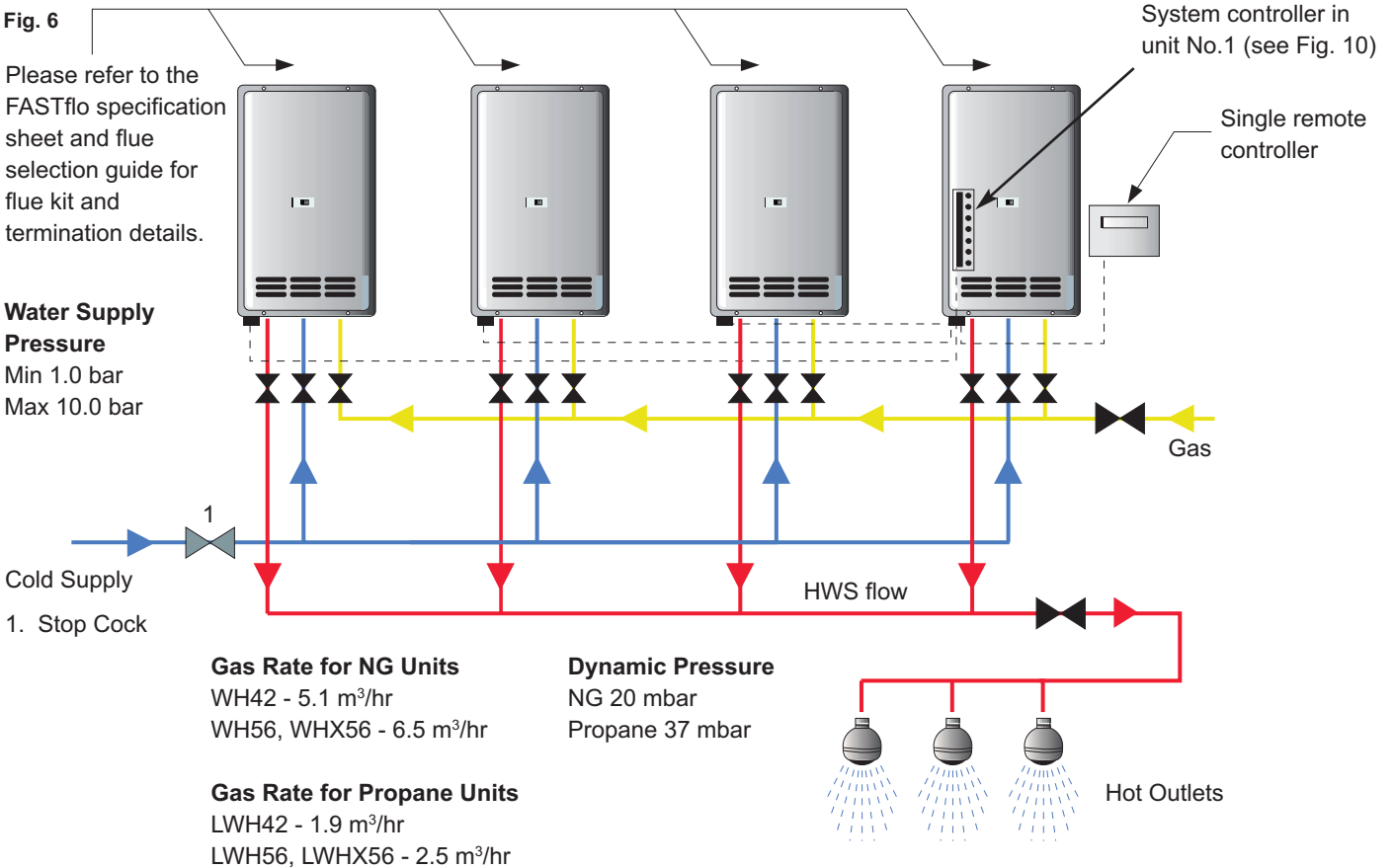


1.5 WH and WHX multiple water heater installation with secondary return



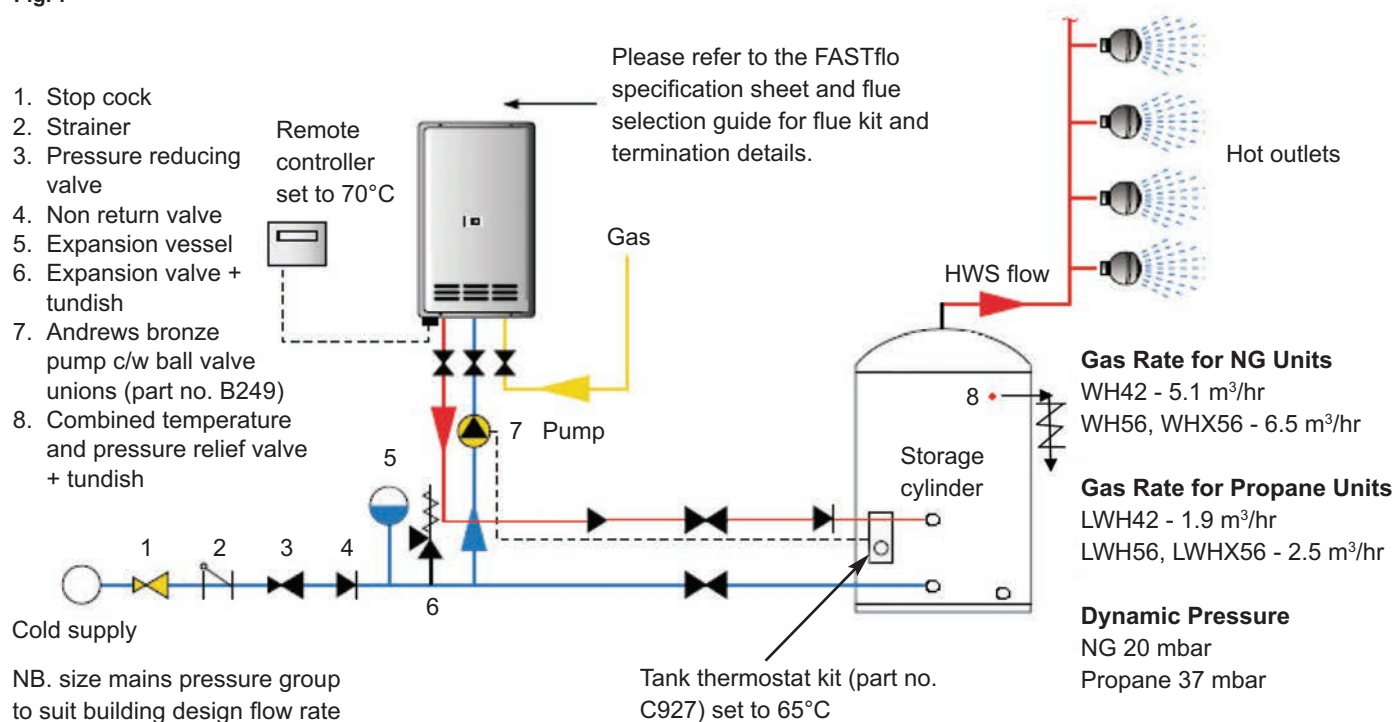
*An electronic system controller kit can be used as an alternative when manifolding up to six units. (see Fig. 6 and 10)

1.6 WH56 and WHX56 multiple water heater installation with system controller kit



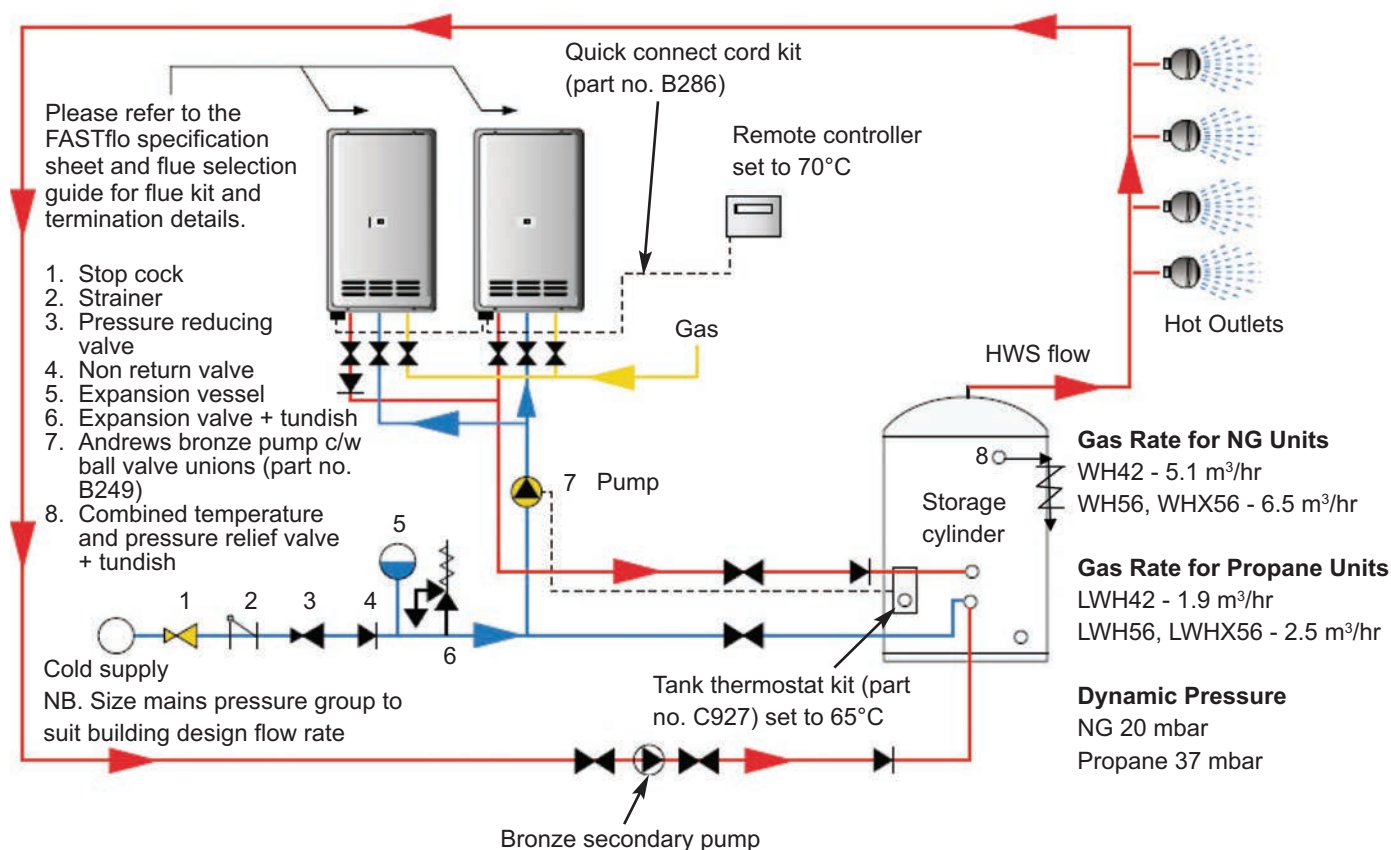
1.7 WH and WHX single water heater installation with ST range storage cylinder

Fig. 7



1.8 WH and WHX multiple water heater installation with ST range storage cylinder, quick connect cord kit and secondary return

Fig. 8



2 Water Flow Rates

2.1 WH and WHX water flow rates

Fig. 9

| Performance Chart | | | | | | | | | | | | | |
|---|-------------------------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|-----------------------|-------|
| Water flow at different temperature rises | Andrews Model Reference | Temperature Rise 25°C | | Temperature Rise 35°C | | Temperature Rise 45°C | | Temperature Rise 55°C | | Temperature Rise 65°C | | Temperature Rise 75°C | |
| | | L sec | L min | L sec | L min | L sec | L min | L sec | L min | L sec | L min | L sec | L min |
| | | WH42, LWH42 | 0.40 | 24.0 | 0.29 | 17.4 | 0.22 | 13.2 | 0.18 | 10.8 | 0.15 | 9.2 | 0.13 |
| WH56, LWH56 | 0.53 | 31.8 | 0.38 | 22.8 | 0.30 | 18.0 | 0.24 | 14.4 | 0.20 | 12.3 | 0.18 | 10.6 | |
| WHX56, LWHX56 | 0.53 | 31.8 | 0.38 | 22.8 | 0.30 | 18.0 | 0.24 | 14.4 | 0.20 | 12.3 | 0.18 | 10.6 | |

The flow rate will vary dependant upon the temperature selected at outlet and the incoming water temperature.

The flow rate can be calculated using the following formula or by reference to the charts above.

WH42, LWH42 = 42 kW output
 WH56, LWH56 = 55.8 kW output
 WHX, LWHX56 = 55.8 kW output

$$\text{Flow rate L/S} = \frac{(\text{Heater output}) \text{ kW}}{\Delta t (\text{temperature rise}) \times 4.2 \text{ specific heat}}$$

In addition to the above the maximum flow through each heater is pre-set independent of temperature, maximum flow rate for the WH42 is 24 L/min and maximum flow rate for the WH56 and WHX56 is 31.8 L/min.

3 Controller kit

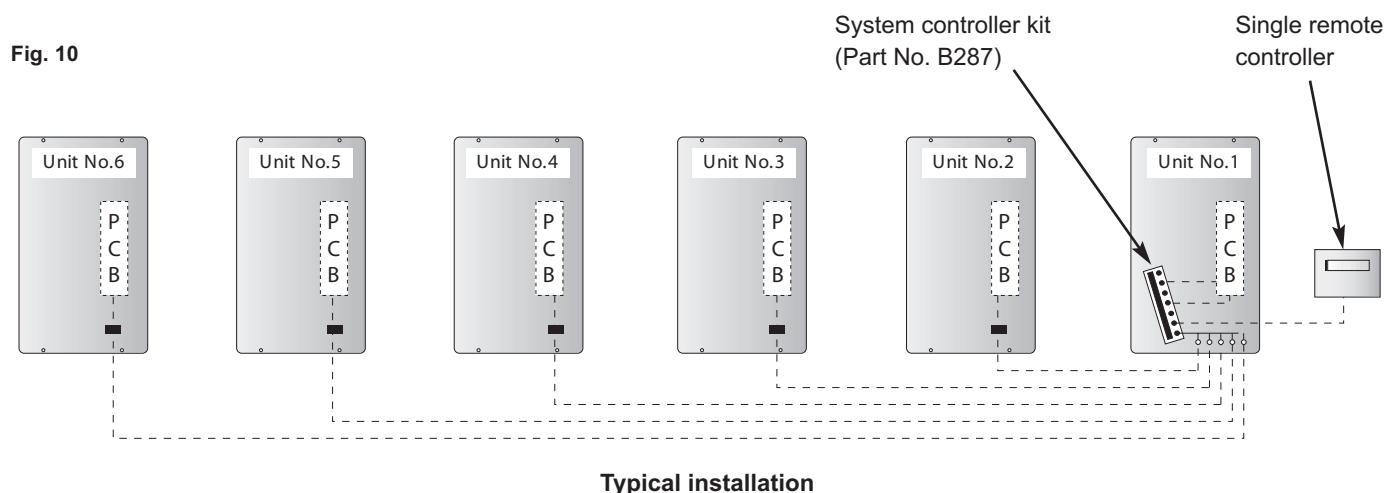
3.1 System controller kit (part No. B287) for WH56, LWH56 and WHX56

The System Controller Kit can be used as an alternative to the Quick Connect Cord Kit (two unit installation) or for controlling up to six manifolded water heaters.

The master unit (No.1) contains the System Controller module and includes plug connectors to enable the control cords from the other units to be connected up to the master unit.

In addition the System Controller incorporates the following standard features, BEMS fault indication, Remote 'Power On' indication, Primary Pump connection via cylinder thermostat, Secondary Circulation Pump connection and Remote Switching.

A comprehensive installation manual is available from our sales department.



System operation

The control panel randomly selects some heaters at the ready stage and some at the standby stage, and heaters will start dependent upon water flow and temperature settings.

The system rotates the lead and standby units after every eight hours operating time.

As the flow rates increases additional units will fire thus maintaining the required system flow temperature.

The remote controller must be connected to Unit No.1 and temperature settings on this controller will be communicated to the other manifolded heaters on the system.

The System Controller is not required when the installation incorporates a storage cylinder / buffer vessel or if a constant large volume of hot water is required.

© Copyright

All technical and technological information contained in these technical instructions, as well as any drawings and technical descriptions supplied, remain our property and shall not be multiplied without our prior consent in writing. Subject to alterations.



Register now to activate your warranty www.andrewswaterheaters.co.uk/register-a-warranty.
Please make sure you attach proof of purchase for your warranty to be monitored.

All descriptions and illustrations provided in this document have been carefully prepared but we reserve the right to make changes and improvements in our products which may affect the accuracy of the information contained in this leaflet. All goods are sold subject to our standard Conditions of Sale which are available on request.

July 2016

Customer support
Monday - Friday
8am - 5pm

Sales
0345 070 1055
Technical
0345 070 1057
Website
andrewswaterheaters.co.uk
Twitter
@AndrewsWH

