

# Pump stations





In the thermal solar energy range A.O. Smith can offer you 2 kinds of installations.

Firstly the solar systems that use thermal solar energy combined with an intelligent control system that makes the installation very energy efficient. This kind of installation is controlled by a high efficiency solar gas water heater. The combination of condensing high efficiency with thermal solar energy integrated in one solution minimizes the gas consumption of the installation.

A.O. Smith also provides installations for smaller applications in the configuration of indirect solar systems. These solar systems consist of an indirect tank which is connected to an already existing central heating system or boiler.

For any system you choose, A.O. Smith can deliver the required parts and several accessories.

### A.O. Smith pump stations

#### **Pump stations**

A.O. Smith has a wide range of pump stations. These pump stations are suited for different applications. Special about this range is the fact that these pump stations can modulate to 15%. Therefore, even in periods of less solar contribution, the installation can generate a reasonable output.

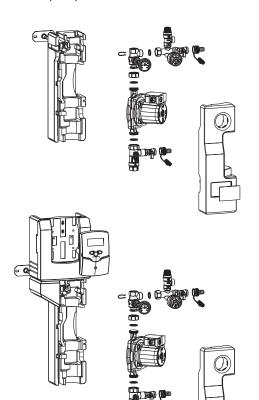
All A.O. Smith pump stations are fitted with the necessary connections for filling the system with Glycol. Also the in- and outlet are fitted with valves. The pump station displays the flow of the Glycol in the installation. Manometer(s) and pressure relief valve are standard integrated.

#### **SGE & SGS installations**

There are 4 pump stations available for an SGE or SGS installation. Selecting the right pump station for the installation is based on the number of collectors in the system. These kind of pump stations are connected to the solar control of the SGE or SGS. The pump stations are available for installations with or without drain back.

#### IT & ITS installations

A.O. Smith has four pump stations available for an indirect IT or ITS installation. The number of collectors in the installation is leading in the choice for one of these 4. The installation is controlled via an integrated control box in the pump station. These pump stations are available for installations with or without drain back.



#### Pump station for SGE/SGS installation

The pump station for the SGE/SGS installation is delivered without control. This pump station needs to be connected to the general intelligent solar control which is delivered with the water heater.

#### Pump station for ITE/ITS installation

The pump station for an ITE/ITS installation is delivered with control. This system has no control accept for the one in the pump station. Therefore this system will be controlled from the pump station.

#### More information

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Please contact our Technical Support Group for further information via +31 40 294 2551 or tsg@aosmith.nl.

### A.O. Smith large pump stations



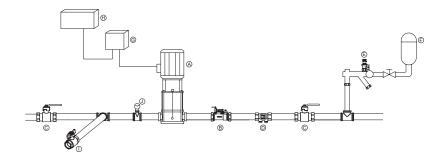
#### **New: Large pump stations**

A.O. Smith expanded her range of pump stations. The requests for systems with more than 15 collectors or more elaborate piping have increased. To fulfill this demand, we developed 20 large capacity pump stations.

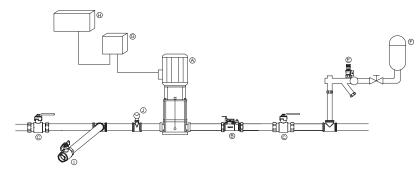
Half of these are used in SGE and SGS installations and the other half in IT or ITS installations. Of these 10 pump stations per kind of installation 5 of them are used in systems with drain back system and the other five are used in installations without drain back system. The difference between those 5 pump stations in the same category is the capacity of the pump stations.

The large pump stations are standard delivered with a connection set. In a SGE or SGS installation this connection set connects the pump station to the solar control of the water heater. A large pump station for an indirect (IT/ITS) system is standard delivered with a control box. In these systems the installation is controlled by the pump station.

In a system with a large pump station you always need to install an expansion vessel. This expansion vessel is not standard delivered with a large pump station.



Configuration for an installation without drainback. In this configuration a non-return valve is integrated.



Configuration for an installation with drainback.

Α	Pump	F	Expansion vessel
В	Flow meter	G	Relay box
С	Stop valve	Н	Solar control
D	Non-return valve	ı	Drain connection
E	Security group	J	Manometer

# Pump stations for SGE/SGS applications







PUMP STATION		
Art. No	Collectors	Drainback
0311590	1-7	yes
0311591	8-15	yes
0311691	1-7	no
0311589	8-15	no

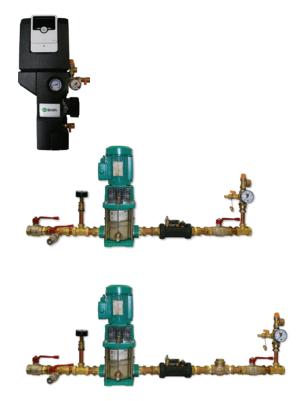
LARGE PUMP STATION WITH DRAINBACK
SGE/SGS
0309977
0309981
0309985
0309989
0309993

<sup>\*</sup> Always install with an expansion vessel

LARGE PUMP STATION WITHOUT DRAINBACK
SGE/SGS
0309978
0309982
0309986
0309990
0309994

**Pump stations** 

## Pump stations for ITE/ITS applications



Data subject to change

PUMP STATION		
Art. No	Collectors	Drainback
0311594	1-7	yes
0311595	8-15	yes
0311692	1-7	no
0311593	8-15	no

LARGE PUMP STATION WITH DRAINBACK
ITE/ITS
0309975
0309979
0309983
0309987
0309991

- \* Always install with an expansion vessel
- \* Control included

LARGE PUMP STATION WITHOUT DRAINBACK
ITE/ITS
0309976
0309980
0309984
0309988
0309992

<sup>\*</sup> Control included

