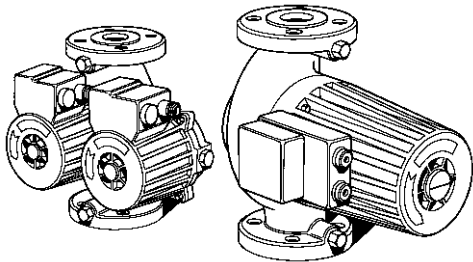


SILENTFLO GLANDLESS CIRCULATORS



Flooded rotor, glandless circulators for continuous service, in domestic and commercial heating. Circulators with Gunmetal casing should be used on secondary hot water service systems.

OPERATING LIMITS

Code	B	S	SL
Temperature range Deg C	15-65	15-110	15-120
Maximum pressure bar	6	6	6/10
Performance test standard	BS5316 part 1:1976/ISO 2548		
Standard electric supply	380/415 V, 3Phase, 50Hz-code E3 220/240 V, 1 Phase, 50Hz-code E1		

Maximum water temperature at ambient air temperature

Air temperature Deg C	20	30	45	60
Water temperature Deg C	110	100	90	80

INSTALLATION

LOCATION

The circulator should be located in a clean, dry, ventilated environment and be easily accessible for servicing. Do not position near hot surfaces. Isolating valves should be fitted to the inlet and outlet of the circulator.

TERMINAL BOX

To allow access to the circulator terminal box it is possible to rotate the motor assembly by removing the four fixing screws, it is advisable to carry out this operation before filling the system with water otherwise the circulator should be isolated and drained of water. Take care not to damage the casing gasket.

CAUTION - Water must not be allowed to enter the motor terminal box. Do not install with the terminal box on the underside of the motor, as water can enter the terminal box whilst venting or from drips from valve glands etc. This can cause motor failure.

INSTALLATION ARRANGEMENTS

- 1 - Before installing the equipment complete all necessary pipework and flush until clean.
- 2- **CAUTION** - Always install both single and twin circulators with the motor shaft horizontal.
- 3 - Single circulators can be mounted in either vertical or horizontal pipework.
- 4 - Twin circulators can only be fitted so that flow is vertically upwards.
- 5 - It is advisable to install secondary hot water circulators in a vertical pipe-run, pumping upwards, the maximum water temperature in such systems must not exceed 65 Deg C.

6 - Avoid installing the pump in the lowest part of the system where sediment can collect. In atmospheric systems the circulator must be positioned so that it does not pump over the feed and expansion tank vent or suck air down the vent. The minimum static head, to avoid cavitation noise, of the circulator must be observed.

ELECTRICAL

The operating voltage and electrical data are indicated on the circulator nameplate and connection should be made as shown on the wiring diagram. The equipment must be earthed.

A suitable starter with overload protection must be provided. Overloads should be set to the same value indicated on the circulator nameplate.

The nameplate amps are given at 400 volts (3 phase) or 230 volts (single phase), site voltages may vary which may affect the circulator run amps. As a general rule overloads may be adjusted upwards by around 10% of the nameplate amps.

CAUTION - Incorrect site wiring connection at the motor terminal box can cause the motor not to run or fail. Nipped wire insulation or loose wiring connections can cause fuse failure and overload trip.

OPERATION

CAUTION - Do not run the circulator dry.

Vent the circulator by carefully slackening the vent plug at the end of the motor until water is seen to escape. Replace the plug and hand tighten.

Close the isolating valves and remove the vent plug - check that the circulator is free to turn by using a suitable screwdriver in the slot at the end of the motor shaft.

Check rotation, at maximum speed setting, by quickly turning the pump on and off to see if the shaft turns in the correct direction.

A direction arrow is shown on the circulator nameplate. Whilst opening the isolating valves, gradually replace the vent plug allowing around a glassful of water to flow tighten the plug.

Always start the circulator on maximum speed setting - on three phase versions, switch off before changing speed.

When the circulator is operating verify that the voltage and running amps are within the nameplate data.

CAUTION - Do not vent the pump whilst hot.

MAINTENANCE

Generally, glandless circulators are maintenance free during their service life, however it is advisable to periodically ensure that the rotor is vented and free to turn.

Any idle pump may tend to sick when it does not operate for prolonged periods, - test periodically.