

Dry-Installed Sewage Pump Type ABS AFC 50/50-2046

SULZER

Dry-installed sewage pump for horizontal or vertical installation, with air-cooled IEC motor from 3- to 22 kW. Suitable for the pumping of wastewater and sewage from buildings and sites in domestic, commercial, industrial and municipal areas.

Construction

- Horizontal version mounted on steel baseplate, vertical version on skirtbase.
- Pull-out design allows easy removal of motor without disconnecting pump from pipework.
- PTC thermistor in windings to protect against overheating of motor.
- Motor and rotor shaft dynamically balanced, with lubricated-for-life, maintenance-free upper and lower bearings.
- Oil-free; glycol/water mixture in seal chamber.
- Shaft sealing with double mechanical seals (one at motor side, one at medium side), independent of rotation direction.
- Separation chamber with seal monitor sensor to indicate water leakage through mechanical seal.
- Tappings for lubricant draining and refilling, priming, and pressure gauge.
- Hydraulic parts with Contrablock or vortex impellers. Option of hardened Contrablock impeller and bottomplate.
- Available in standard and explosion-proof versions in accordance with international standard ATEX.
- Hydraulic bearing with a calculated lifetime of $L_{10} > 100\ 000$ hours.
- Maximum allowable temperature of the medium for continuous operation is 40 °C.
- Maximum ambient temperature: +40 °C.
- Maximum temperature of the medium: +80 °C.



Motor

Three-phase, squirrel cage induction motors, 2-, 4- and 6-pole from 3- to 22 kW.

Voltage: 230/400 V, 3~, 50 Hz (other voltages on request).

Insulation class: F to 155 °C.

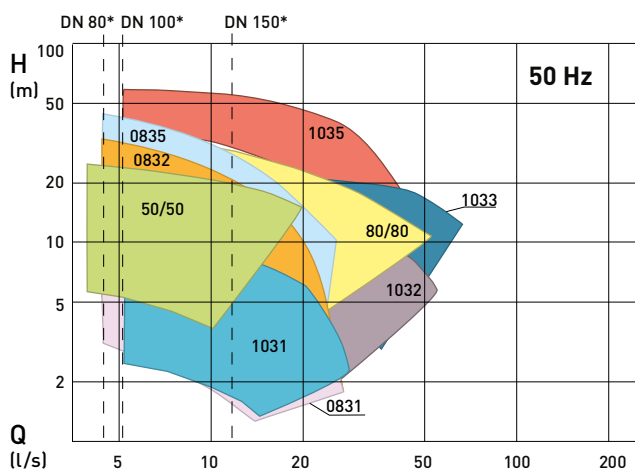
Protection type: IP 55.

Start-up: direct on line (DOL) or star-delta.

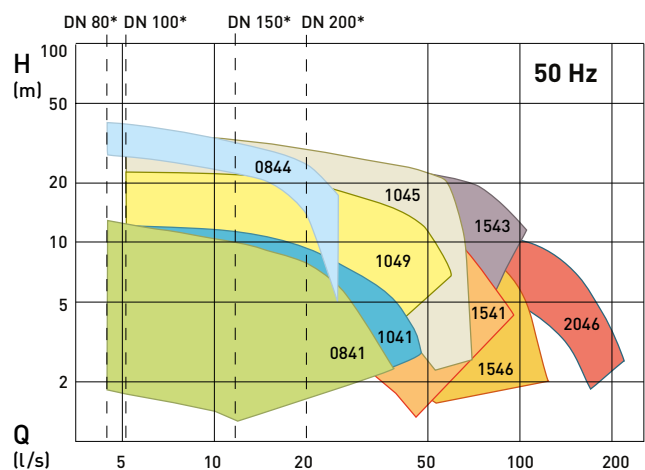
Pump Selection

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

Performance fields vortex



Performance fields Contrablock



* Minimum flow rate Q

Standard and options

Description	Standard	Option
Mains voltage	400 V 3~	230 V, 230/400 V, 400/695 V, 690 V
Voltage tolerance	± 10%	-
Motor efficiency	EFF 2	EFF 1 (selected models)
PTC thermistor	Yes	-
Mechanical seal (at medium side)	SiC-SiC-NBR	SiC-SiC-Viton
Seal monitor (DI)	Yes	-
O-rings	NBR	Viton
Protective coating	Two-component epoxy resin coating	Special coatings on request
Cathodic protection	No	Yes
Bearing monitor	No	Yes
Lubricant monitor	No	Yes

Hydraulics and Motor Configuration

AFC	Impeller	Discharge	Motor	Motor frame
50/50	Vortex	DN 50	3/6	132S
			7.5/4	132M
			15/2	160M
			22/2	180M
0831	Vortex	DN 80	3/4	100L
			3/6	132S
0832	Vortex	DN 80	4/2	112M
			7.5/2	132S
0835	Vortex	DN 80	7.5/2	132S
			11/2	160M
80/80	Vortex	DN 80	3/6	132S
			7.5/4	132M
			9.2/6	160L
			9.2/4	132M
			15/4	160L
			22/2	180M
0841	Contrablock	DN 80	3/6	132S
			3/4	100L
0844	Contrablock	DN 80	7.5/2	132S
			11/2	160M
1031	Vortex	DN 100	3/6	132S
			3/4	100L

AFC	Impeller	Discharge	Motor	Motor frame
1032	Vortex	DN 100	3/6	132S
			7.5/4, 9.2/4	132M
1033	Vortex	DN 100	15/4, 9.2/6 18.5/4	160L 180M
1035	Vortex	DN 100	22/2	180M
1041	Contrablock	DN 100	3/4	100L
			3/6	132S
1045	Contrablock	DN 100	15/4, 9.2/6	160L
			18.5/4	180M
			22/4	180L
1049	Contrablock	DN 100	3/6	132S
			7.5/4, 9.2/4	132M
1541	Contrablock	DN 150	3/6	132S
			7.5/4, 9.2/4	132M
1543	Contrablock	DN 150	15/4, 9.2/6	160L
			18.5/4	180M
			22/4	180L
1546	Contrablock*	DN 150	3/6	132S
			7.5/4, 9.2/4	132M
2046	Contrablock*	DN 200	11/6, 9.2/6	160L
			15/6	180L

* 2-channel

Materials

Description	Standard	Option
Motor	Seal chamber	Cast iron EN-GJL-250
	Motor housing	Cast iron EN-GJL-250
	Motor shaft	Stainless steel 1.4021 (AISI 420)
Hydraulics	Volute	Cast iron EN-GJL-250
	Impeller	Cast iron EN-GJL-250
	Bottom plate	Cast iron EN-GJL-250
Mounting	Skirt base	Steel EN-3B (painted)
	Baseplate	Steel EN-3B (painted)

* Not available for AFC 0835, 1035, 1546 (9.2/4 motor), 50/50 and 80/80.