



ABS SUBMERSIBLE MIXED FLOW COLUMN PUMPS AFL

- ❑ **Easy installation by means of a self centering, self sealing coupling system**
- ❑ **Easy maintenance thanks to the compact modular unit design**
- ❑ **Automatic moisture detection and temperature monitoring**
- ❑ **Newly developed hydraulics with broad band of high efficiencies**
- ❑ **Available in standard and explosion proof versions**

Applications

ABS submersible pumps AFL can be used everywhere where large volumes of process water or wastewater containing solid effluent must be pumped.

The AFL pumps can be applied as any of the following:

Sewage pumps in combination with screens, active sludge pumps, combined sewage and surface water pumps, drainage pumps in pumping stations for dewatering reclaimed land in low lying coastal areas, storm water pumps for storm protection in areas liable to flooding and transfer pumps to control the water level in lakes and lagoons subject to tidal influence.

Furthermore the AFL pumps are suitable in industrial raw water and as process water pumps, as pumps for dry docks, canals and harbours, as cooling pumps in power plants, raw water pumps for preparation and supply of drinking water, irrigation pumps to allow areas of low rainfall to be used for agricultural and other purposes.

ABS submersible mixed flow column pumps with motor and hydraulic section designed on the modular principle

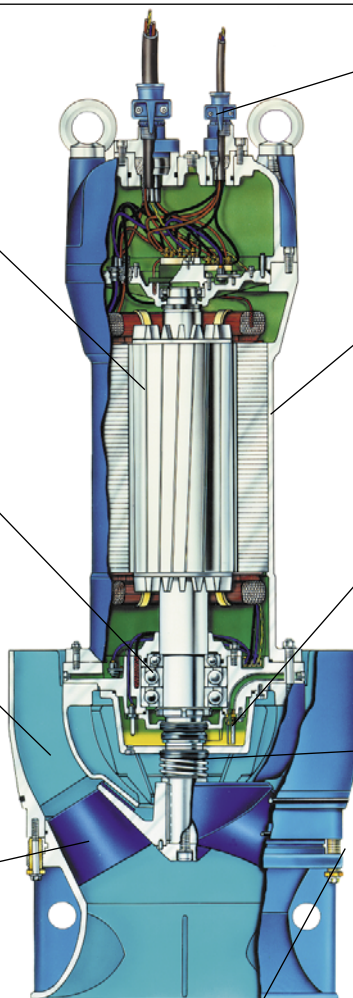
Water tight motor enclosure to IP 68; stator wound and impregnated according to class H with thermal sensors. Rotor and shaft dynamically balanced

Lubricated-for-life ball and roller bearings support the shaft at bottom and top each with temperature monitors

Hydraulics with diffuser and adjustable wear gap at the suction side. Material: EN-GJL-250, DIN EN 1561 (Cast iron, ASTM A48 Class 35)

Mixed flow impellers. Material: Cast iron EN-GJL-250, DIN EN 1561 (Cast iron, ASTM A48 Class 35) also available in X3CrNiMoN27-5-2 (1.4460, ASTM A351 Grade CD-4M CU). AFL 0801 with new skew design impeller

All motors are also available with explosion proof certification according to European standards or US FM standards



Water tight enclosed connection chamber IP 68. Cable inlet with strain relief anti-kink device and double seal



Optimum motor cooling by directing the medium being pumped over the motor

For optimum security ABS provide a system of monitoring devices. The pumps are permanently monitored to ensure that faults or wear are reported in plenty of time. This means that major damage to these high quality submersible pumps can be avoided by timely inspection

High quality mechanical seal with solid silicon carbide rotating seats ensure reliable shaft sealing



All pumps are routinely tested during production to achieve the performance standard of ISO 9906 CL2. Performance tests to ISO 9906 CL1 are also available

Coupling device with conical centering unit secured against rotation and water tight

Installation

Suitable for installation in steel or concrete riser pipes for economical operation and simple installation. The centering of the pump and sealing between pump and pipeline is achieved automatically by means of a conical coupling ring.

No additional installation work required.

Maintenance

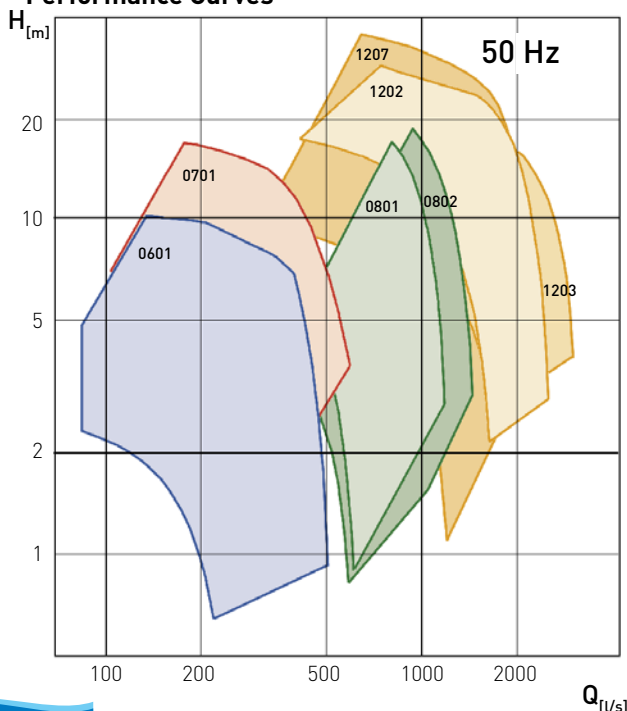
Easy maintenance and flexibility are the characteristics of the AFL pumps. Continuous stator, bearing and seal monitoring systems provide effective remote surveillance of these major components.

An oil change is only necessary if the moisture sensor in the oil chamber has activated.

Technical Specifications

Nominal pipe diameter:	600 - 1200 mm
Power range:	15 - 650 kW
Pole number:	4 - 12

Performance Curves



We know how water works