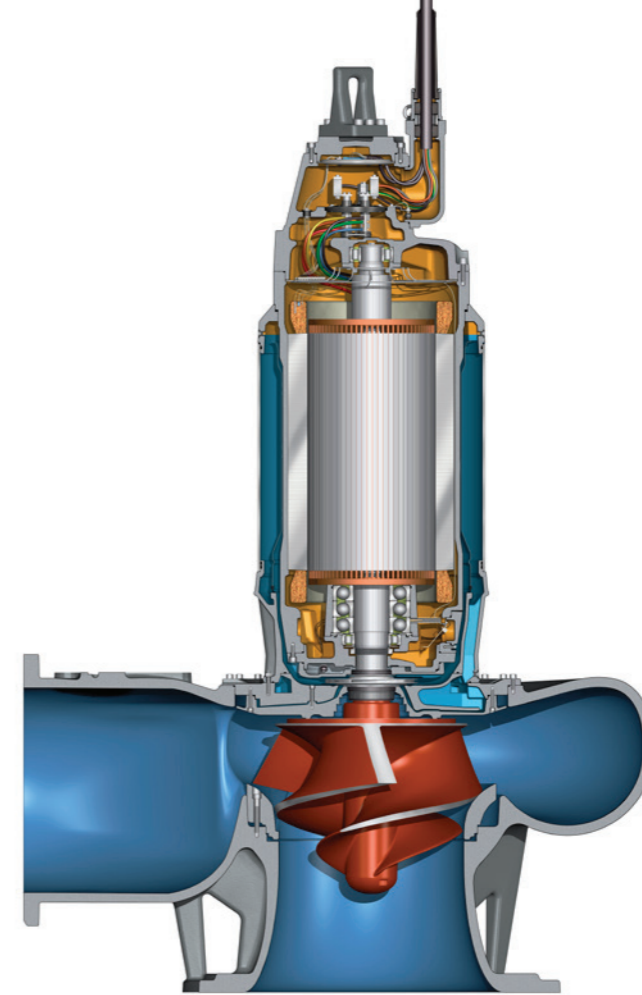


Xylem ['zīləm]

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xylem.com



FLYGT 3000 SERIES

Flexible cooling options

xylem
Let's Solve Water

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FLYGT
a xylem brand

Secure the optimal cooling solution for pumping applications

The extensive range of Flygt wastewater pumps ensures flexible configurations to match any pumping requirements. This comprehensive selection of pump options will provide optimal performance and power, while reducing operating costs and simplifying maintenance.

Cooling is a key aspect of pump station performance. Flygt offer several types of cooling systems, including advanced closed-loop cooling, which delivers the ultimate in flexibility and reliability.

Whatever the demands, Flygt pumps can help boost efficiency and simplify operations. The following pages provide a brief description of the four types of cooling systems available in Flygt 3000 wastewater pumps.

Closed-loop cooling

Flygt's closed-loop cooling system uses the latest technology to secure industry leading performance. It is suited to all dry installations, as well as wet installations where the motor is not sufficiently submerged.

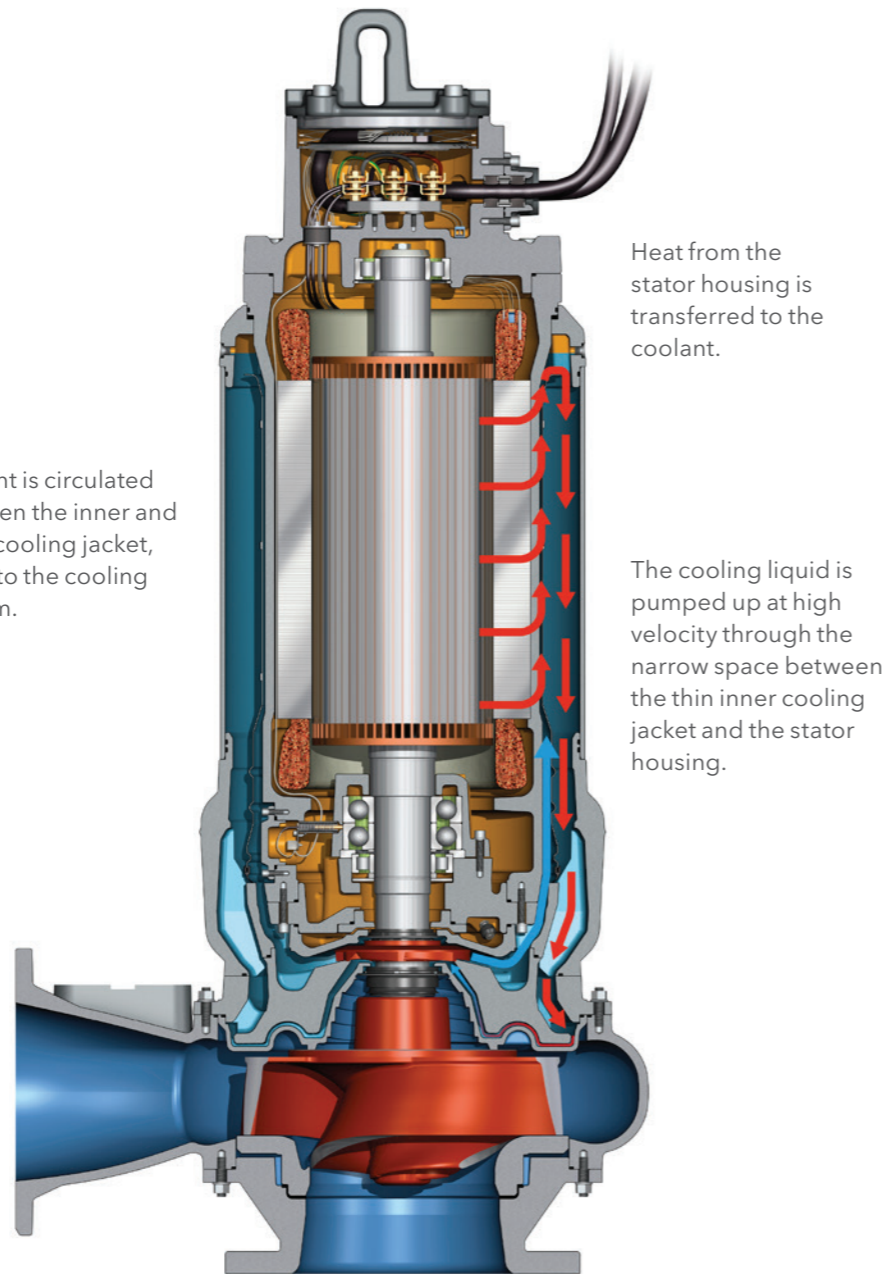
A key strength of closed-loop cooling is that it is not sensitive to impurities in the pumped media - the closed-loop ensures the coolant is never contaminated. The pump can also be run at lower speeds compared to other cooling types.

Did you know...

Coolant properties are key to a maintenance-free system. Flygt's closed-loop system uses a precise mixture of pure water and a proprietary polypropylene glycol formulation. It has excellent heat transfer and corrosion resistance properties and is freeze-proof down to -45°C. Service life is around 10 years in normal operation.

This formulation is superior to common liquid coolants, such as oil, which has poor heat transfer and increases power consumption due to its high viscosity.

How closed-loop cooling works

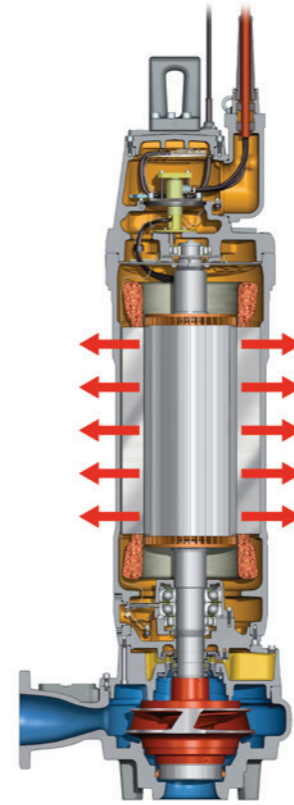


Heat from the stator housing is transferred to the coolant.

The cooling liquid is pumped up at high velocity through the narrow space between the thin inner cooling jacket and the stator housing.

Coolant is circulated between the inner and outer cooling jacket, down to the cooling bottom.

The coolant bottom transfers heat from the coolant to the pumped media.

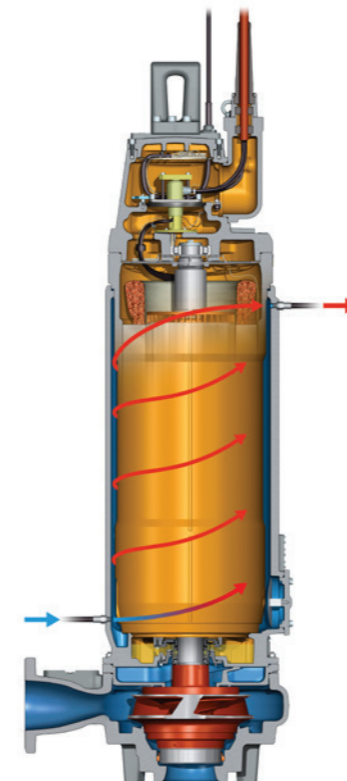
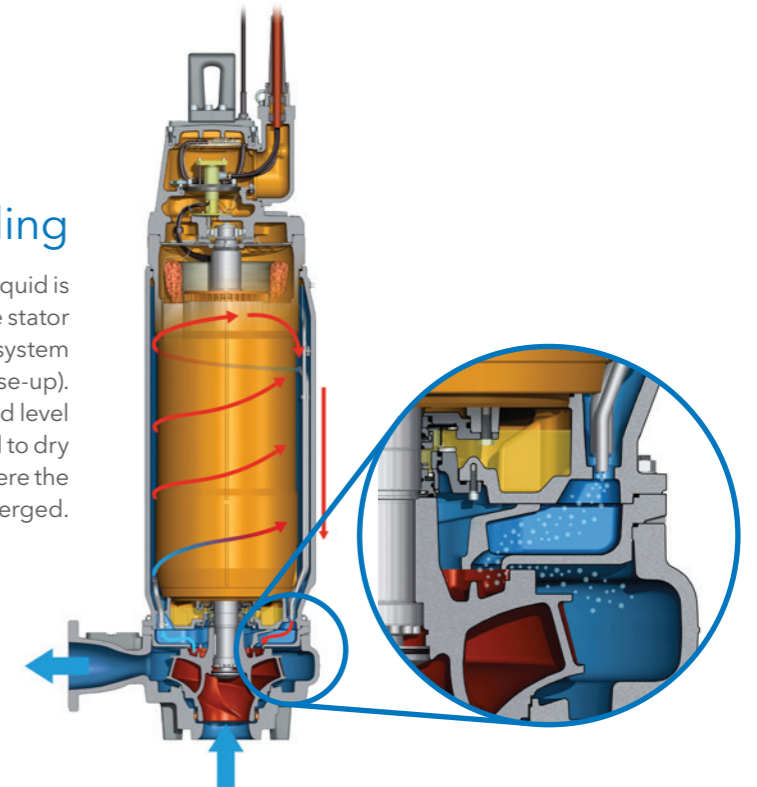


Direct cooling

A simple and low-cost solution, direct cooling relies on the pumped liquid to cool the pump. This type of cooling system is beneficial in installations where the motor is primarily submerged during operation. Direct cooling is a good solution for axial flow pumps and can be economical for centrifugal pumps if fully submerged.

Media cooling

In media cooling, a portion of the pumped liquid is circulated inside a cooling jacket surrounding the stator housing. Air is automatically removed from the system at first start-up by the air ventilation pipe (see close-up). Cooling is therefore not dependent on the liquid level in a wet-pit installation. Media cooling is suited to dry installations, as well as some wet installations where the motor is not sufficiently submerged.



External cooling

External cooling is a more complex solution suitable for applications where liquid temperatures exceed 40°C for extended periods. An external water supply is connected to a cooling jacket surrounding the stator housing, and access to clean water is required whenever the pump is running. External cooling is required to maintain the motor's full power rating in warm-liquid applications.