

# ABS submersible sewage pump AFP 1031 - 2046 SX

High-grade stainless steel pumps from 1.3 to 18.5 kW. AFP SX is suitable for pumping wastewater and sewage containing corrosive materials in chemical, processing and seawater applications.



## Construction

- Complete unit is encapsulated with stainless steel. All medium contact parts are made of corrosion-resistant materials.
- The water-tight, fully flood-proof motor and the pump section form a compact and robust unit.
- Bi-metallic thermal sensors in the stator which open at 140 °C.
- Rotor and rotor shaft dynamically balanced, with lubricated-for-life, maintenance-free upper and lower bearings.
- ME3 features an internal closed loop cooling system. Cooling medium: glycol/water mixture.
- Shaft sealing with viton double mechanical seals, independent of rotation direction.
- Separation chamber with seal monitor sensor to indicate water leakage through mechanical seal.
- Hydraulic parts with Contrablock or vortex impellers.
- Maximum ambient temperature + 40 °C,
- These pumps are available both in standard and explosion-proof versions in accordance with international standards EExd II BT4/ATEX.



## Hydraulics

AFP	Impeller type
1031	Vortex
1032	Vortex
1033	Vortex
1045	Contrablock
1533	Vortex
1543	Contrablock
2045	Contrablock
2046 *	Contrablock

\* 2-channel

Other hydraulic configurations available by request.

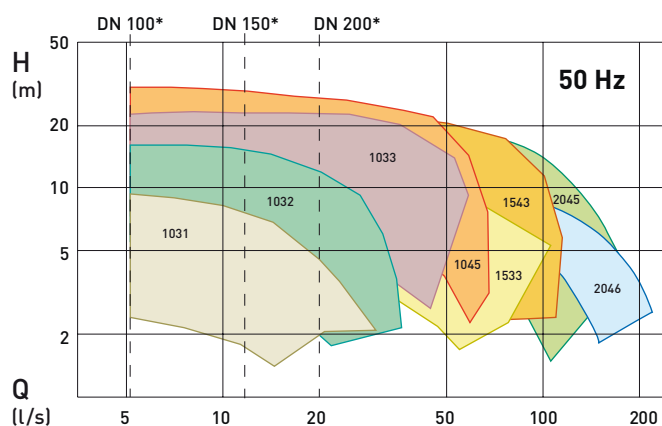
## Motor

Water pressure sealed, three phase, squirrel cage induction motors, 4- or 6-pole from 1.3 to 18.5 kW.  
 Voltage: 400 V, 3-, 50 Hz (other voltages on request)  
 Insulation class: F to 155 °C  
 Protection type: IP 68  
 Start-up: direct-on-line (DOL) or star-delta

## Pump selection

Please use the ABSEL program as the only valid selection tool.

## Performance curves



\* Minimum flow rate Q

## Standard and options

Description	Standard	Option
Max. submergence depth	20 m	
Mains voltage	400 V	230, 500, 695, 230/400, 400/695, 500/866 V
Voltage tolerance	±10%	
Cables	HO7RN-F	EMC shielded cables
Cable length	10 m	20, 30, 40, 50 m
Mechanical seal (medium side)	SiC-SiC (Viton)	
Mechanical seal (motor side)	Carbon-Chrome steel (Viton)	
O-rings	Viton	
Preparation for lifting hoist	M1, M2: Cast eyelet. ME3: Lifting hoop	
Installation	Wet-well	
Motor cooling	ME3: internal closed loop cooling system	

\* Star-delta only on motors above 3 kW.

## Motor and seal protection

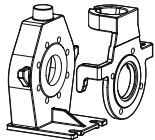
X = Standard O = Option		Standard motor	EEx motor
<b>Winding</b>	Bi-metallic switch	X	X
	Thermistor (PTC)	O	O
	PT 100	O	O
<b>Seal</b>	Motor chamber	X	X
	Seal chamber	X	n.a.

## Materials

Description	Material
Cooling Chamber	Stainless steel 1.4408 (AISI 316)
Cooling Jacket	Stainless steel 1.4401 (AISI 316)
Motor Housing ME3*	Cast iron EN-GJL-250
Motor Housing M1 & M2	Stainless steel 1.4408 (AISI 316)
Motor Shaft	Stainless steel 1.4401 (AISI 316)
Volute	Stainless steel 1.4408 (AISI 316)
Impeller	Stainless steel 1.4460 (AISI 329)
Bottom Plate	Stainless steel 1.4408 (AISI 316)
Lifting Hoop	Stainless steel 1.4401 (AISI 316)
Pedestal	Stainless steel 1.4408 (AISI 316)
Fasteners	Stainless steel 1.4401 (AISI 316)

\* Enclosed by cooling jacket.

## Accessories

Description	Part No.	
<b>Pedestal (without bend)</b> DN 100	62325006	
<b>Pedestal (with bend)</b> DN 150 DN 200	contact ABS contact ABS	