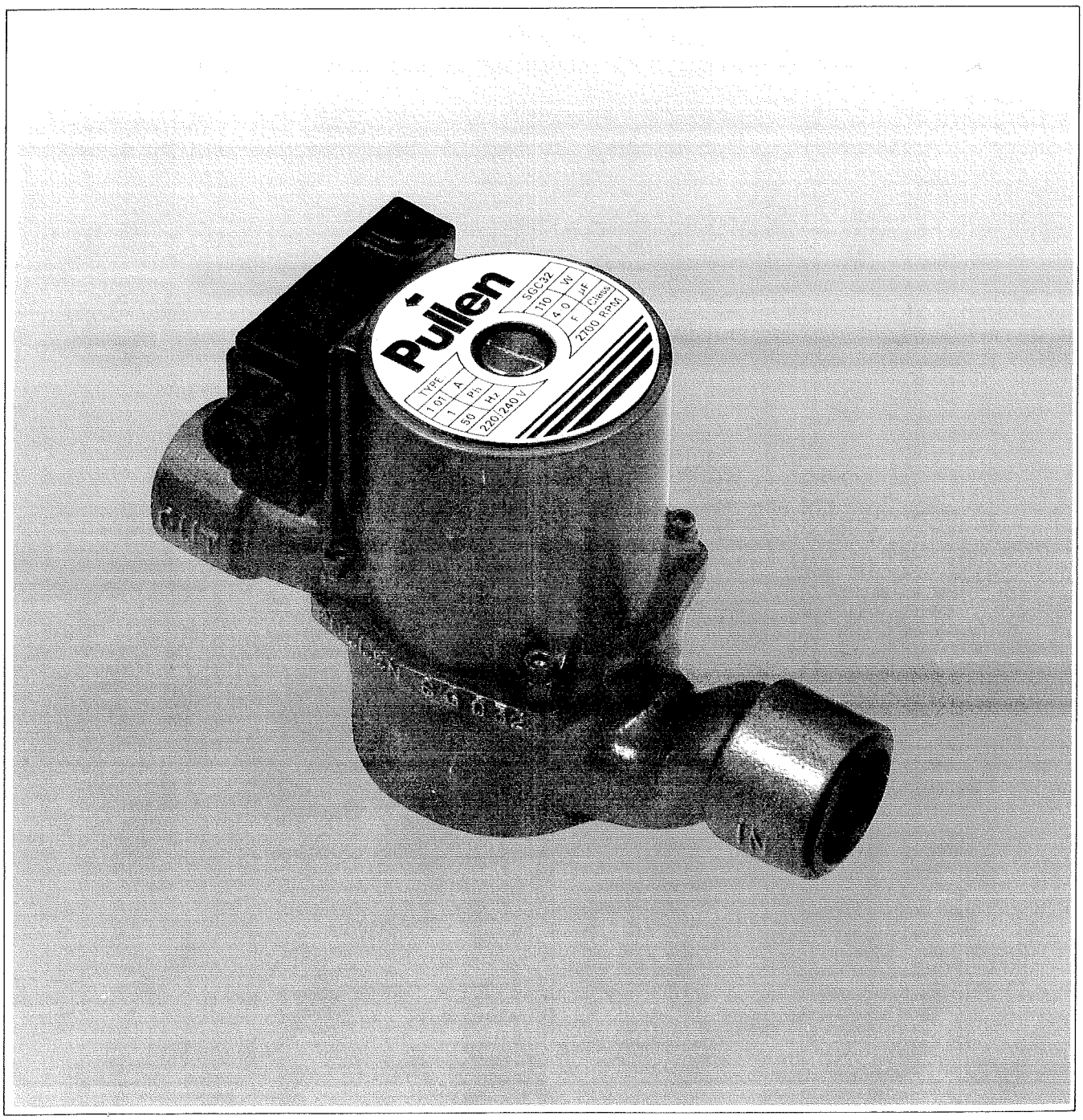
Pullen

Canned Rotor Pumps Series SGC

0 – 2.5 l/s

For hot water supply Secondary and Heating Systems



SGC — Quiet Canned Rotor Pumps

Application

The SGC pumps have been designed for Hot Water Supply Secondary circulation, where a corrosion-resistant gunmetal casing is required, or for circulating water in pressurised and non-pressurised heating systems, where a cast-iron casing is normally used.
The pumps are suitable for handling water at temperatures up to 110°C and system pressures up to 6 or 8 bar, depending on the size of pump.

Canned rotor pumps should not be used for chilled water systems owing to the additional energy required to overcome the heat input from the motor to the system.
See Leaflet No. VM201 for details of Pullen VM(P) pumps with dry motors, which are ideally suited to this application.

Quiet Running

SGC pumps are exceptionally quiet in operation. They are fitted as standard with silent-running single-phase motor, making them ideally suited to applications where noise must be kept to a minimum.

Long Maintenance-Free Life

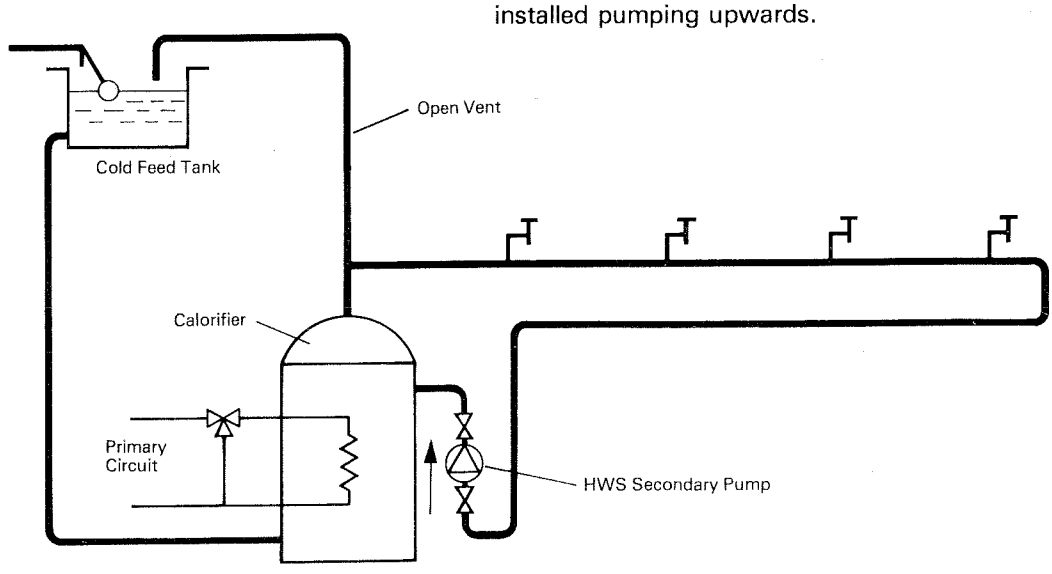
The canned rotor design has no shaft-seals, thereby giving totally leak-free operation and since the bearings are water lubricated no maintenance is required. When installed correctly, the unit will give many years of trouble-free operation and if a replacement should eventually be required, a new head, comprising motor and complete rotating element can be fitted into the existing casing simply by removing four screws.

Installation

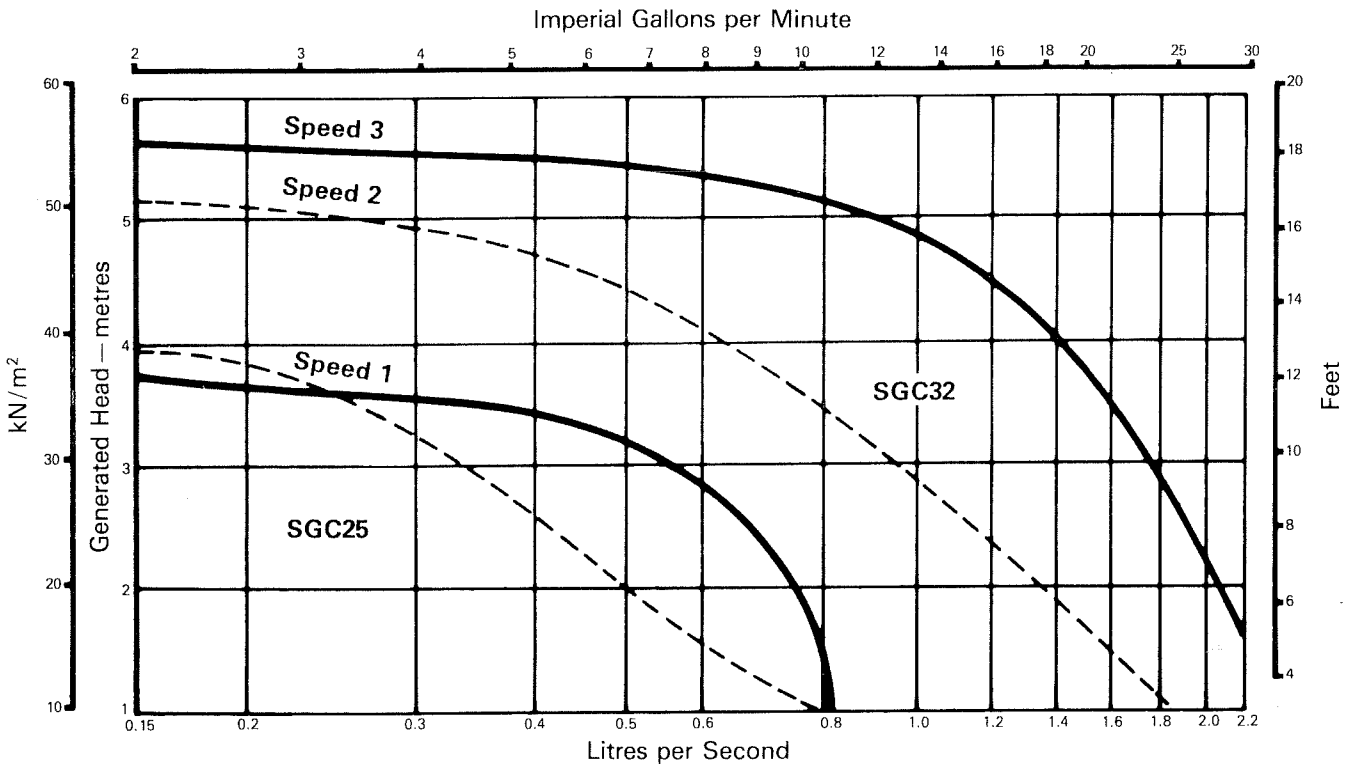
The pipework should be sized to pass the required quantity of water without excessive frictional losses. Locate the pump so as to provide adequate motor ventilation and sufficient room to permit pump head removal. Use flexible conduit at electrical connection to facilitate this removal.
The pump should NOT be fitted into the lowest point in the system as the build-up of sediment in this region will damage the bearings and could cause the pump to seize.
It is recommended that isolating valves be fitted to the suction—and discharge—pipework so that the pump can be inspected without draining down the system. The pipework must be supported as close to the pump as possible and should line up correctly with the inlet and outlet ports to prevent any pipe strain being imposed on the pump casing.

Recommended position of Pump in HWS systems

Owing to the large amount of air present in HWS Systems we recommend that the pump should be installed pumping upwards.



Performance Characteristics

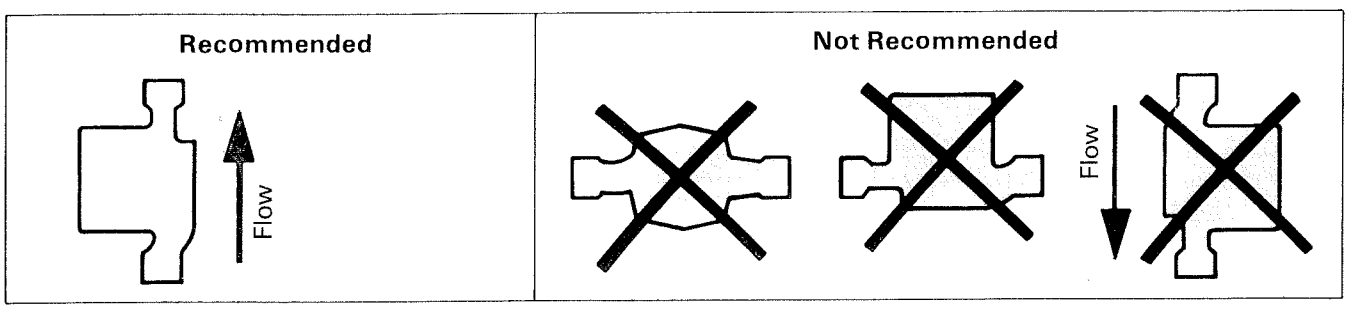


Capabilities

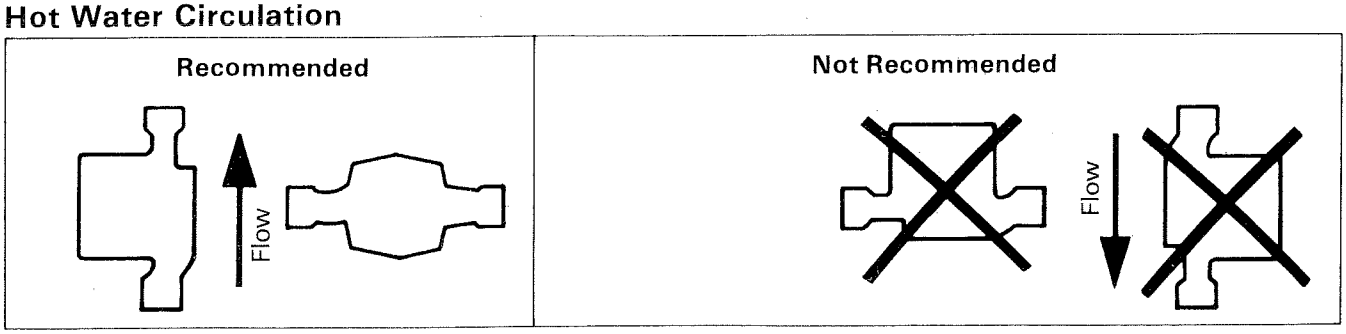
	SGC25				SGC32			
Maximum Working Pressure	8 bar				6 bar			
Maximum Working Temperature	110°C when operating in an ambient temperature not exceeding 50°C. If ambient temperature exceeds 50°C then working temperature must be reduced accordingly.							
Minimum Positive Head at Inlet (for quiet running)								
Water Temperature °C	80	90	100	110	80	90	100	110
Min. Positive Head metres	0.5	1.5	5	9.2	1.0	2.5	6	10.2

Mounting Arrangements

HWS Secondary



Hot Water Circulation



Note:
It is important to ensure that the discharge pipework from the pump rises to clear the air passed through the pump.

Specification

Casing: Manufactured from high-grade gunmetal to BS1400 Grade LG-2C—HWS Secondary applications.
or Manufactured from high-grade cast iron to BS1452 Grade 220—Heating applications.

Impeller: Fabricated from lightweight stainless steel with extremely smooth surfaces to give maximum performance and minimum drag. Accurately balanced to give quiet, vibration-free operation.

Sealing Ring: Stainless steel and renewable.

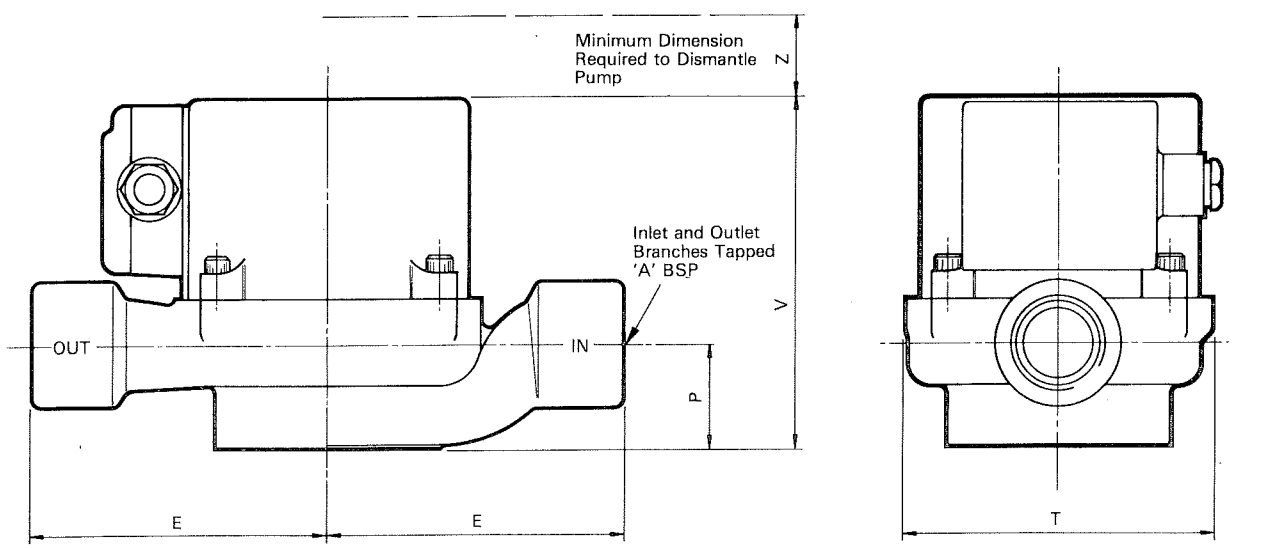
Motor: Single phase only, incorporating a stainless steel can, which positively seals the motor windings from the pumped water, and a ceramic shaft running in water-lubricated ceramic bearings, giving a long trouble-free motor life.
SGC32 is supplied with a three-speed motor giving flexibility to the pump output.
Supply voltage required: 220/240V 1ph 50Hz.

Motor Protection

The SGC25 pump does not require motor protection as the temperature of the windings, even under locked rotor conditions, will not exceed the maximum design limitations.
The SGC32 pump does require motor protection and we recommend the use of a starter, fitted with the correct thermal overload. This equipment can be supplied by Pullen Pumps.

Pump	Motor Input	Running Current	Starting Current	Speed rpm
SGC25	40W	0.42 A	0.6 A	2500
SGC32	140W	0.62 A	0.93 A	2400(3)
	125W	0.57 A	0.67 A	1650(2)
	80 W	0.39 A	0.43 A	1050(1)

Dimensions



Pump	A	E	P	T	V	Z	Weight kg
SGC25	1" BSP	105	37	110	130	25	4.5
SGC32	1¼" BSP	130	46	118	170	30	6.8

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