

**Product Instruction Manual** 

# Speedflow



SF05K, SF10K & SF15K SF05KSS, SF10KSS & SF15KSS Undersink unvented water heater Thank you for purchasing a Hyco Speedflow unvented water heater. The Speedflow is ideal for use in cloakrooms and kitchens in offices, shops, student accommodation and domestic premises which have been extended and there is no central hot water system nearby. One unit located under the kitchen sink is often used to supply hot water for light dishwashing in the kitchen sink and hand washing in the cloakroom basin. Please read and understand these instructions before commencing installation and leave them with the user when installation is complete.

#### 1. Important safety points

- The unit must be installed and maintained by a competent person in accordance with current electrical and plumbing regulations.
- Only connect the heater to a single phase supply with a mains voltage as specified on the rating plate.
- Do not connect to power unless unit is full of water open tap and allow water to flow freely to clear airlocks.
- Do not switch power on if water in heater or pipes could be frozen.
- Always fit the heater the correct way up (pipes should be at the top).
- It is essential that the supplied pressure-relief device is fitted, make plumbing connections with flexible stainless steel hoses to facilitate future maintenance.
- Water may drip from the discharge pipe of the pressure-relief device and this pipe must be left open to the atmosphere.
- The pressure-relief device is to be operated regularly to remove lime deposits and to verify that it is not blocked.
- Use lowest acceptable temperature setting to save energy and reduce lime scale.
- This appliance can be used by children aged from 8 years and above and persons
  with reduced physical, sensory or mental capabilities or lack of experience and
  knowledge if they have been given supervision or instruction concerning use of
  the appliance in a safe way and understand the hazards involved. Children shall
  not play with the appliance. Cleaning and user maintenance shall not be made
  by children without supervision.

#### 2. Installation

#### **Wall Mounting**

The Speedflow is normally fitted immediately below the outlet to be supplied, but it can be mounted above or to the side of the outlet provided it is vertical with the pipe outlets at the top. The unit can either be placed directly on the floor or fixed to a wall using the mounting bracket supplied.



Ensure the mounting surface is strong enough to support the speedflow including the weight of the water.

The 5 litre models (SF05K/SS) can typically serve 1 sink, the 10 litre models (SF10K/SS) can typically serve 1 or 2 sinks and the 15 litre models (SF15K/SS) can typically serve 2 or 3 depending on simultaneous usage.

#### **Plumbing**

A service valve should be fitted to allow / facilitate future maintenance.



The supplied 6 bar pressure relief valve must always be fitted. There must be no obstructions in the pipwork between the heater and the relief valve. The relief valve must discharge to a safe and visible place.

The hot and cold fittings are 1/2'' BSP and are at the top of the unit. These connections are colour coded (blue = cold, red = hot). They are not interchangeable.

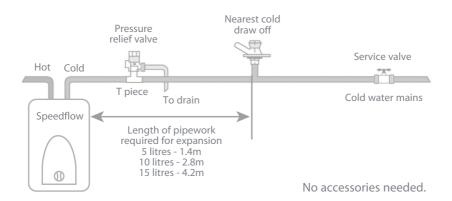
The final connection of the Speedflow to pipework should be implemented with flexible stainless steel hoses.



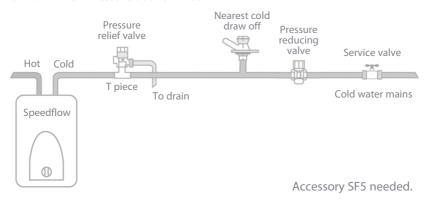
Open hot water tap and allow water to run through fpr at lease 5 seconds to clear airlocks.

Depending on the installation circumstances, other accessories may be required. If required, these must be ordered separately and are installed as shown on the diagrams below and on the next page. Water pressure can increase considerably at night when demand is low, so a pressure reducing valve may be required even if there is no obvious problem at installation.

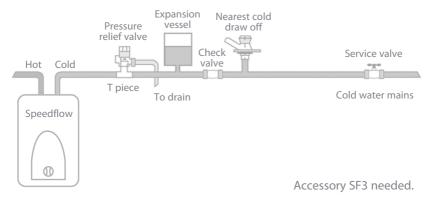
#### **DIAGRAM A** - Pressure below 4.2 bar



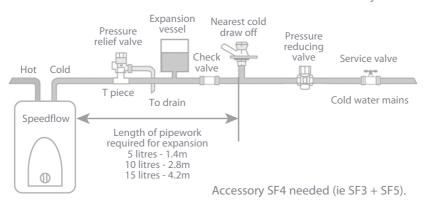
#### **DIAGRAM B** - Pressure above 4.2 bar



#### **DIAGRAM C** - Pressure below 4.2 bar and cold water draw off nearby



#### **DIAGRAM D** - Pressure above 4.2 bar and cold water draw off nearby



#### **Electrical**

- Installation must comply with the latest IEE regulations.
- Connection should be to a fused switched 13A spur. If the cable length is insufficient, it is recommended that the entire cable is replaced and no joins made to the original.

This product must be earthed.



Important: do not switch the heater on unless you are certain that it is completely full of water. failure to do so will void the warranty.

#### 3. Operation

Switch on the mains supply. The external neon lamp indicates when the element is heating.



Use the lowest acceptable temperature setting to save energy.



Hot water may present a scalding hazard, especially to children or the infirm. Athermostatic blending valve is recommended in high risk situations.

#### Thermal cutout reset, element replacement and anode replacement



Discount electricity supply before maintenance.

A re-settable safety thermal cut-out switches off the element in the event of the unit over-heating.

The thermal cut-out may trip occasionally in normal use. If this happens the heater will not heat water and the element light will not come on.

The thermal cut-out is located underneath the unit behind the grey access plate.

Depending on the mounting position of the unit, you may need to uninstall the unit for ease of access to the cutout.

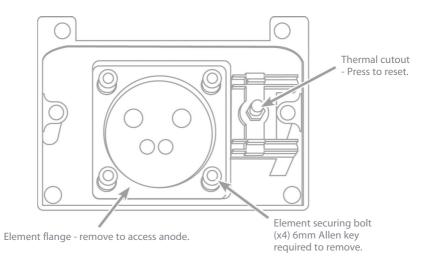
In these cases, disconnect electricity supply and unscrew flexible hose connectors. Drain water from heater and locate grey access plate.

Remove the cover retaining screws and gently prise cover off. The thermal cut-out will be visible, as shown below.

To reset the cutout, depress the button in the centre of the device. If the device has tripped reduce the thermostat setting if possible.

If the device trips repeatedly with a low thermostat setting, contact Hyco Technical Department on 01924 225200.

To access the element or anode, unscrew the bolts holding the flange in position. The element and anode can then be removed. Reverse to re-fit.



#### 4. Maintenance

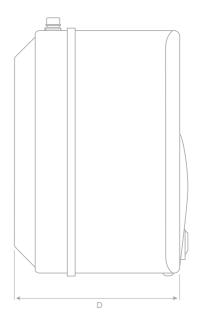
A grey cylindrical magnesium sacrificial anode is fitted to the element to aid tank corrosion resistance. The anode condition should be inspected annually and replaced if the there are signs of significant corrosion.

The pressure relief valve should be checked annually by twisting the cap and verifying water is discharged.

## 5. Specifications

Supply	230V ~ 50Hz	
Power	2kW	
Tank Capacity	SF05K/SS - 5 Litres	
	SF10K/SS - 10 Litres	
	SF15K/SS - 15 Litres	
Tank Material	K Models - Vitreous enamel lined steel	
	SS Models - Stainless steel SUS 304 1.2mm	
Dimensions (h x w x d)	SF05K/SS 320 x 280 x 245mm	
	SF10K/SS 410 x 310 x 280mm	
	SF15K/SS 530 x 310 x 280mm	
Pressure relief valve setting	6 bar	
Thermal cutout	Manual reset 85°C	





## 6. Troubleshooting

Sympton	Possible cause	Solution
Water constantly flows from pressure relief valve.	Water pressure is too high (above 4 bar).	Fit Pressure Reducing Valve Kit (Hyco Kit SF4).
Water flows from pressure relief valve	Heated water cannot expand back up inlet pipe	Fit Expansion Vessel Kit (Hyco kit SF3).
Water is not heated	<ol> <li>Thermal cut-out has tripped.</li> <li>Element has failed.</li> <li>Thermostat has failed.</li> </ol>	1. See section 6. Check heater is correct way up (pipes at top). 2. Replace element. See section 6 for access to element. 3. Replace thermostat.
Small volume of hot water	1. Unit upside down. 2. Thermostat set too low. 3. Thermostat fault.	Re-install correct way up.     Increase thermostat setting.     Replace thermostat.
Water appears to leak from heater	Poor connections to pipework.     Element gasket leak.	1. Check plumbing connections, especially those to inlet and outlet. 2. Refit gasket, tighten flange bolts evenly. Do not over tighten. See section 6 for access to element.

If problems persist contact Hyco Technical Dept on 01924 225200.

### 7. Guarantee and service policy

This product is guaranteed against faulty materials and manufacture for a period of one year from the date of purchase. Hyco will in its sole discretion replace, repair or refund any faulty unit. Incorrect installation and failure to follow correct operating instructions are excluded. Consequential costs such as labour charges or damage to surroundings are expressly excluded.



INFORMATION FOR CORRECT DISPOSAL OF THE PRODUCT IN ACCORDANCE WITH THE FUROPEAN DIRECTIVE 2002/96/F.

At the end of its working life this equipment must not be disposed of as household waste. It must be taken to a local authority waste collection centre or to a dealer providing this service. Disposing of electrical and electronic equipment separately enables its components to be recovered and recycled to obtain significant savings in energy and resources. In order to underline the duty to dispose of this equipment separately, the product is marked with a crossed out dustbin.

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