AGRICULTURAL WASTE/BIOGAS

EQUIPMENT CATALOG

* 3



FLYGT



Providing custom-engineered waste management solutions for agriculture.

Skinner AgSolutions, Inc. is the exclusive distributor of Flygt-Xylem pumps, mixers and related equipment for the agricultural/biogas market. In addition, they are an authorized distributor of Godwin-Xylem and GWT-Xylem equipment.

A long-time supplier of pumps, mixers, valves and other equipment, Skinner AgSolutions has become a leading provider of custom-engineered equipment solutions for dairy and hog waste management across the country.

Beyond just providing the equipment needed, we partner with you to design your complete waste management system. Whether a new installation, a retrofit or an upgrade of an existing system, Skinner AgSolutions has the answer to fit your needs.

Skinner AgSolutions focuses on three areas of equipment systems: Manure Handling, Biogas and Nutrient Management.



Through their division SA Valves, Skinner AgSolutions provides their own SA branded Knife Gate Valves, as well as best in class ball and butterfly valves from selected industry leaders.

To view the entire line of SA Valves, including automation controls, please visit our website at https://savalves.us/.

For complete information on all the products and services available from Skinner AgSolutions, Inc., please visit our website at https://skinneragsolutions.com/.



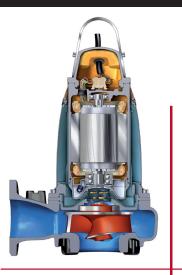


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Flygt submersible chopper pumps are specifically designed for pumping liquid manure with fibrous material. Whether it's a simple or demanding pumping job, Flygt always offers the right solution for the entire range of tasks.

The chopper impellers of Flygt's F series are particularly powerful and dependable. In combination with the clog-free N hydraulics, they make for great operating reliability and reduce annoying and costly interruptions. At the same time, the F pumps offer a significantly wider range of applications, both with respect to output quantity and pressure head (water column up to 230 ft/70 m, capacity up to 3100 gpm (196 l/s) and motor power up to 70 hp/26 kW).



Depending on the duty point, the special efficiency of the 3000 Series saves an average of

30% of the energy required.

FEATURES INCLUDE:

- Compact construction
- Adaptable modular system
- Large number of applications with different chopper impellers
- High efficiency
- Cast-iron and Hard-Iron[™] design
- Surface treatment for all parts which come in contact with the medium
- · Available in standard and explosion proof motors
- Motors for all standard power networks (special voltages and frequencies on request)
- Thermal monitoring protection in all pumps with standard and explosion protection

THE N-IMPELLER – AN ALTERNATIVE TO THE CHOPPER SYSTEM

If the risk of blockages during pumping of liquid manure is to be reduced to a minimum, Flygt pumps with N-impeller technology are the best choice. The patented hydraulic system is self-cleaning and constantly achieves high efficiency of over 80 percent. At the core of the N-pump is the patented N-impeller, tried and tested in practical use. The unique semi-open construction of the impeller, combined with a relief groove in the pump housing, reduces the risk of blockages and ensures that the pump maintains its constantly high efficiency. This reduces the overall energy consumption and dramatically cuts the life cycle costs of the pump, making the N-pump series the ideal solution for liquid manure.

For a complete description and a visual demonstration on how the 3000 Series Submersible Chopper Pumps are used, click on the following link to the Skinner AgSolutions website. Then scroll down to watch the "Flygt Chopper Pump 3127" video. https://skinneragsolutions.com/pumps/



- METHODS OF INSTALLATION -



For semi-permanent wet well installations. The pump is installed with twin guide bars on a discharge connection.



A semi-permanent free standing installation. Transportable version with pipe or hose connection.



A vertically-mounted, permanent dry well or in-line installation with flange connections for suction and discharge pipework. Available for 3127, 3153, 3171 and 3202.



A horizontally-mounted, permanent dry well or in-line installation with flange connections for suction and discharge pipework. Available for 3127, 3153, 3171 and 3202.



A semi-permanent installation with a swiveling guide bar for mixing and pumping. Available for 3085 and 3102.

COMPREHENSIVE RANGE OF SUBMERSIBLE CHOPPER PUMPS AVAILABLE



3085 Submersible Chopper Pump



3153 Submersible Chopper Pump



3102 Submersible Chopper Pump



3171 Submersible Chopper Pump



3127 Submersible Chopper Pump



3152 Submersible Chopper Pump

NOTE: High-Head N-Pumps (4") and High-Volume N-Pumps (8", 10" and 12") are also available. Contact us for performance specifications.

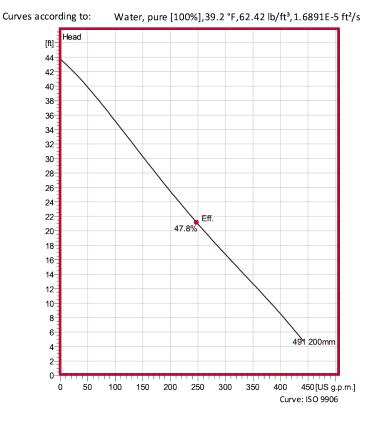
For more information on all the pumps available from Skinner AgSolutions, Inc., please visit the pump section of our website at https://skinneragsolutions.com/pumps/

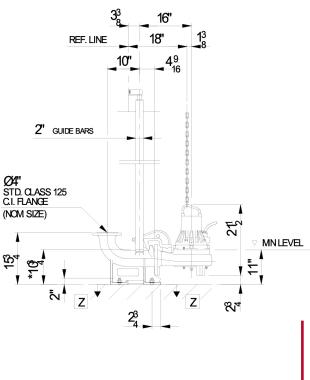
Part Number: 3085.183-2272

Pump Description: FP491-4 3/460/3 FLS 491 Impeller



CONFIG	URATION
Motor Number	F3085.183 15-10-4AL-W 3 hp
Installation Type	P - Semi-permanent, Wet
Impeller Diameter	200 mm
Discharge Diameter	3 15/16 inch
PUMP INF	ORMATION
Impeller Diameter	200 mm
Discharge Diameter	3 15/16 inch
Inlet Diameter	100 mm
Maximum Operating Speed	1705 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3085.183 15-10-4AL-W 3 hp
Motor Number Phases	F3085.183 15-10-4AL-W 3 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1705 rpm
Phases Rated Speed Rated Power	3 ~ 1705 rpm 3 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1705 rpm 3 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1705 rpm 3 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1705 rpm 3 hp No 4 4.5 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1705 rpm 3 hp No 4 4.5 A 61
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1705 rpm 3 hp No 4 4.5 A 61 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1705 rpm 3 hp No 4 4.5 A 61 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1705 rpm 3 hp No 4 4.5 A 61 60 Hz 460 V H



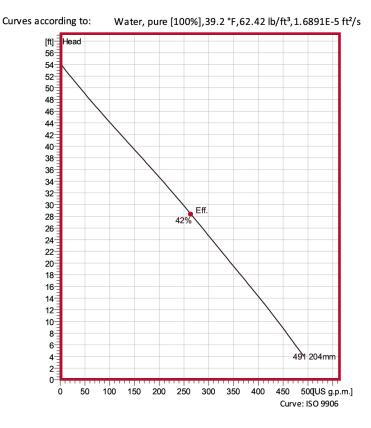


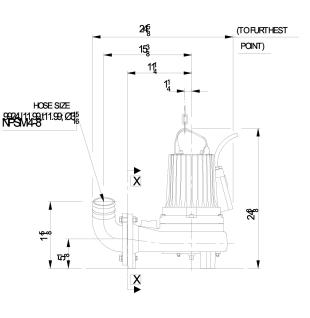
Part Number: 3102.181-0382

Pump Description: FS491-4T 5/460/3 FLS 491 Impeller



CONFI	GURATION
Motor Number	F3102.181 18-11-4AL-W 5 hp
Installation Type	S – Portable Semi-permanent, Wet
Impeller Diameter	204 mm
Discharge Diameter	3 15/16 inch
PUMP IN	FORMATION
Impeller Diameter	204 mm
Discharge Diameter	3 15/16 inch
Inlet Diameter	100 mm
Maximum Operating Speed	1745 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR	– GENERAL
Motor Number	F3102.181 18-11-4AL-W 5 hp
Phases	3~
Rated Speed	1745 rpm
Rated Power	5 hp
	onp
ATEX Approved	No
ATEX Approved Number of Poles	
	No
Number of Poles	No 4
Number of Poles Rated Current	No 4 6.7 A
Number of Poles Rated Current Stator Variant	No 4 6.7 A 61
Number of Poles Rated Current Stator Variant Frequency	No 4 6.7 A 61 60 Hz
Number of Poles Rated Current Stator Variant Frequency Rated Voltage	No 4 6.7 A 61 60 Hz 460 V
Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	No 4 6.7 A 61 60 Hz 460 V H



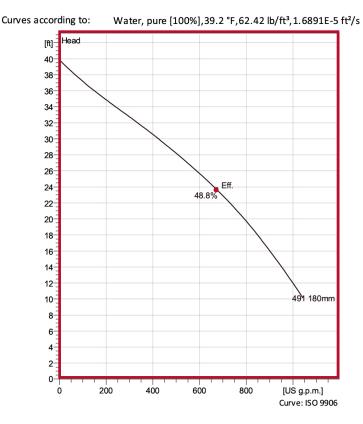


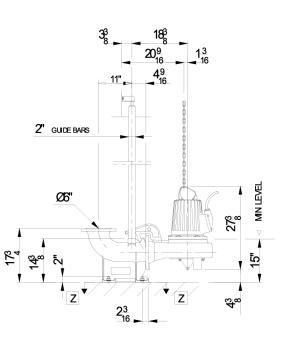
Part Number: 3127.182-0105

Pump Description: FP491-6 10/460/3 FLS 491 Impeller



CONFIG	URATION
Motor Number	F3127.182 21-12-4AL-W 10 hp
Installation Type	P - Semi-permanent, Wet
Impeller Diameter	180 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	180 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1750 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3127.182 21-12-4AL-W 10 hp
Motor Number Phases	F3127.182 21-12-4AL-W 10 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1750 rpm
Phases Rated Speed Rated Power	3 ~ 1750 rpm 10 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1750 rpm 10 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1750 rpm 10 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1750 rpm 10 hp No 4 13 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1750 rpm 10 hp No 4 13 A 38
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1750 rpm 10 hp No 4 13 A 38 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1750 rpm 10 hp No 4 13 A 38 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1750 rpm 10 hp No 4 13 A 38 60 Hz 460 V H



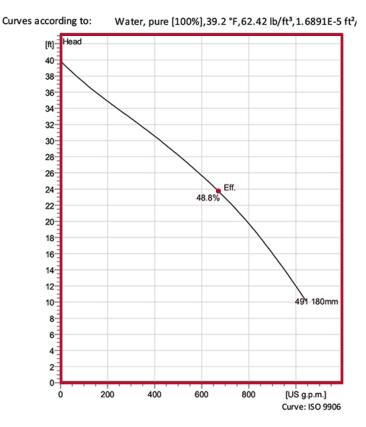


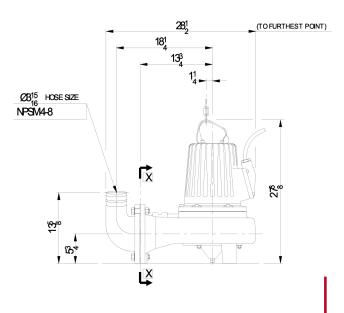
Part Number: 3127.182-0879

Pump Description: FS491-4T 10/460/3 FLS 491 Impeller



CONEI	GURATION
Motor Number	F3127.182 21-12-4AL-W 10 hp
Installation Type	S – Portable Semi-permanent, Wet
Impeller Diameter	180 mm
Discharge Diameter	5 7/8 inch
PUMP IN	FORMATION
Impeller Diameter	180 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1750 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR ·	- GENERAL
Motor Number	F3127.182 21-12-4AL-W 10 hp
Phases	3~
Rated Speed	1750 rpm
Rated Power	10 hp
ATEX Approved	No
Number of Poles	4
Rated Current	13 A
Stator Variant	38
	00
Frequency	60 Hz
Frequency Rated Voltage	
	60 Hz
Rated Voltage	60 Hz 460 V
Rated Voltage Insulation Class	60 Hz 460 V H



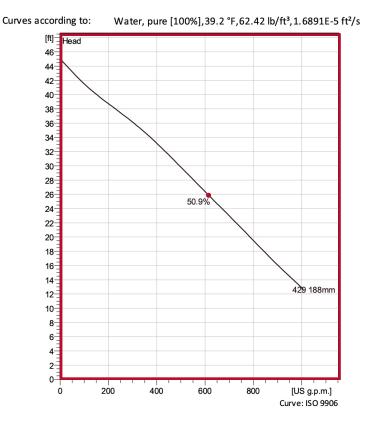


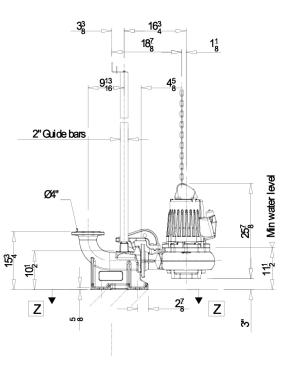
Part Number: 3127.350-0132

Pump Description: FP428-6 10/460/3 FLS 428 Impeller



CONFIG	URATION
Motor Number	F3127.350 21-12-4AL-W 10 hp
Installation Type	P – Semi-permanent, Wet
Impeller Diameter	188 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	188 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1750 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3127.350 21-12-4AL-W 10 hp
Phases	3~
Phases Rated Speed	3 ~ 1750 rpm
	•
Rated Speed	1750 rpm
Rated Speed Rated Power	1750 rpm 10 hp
Rated Speed Rated Power ATEX Approved	1750 rpm 10 hp No
Rated Speed Rated Power ATEX Approved Number of Poles	1750 rpm 10 hp No 4
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	1750 rpm 10 hp No 4 13 A
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	1750 rpm 10 hp No 4 13 A 38
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	1750 rpm 10 hp No 4 13 A 38 60 Hz
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	1750 rpm 10 hp No 4 13 A 38 60 Hz 460 V



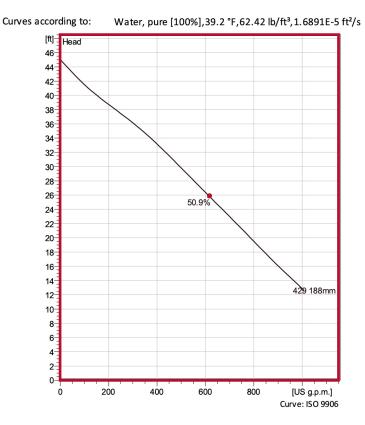


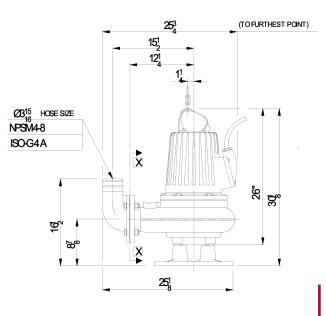
Part Number: 3127.350-0298

Pump Description: FS428-6 10/460/3/ FLS 428 Impeller



CONFIC	GURATION
Motor Number	F3127.350 21-12-4AL-W 10 hp
Installation Type	S – Portable Semi-permanent, Wet
Impeller Diameter	188 mm
Discharge Diameter	5 7/8 inch
PUMP IN	ORMATION
Impeller Diameter	188 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1750 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR	- GENERAL
Motor Number	F3127.350 21-12-4AL-W 10 hp
Disease	2
Phases	3~
Rated Speed	3 ~ 1750 rpm
	•
Rated Speed	1750 rpm
Rated Speed Rated Power	1750 rpm 10 hp
Rated Speed Rated Power ATEX Approved	1750 rpm 10 hp No
Rated Speed Rated Power ATEX Approved Number of Poles	1750 rpm 10 hp No 4
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	1750 rpm 10 hp No 4 13 A
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	1750 rpm 10 hp No 4 13 A 38
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	1750 rpm 10 hp No 4 13 A 38 60 Hz
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	1750 rpm 10 hp No 4 13 A 38 60 Hz 460 V
Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	1750 rpm 10 hp No 4 13 A 38 60 Hz 460 V H



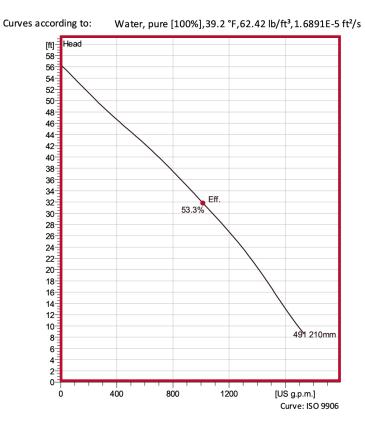


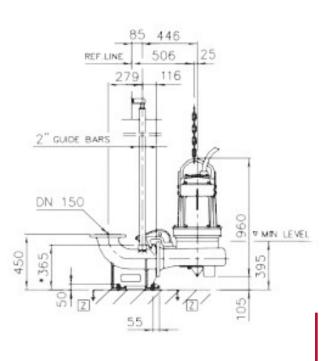
Part Number: 3152.350-0697

Pump Description: FP491-6 20/460/3 FLS 491 Impeller



CONFIG	URATION
Motor Number	F3152.350 25-15-4AA-W 20 hp
Installation Type	P - Semi-permanent, Wet
Impeller Diameter	210 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	210 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1755 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3152.350 25-15-4AA-W 20 hp
Motor Number Phases	F3152.350 25-15-4AA-W 20 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1755 rpm
Phases Rated Speed Rated Power	3 ~ 1755 rpm 20 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1755 rpm 20 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1755 rpm 20 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1755 rpm 20 hp No 4 26 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1755 rpm 20 hp No 4 26 A 38
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1755 rpm 20 hp No 4 26 A 38 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1755 rpm 20 hp No 4 26 A 38 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1755 rpm 20 hp No 4 26 A 38 60 Hz 460 V H



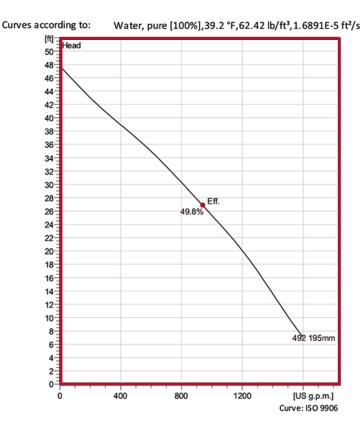


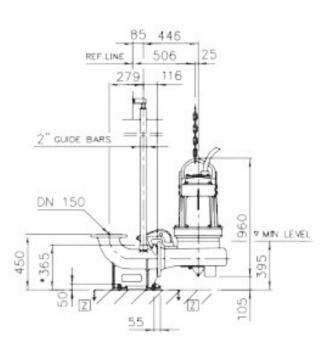
Part Number: 3152.350-0755

Pump Description: FP492-6 16/230/3 FLS 492 Impeller



CONFIG	URATION
Motor Number	F3152.350 25-15-4AL-W 16 hp
Installation Type	P – Semi-permanent, Wet
Impeller Diameter	195 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	195 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1760 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3152.350 25-15-4AL-W 16 hp
Motor Number Phases	F3152.350 25-15-4AL-W 16 hp 1 ~
Phases	1~
Phases Rated Speed	1 ~ 1760 rpm
Phases Rated Speed Rated Power	1 ~ 1760 rpm 16 hp
Phases Rated Speed Rated Power ATEX Approved	1 ~ 1760 rpm 16 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	1 ~ 1760 rpm 16 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	1 ~ 1760 rpm 16 hp No 4 62 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	1 ~ 1760 rpm 16 hp No 4 62 A 12
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	1 ~ 1760 rpm 16 hp No 4 62 A 12 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	1 ~ 1760 rpm 16 hp No 4 62 A 12 60 Hz 230 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	1 ~ 1760 rpm 16 hp No 4 62 A 12 60 Hz 230 V H



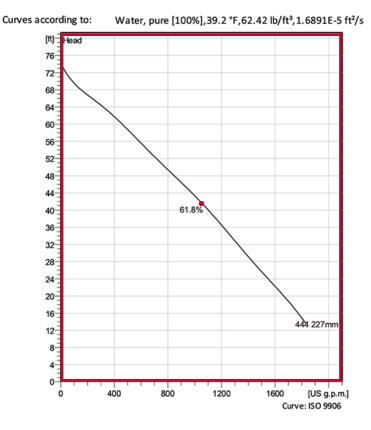


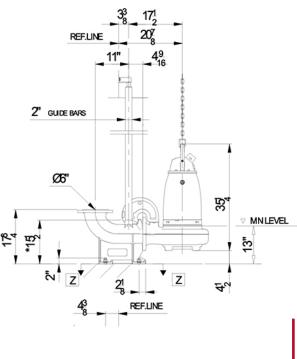
Part Number: 3153.350-0945

Pump Description: FP444-6 20/460/3 FLS FV 444 Impeller



CONFIG	URATION
Motor Number	F3153.350 21-18-4AA-W 20 hp
Installation Type	P – Semi-permanent, Wet
Impeller Diameter	227 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	227 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1760 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3153.350 21-18-4AA-W 20 hp
Motor Number Phases	F3153.350 21-18-4AA-W 20 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1760 rpm
Phases Rated Speed Rated Power	3 ~ 1760 rpm 20 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1760 rpm 20 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1760 rpm 20 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1760 rpm 20 hp No 4 26 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1760 rpm 20 hp No 4 26 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz 460 V H



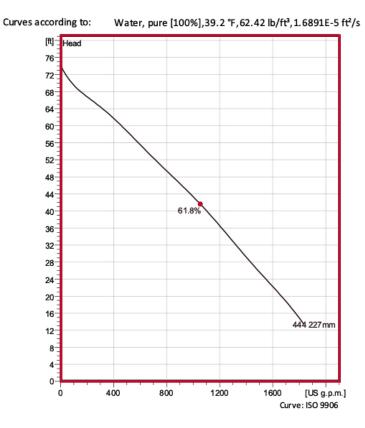


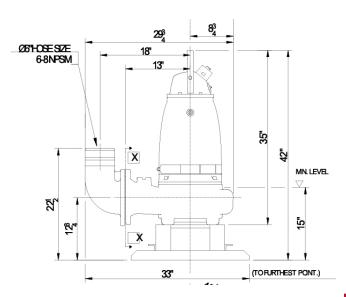
Part Number: 3153.350-1147

Pump Description: FS444-6T 20/460/3 FLS FV 444 Impeller



CONFIC	GURATION
Motor Number	F3153.350 21-18-4AA-W 20 hp
Installation Type	S – Portable Semi-permanent, Wet
Impeller Diameter	227 mm
Discharge Diameter	5 7/8 inch
PUMP IN	FORMATION
Impeller Diameter	227 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1760 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR	- GENERAL
Motor Number	F3153.350 21-18-4AA-W 20 hp
Phases	3~
Rated Speed	1760 rpm
Rated Power	20 hp
ATEX Approved	No
Number of Poles	4
Rated Current	26 A
Stator Variant	1
Frequency	60 Hz
Frequency Rated Voltage	60 Hz 460 V
Rated Voltage	460 V
Rated Voltage Insulation Class	460 V H



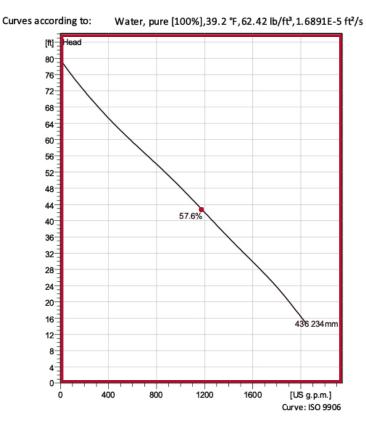


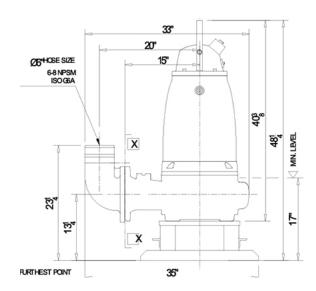
Part Number: 3171.350-0083

Pump Description: FS436-6T 25/460/3 50' FLS FV



CONFIC	GURATION
Motor Number	F3171.350 25-14-4AA-W 25 hp
Installation Type	S – Portable Semi-permanent, Wet
Impeller Diameter	234 mm
Discharge Diameter	5 7/8 inch
PUMP IN	FORMATION
Impeller Diameter	234 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1755 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR ·	- GENERAL
Motor Number	F3171.350 25-14-4AA-W 25 hp
Motor Number Phases	F3171.350 25-14-4AA-W 25 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1755 rpm
Phases Rated Speed Rated Power	3 ~ 1755 rpm 25 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1755 rpm 25 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1755 rpm 25 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1755 rpm 25 hp No 4 30 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1755 rpm 25 hp No 4 30 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1755 rpm 25 hp No 4 30 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1755 rpm 25 hp No 4 30 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1755 rpm 25 hp No 4 30 A 1 60 Hz 460 V H

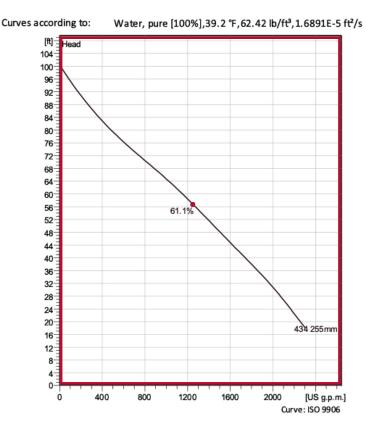


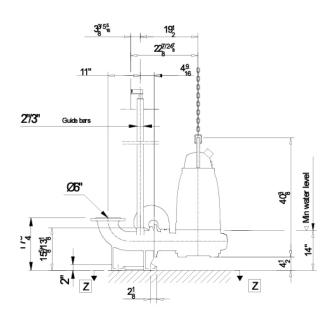


Part Number: 3171.350-0324 Pump Description: FP434-6 34/460/3 50' FLS FV



CONFIG	URATION
Motor Number	F3171.350 25-19-4AA-W 34 hp
Installation Type	P – Semi-permanent, Wet
Impeller Diameter	255 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	255 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1755 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	F3171.350 25-19-4AA-W 34 hp
Motor Number Phases	F3171.350 25-19-4AA-W 34 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1755 rpm
Phases Rated Speed Rated Power	3 ~ 1755 rpm 34 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1755 rpm 34 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1755 rpm 34 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1755 rpm 34 hp No 4 40 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1755 rpm 34 hp No 4 40 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1755 rpm 34 hp No 4 40 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1755 rpm 34 hp No 4 40 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1755 rpm 34 hp No 4 40 A 1 60 Hz 460 V H





TWO-WAY MIX/PUMP VALVE

Part Number: 1000000530147 Pump Description: Two-Way Valve (6" 4")

Flygt's Two-Way Mix/Pump Valve and its mixer jet are used for heavy mixing or filling the manure storage container, when paired with one of the Flygt 3000 Series Submersible Chopper Pumps.

Although called a valve, it is actually a pump fitting/attachment that has a spring-loaded flap that opens and closes.





OPERATIONS INCLUDE:

- Pumping off the liquid manure from the storage container
- Mixing in the storage container
- Switching the two-way valve with a cable pull above the edge of the container

Flygt submersible pump on a square mast with the Two-Way Mix/Pump Valve

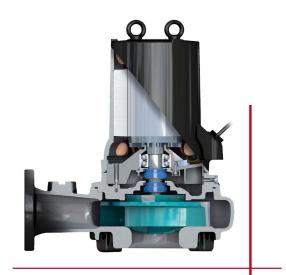
For a complete description and a visual demonstration on how the Two-Way Mix/Pump Valve is used, click on the following link to the Skinner AgSolutions website. Then scroll down to watch the "Two-Way Valve Permanent Installation" video.

https://skinneragsolutions.com/pumps/

By combining performance and quality in a convenient and economical package, the Flygt 1300 Series Submersible Pumps ensure reliability and reduce downtime, enabling your operation to run efficiently.

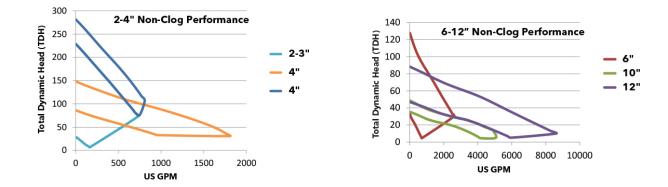
The Flygt 1300 series is based on technology developed and tested in tough environments throughout the world. The hydraulic design of the pumps has been proven to reduce clogging and maintain efficiency when pumping wastewater.

The Flygt 1300 series has an efficient air-filled motor that is press fit into the motor housing to provide optimal heat transfer and cooling. The robust motor is rated for continuous duty, delivering reliable operation in the most demanding applications.



The 1300 series is available in a wide range of discharge sizes up to 12" for non-clog pump configurations. There is also a wide range of easy to configure installation options to satisfy pump replacement, new install, or temporary installations.

The Flygt 1300 series pumps can be paired with a Flygt pre-engineered fiberglass lift station and Flygt monitoring and controls to form a complete worry-free system.



FLYGT 1300 SERIES SUBMERSIBLE PUMPS

METHODS OF INSTALLATION

The Flygt 1300 series is designed to fit your needs. Start with a bare pump and order the right kit, depending on your desired installation method.

Wet-well Installation Kit

The pump is installed with twin guide bars on a discharge connection.

Kit contents:

- Upper guide bar bracket with bolts
- Discharge connection
- Anchor bolts
- Sliding bracket kit that includes: Sliding bracket, seal ring, studs, nuts, bolts & washers

Replacement Kit

Simple kit to replace an old pump or upgrade to a larger model.

Kit contents either:

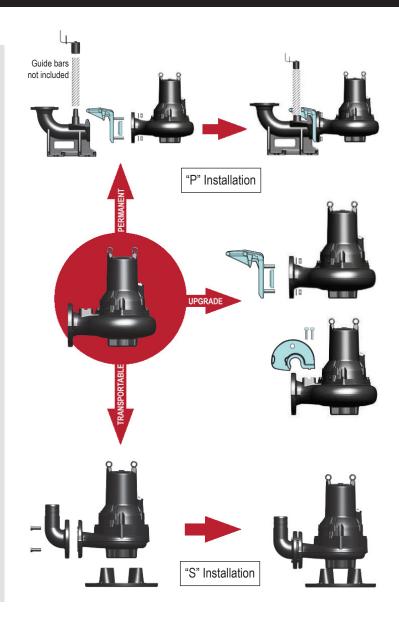
- Sliding bracket, seal ring, studs, nuts & washers
- Sliding bracket & 4 bolts

Free-standing Kit

Ideal for portability.

Kit contents:

- Hose connection with gasket, bolts, nuts & washers
- Stand with screws & washers



FOUR NON-CLOG, RELIABLE SUBMERSIBLE PUMPS AVAILABLE

Choose from the full line of Flygt 1300 Series Submersible Pumps offered by Skinner AgSolutions, Inc. -



1315 Submersible Pump



1320 Submersible Pump





1325 Submersible Pump 1330 Se

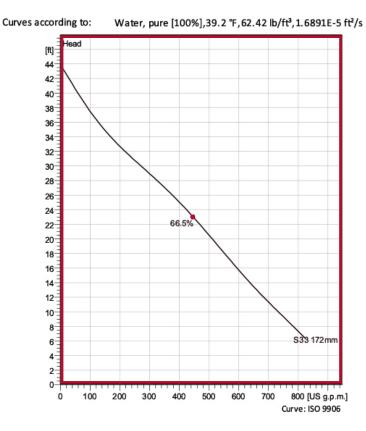
1330 Submersible Pump

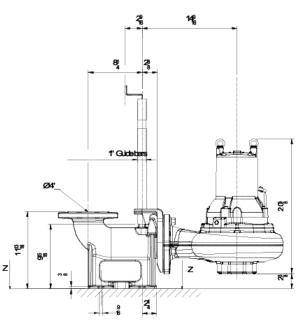
For more information on all the pumps available from Skinner AgSolutions, Inc., please visit the pump section of our website at https://skinneragsolutions.com/pumps/

Part Number: 1315.181-0744 Pump Description: KX433-4 4/460/3 50' FLS



CONFIG	URATION
Motor Number	K1315.181 15-12-4ZB-W 4 hp
Installation Type	Wet Well Kit
Impeller Diameter	172 mm
Discharge Diameter	3 15/16 inch
PUMP INF	ORMATION
Impeller Diameter	172 mm
Discharge Diameter	3 15/16 inch
Inlet Diameter	100 mm
Maximum Operating Speed	1720 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1315.181 15-12-4ZB-W 4 hp
Motor Number Phases	K1315.181 15-12-4ZB-W 4 hp 3 ~ (1 ~ available on most pumps)
Phases	3 ~ (1 ~ available on most pumps)
Phases Rated Speed	3 ~ (1 ~ available on most pumps) 1720 rpm
Phases Rated Speed Rated Power	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4 5.6 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4 5.6 A 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4 5.6 A 4 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4 5.6 A 4 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ (1 ~ available on most pumps) 1720 rpm 4 hp No 4 5.6 A 4 60 Hz 460 V F

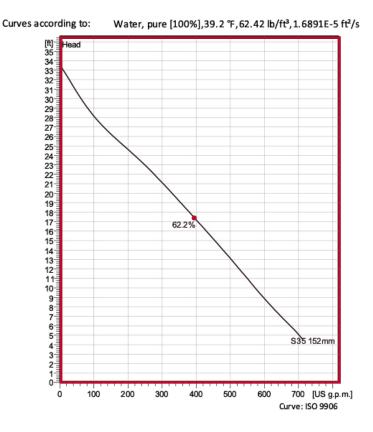


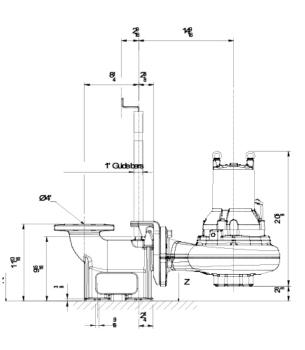


Part Number: 1315.181-0791 Pump Description: KX435-4 3.4/460/3 50' FLS



URATION
K1315.181 15-12-4ZB-W 3.4 hp
Wet Well Kit
152 mm
3 15/16 inch
ORMATION
152 mm
3 15/16 inch
100 mm
1735 rpm
2
40° C
GENERAL
K1315.181 15-12-4ZB-W 3.4 hp
3 ~ (1 ~ available on most pumps)
1735 rpm
3.4 hp
5.4 lip
No
No
No 4
No 4 5 A
No 4 5 A 4
No 4 5 A 4 60 Hz
No 4 5 A 4 60 Hz 460 V

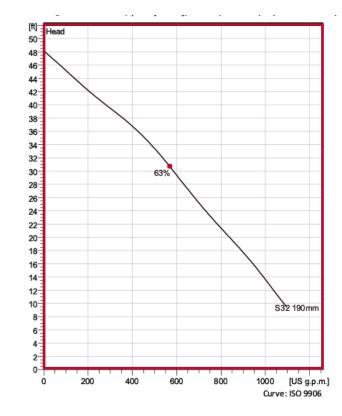


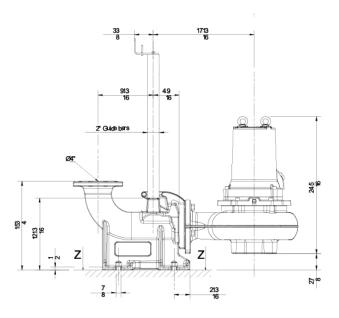


Part Number: 1320.090-0098 Pump Description: KX452-4 7.5/460/3 50' FM FLS



CONFIG	URATION
Motor Number	K1320.181 18-15-4ZB-W 7.5 hp
Installation Type	Wet Well Kit
Impeller Diameter	190 mm
Discharge Diameter	3 15/16 inch
PUMP INF	ORMATION
Impeller Diameter	190 mm
Discharge Diameter	3 15/16 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1755 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1320.181 18-15-4ZB-W 7.5 hp
Motor Number Phases	K1320.181 18-15-4ZB-W 7.5 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1755 rpm
Phases Rated Speed Rated Power	3 ~ 1755 rpm 7.5 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1755 rpm 7.5 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1755 rpm 7.5 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1755 rpm 7.5 hp No 4 11 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1755 rpm 7.5 hp No 4 11 A 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1755 rpm 7.5 hp No 4 11 A 4 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1755 rpm 7.5 hp No 4 11 A 4 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1755 rpm 7.5 hp No 4 11 A 4 60 Hz 460 V F

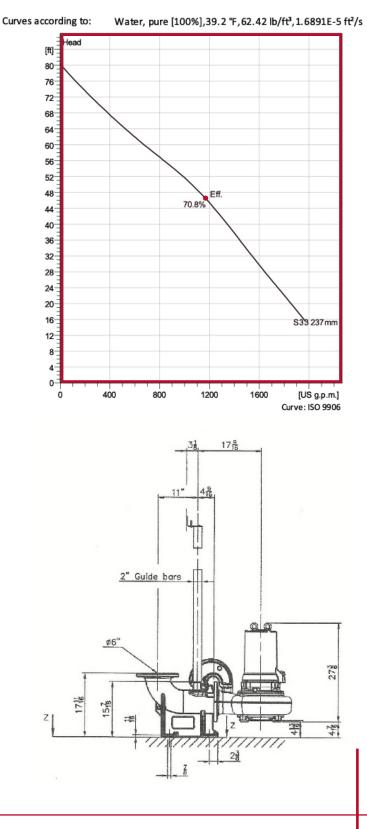




Part Number: 1325.181-0470 Pump Description: KX433-6 20/460/3 50' FLS



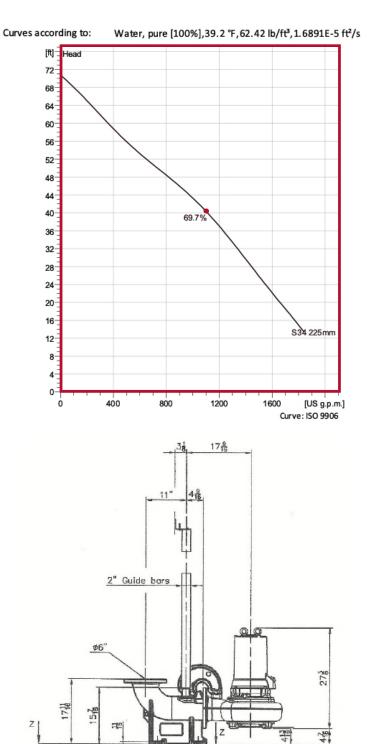
CONFIG	URATION
Motor Number	K1325.181 21-18-4ZA-W 20 hp
Installation Type	Wet Well Kit
Impeller Diameter	237 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	237 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1760 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1325.181 21-18-4ZA-W 20 hp
Motor Number Phases	K1325.181 21-18-4ZA-W 20 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1760 rpm
Phases Rated Speed Rated Power	3 ~ 1760 rpm 20 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1760 rpm 20 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1760 rpm 20 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1760 rpm 20 hp No 4 26 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1760 rpm 20 hp No 4 26 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1760 rpm 20 hp No 4 26 A 1 60 Hz 460 V F



Part Number: 1325.181-0485 Pump Description: KX434-6 18/460/3 50'(6) FLS 1V



CONFIG	URATION
Motor Number	K1325.181 21-18-4ZA-W 18 hp
Installation Type	Wet Well Kit
Impeller Diameter	225 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	225 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1765 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1325.181 21-18-4ZA-W 18 hp
NOTOR NUMBER	K1525.101 21-10-42A-W 1011p
Phases	3~
Phases	3~
Phases Rated Speed	3 ~ 1765 rpm
Phases Rated Speed Rated Power	3 ~ 1765 rpm 18 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1765 rpm 18 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1765 rpm 18 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1765 rpm 18 hp No 4 23 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1765 rpm 18 hp No 4 23 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1765 rpm 18 hp No 4 23 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1765 rpm 18 hp No 4 23 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1765 rpm 18 hp No 4 23 A 1 60 Hz 460 V F



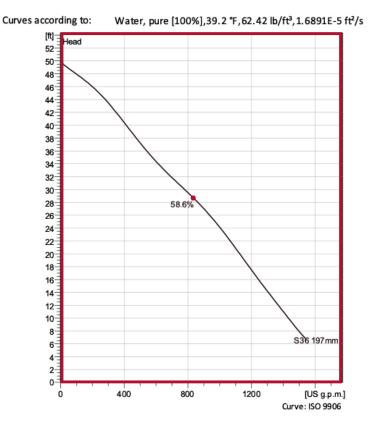
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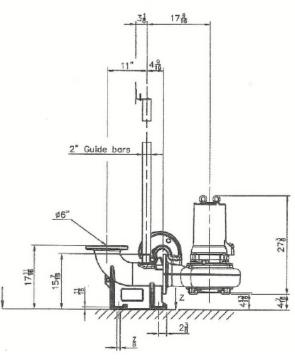
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Part Number: 1325.181-0486 Pump Description: KX436-6 14/460/3 50'(6) FLS 1V



CONFIG	URATION
Motor Number	K1325.181 21-18-4ZA-W 14 hp
Installation Type	Wet Well Kit
Impeller Diameter	197 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	197 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	150 mm
Maximum Operating Speed	1770 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1325.181 21-18-4ZA-W 14 hp
Motor Number Phases	K1325.181 21-18-4ZA-W 14 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1770 rpm
Phases Rated Speed Rated Power	3 ~ 1770 rpm 14 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1770 rpm 14 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1770 rpm 14 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1770 rpm 14 hp No 4 19 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1770 rpm 14 hp No 4 19 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1770 rpm 14 hp No 4 19 A 1 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1770 rpm 14 hp No 4 19 A 1 60 Hz 460 V
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage Insulation Class	3 ~ 1770 rpm 14 hp No 4 19 A 1 60 Hz 460 V F

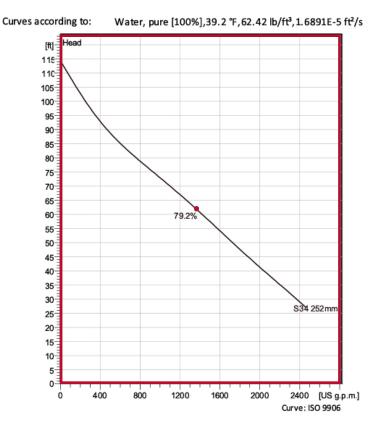


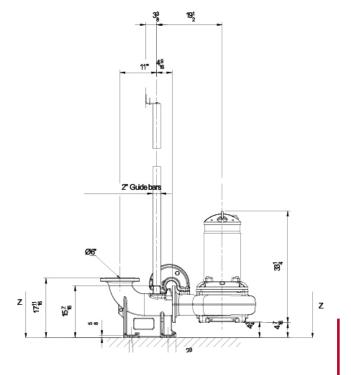


Part Number: 1330.181-0335 Pump Description: K434-6 32/460/3 50' FLS



CONFIG	URATION
Motor Number	K1330.181 25-19-4ZA-W 32 hp
Installation Type	Wet Well Kit
Impeller Diameter	252 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	252 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	200 mm
Maximum Operating Speed	1760 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1330.181 25-19-4ZA-W 32 hp
Motor Number Phases	K1330.181 25-19-4ZA-W 32 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1760 rpm
Phases Rated Speed Rated Power	3 ~ 1760 rpm 32 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1760 rpm 32 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1760 rpm 32 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1760 rpm 32 hp No 4 37 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1760 rpm 32 hp No 4 37 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1760 rpm 32 hp No 4 37 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1760 rpm 32 hp No 4 37 A 1 60 Hz 460 V

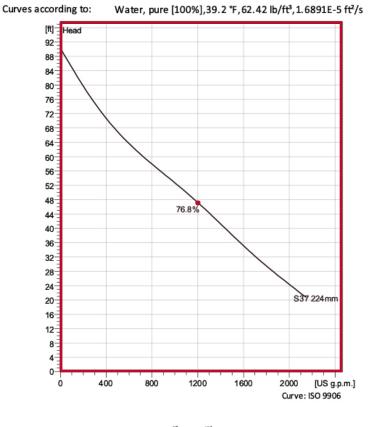


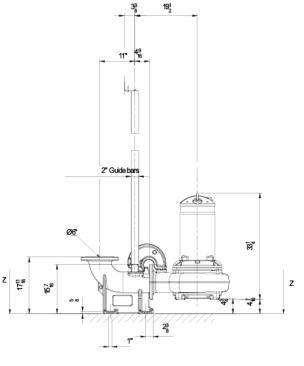


Part Number: 1330.181-0336 Pump Description: K437-6 23/460/3 50' FLS



CONFIG	URATION
Motor Number	K1330.181 25-19-4ZA-W 23 hp
Installation Type	Wet Well Kit
Impeller Diameter	224 mm
Discharge Diameter	5 7/8 inch
PUMP INF	ORMATION
Impeller Diameter	224 mm
Discharge Diameter	5 7/8 inch
Inlet Diameter	200 mm
Maximum Operating Speed	1770 rpm
Number of Blades	2
Maximum Fluid Temperature	40° C
MOTOR -	GENERAL
Motor Number	K1330.181 25-19-4ZA-W 23 hp
Motor Number Phases	K1330.181 25-19-4ZA-W 23 hp 3 ~
Phases	3~
Phases Rated Speed	3 ~ 1770 rpm
Phases Rated Speed Rated Power	3 ~ 1770 rpm 23 hp
Phases Rated Speed Rated Power ATEX Approved	3 ~ 1770 rpm 23 hp No
Phases Rated Speed Rated Power ATEX Approved Number of Poles	3 ~ 1770 rpm 23 hp No 4
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current	3 ~ 1770 rpm 23 hp No 4 28 A
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant	3 ~ 1770 rpm 23 hp No 4 28 A 1
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency	3 ~ 1770 rpm 23 hp No 4 28 A 1 60 Hz
Phases Rated Speed Rated Power ATEX Approved Number of Poles Rated Current Stator Variant Frequency Rated Voltage	3 ~ 1770 rpm 23 hp No 4 28 A 1 60 Hz 460 V





FLYGT MIXERS

Skinner AgSolutions, Inc. offers the full range of mixers needed in manure handling and biogas production systems. After decades of experience, Skinner AgSolutions can custom-engineer a solution for your waste/biogas equipment needs.

Depending on the application, we select from the following Flygt mixer options –

FLYGT COMPACT MIXERS

Engineered for flexibility, versatility and ease of installation, these space-saving mixers offer highly efficient solutions for any tank shape and size.

Our compact mixers easily blend highly contaminated fluids, high-density or high-viscosity liquids, and liquids with fibrous material. Few components, low capital investment and straightforward service routines make Flygt compact mixers the economical choice for a broad range of mixing applications.

FLYGT LOW-SPEED MIXERS

When mixing and horizontal flow is essential, Flygt low-speed mixers deliver outstanding cost-effective performance for applications that involve gentle mixing of large fluid volumes.

Engineered for more efficient bulk flow, lower energy consumption and positioning flexibility, these mixers offer highly efficient solutions for a wide range of mixing applications.

FLYGT MID-SIZED MIXERS

Flygt mid-sized mixers combine superior hydraulic design with large diameter propellers and low speeds. That combination results in optimized thrust and maximized biogas production profitability, by generating required bulk flow with minimum energy consumption.

Choose from the full range of Flygt MixersColspan="2">Colspan="2"Colspan=

4660 Compact Mixer





4460 Biogas Mid-Sized Mixer

For more information on all the mixers available from Skinner AgSolutions, Inc., please visit the mixers section of our website at https://skinneragsolutions.com/mixers/

FLYGT 4600 SERIES COMPACT MIXERS

Part Numbers: 4640.310-0014, 4650.310-0027, 4660.310-0053 and 4670.310-0023

For decades, Flygt has been at the cutting edge of mixer research and development. Flygt compact mixer components contribute to their reliable operation, reduced energy costs and efficient mixing.

The 4600 Series Compact Mixers feature a squirrel-cage induction motor, providing superior durability and dependability. Stator windings are trickle impregnated in resin and rated at Class H 180°C (355°F) for excellent resistance to overheating and long service life.

The large oil volume ensures smooth operation and long service intervals between refills. To make service easy, the oil plugs allow refill without removing the propeller.

Flygt compact mixers feature an efficient hydraulic design with few, easy-to-service components, which contributes to reliable, troublefree operation. Engineered to generate maximum thrust with minimal use of energy, the propeller blades, with their backswept design, allow highly fibrous material to pass through. Wide-hub design deflects fibrous material.

Skinner AgSolutions stocks four models of compact mixers, with other sizes available by custom order. Using standardized materials and components, the modular design, which includes a series of blade angles for each model, provides a comprehensive range of mixer performance.



FLYGT 4600 SERIES COMPACT MIXERS

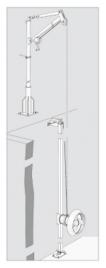
LOW COST OF INSTALLATION

Flygt installation equipment is rigid enough to withstand the weight and reaction forces exerted by the mixer throughout its operating life. It is also robust and easy to work with.

To help withstand fatigue from strongly fluctuating forces within the tank, Flygt compact mixers are usually installed along rigid guide bars at appropriate depths for optimal mixing efficiency. Used together with our lifting equipment, guide bar systems enable easy access for inspection and service.

Raising and lowering Flygt compact mixers with our lifting equipment is as easy and convenient as it is safe. The CE-approved lifting davit is mounted in a holder at its lower end, which enables easy turning of the davit. To reduce investment cost, one davit can be used for several mixers.

METHODS OF INSTALLATION



Guide bar mounting The mixer is lowered or raised along a guide bar located on the tank wall.



Floor mounting Affixes to a stand on the bottom; often used in shallow tanks and ponds.



Flange mounting Securely affixes to an adapter flange, which is mounted in the tank inspection hole.





Cantilever mounting Mounts on a cantilever bar, which is fixed to the tank edge.



TECHNICAL SPECIFICATIONS CHART

4640.310-0014 COMPACT MIXER			
Power – 60 Hz (hp)	4.0 hp		
Thrust Range – 60 Hz, N	300-800N		
Propeller Diameter, m (in)	0.368 m (14.5 in)		
4650.310-0027 COMPACT MIXER			
Power – 60 Hz (hp)	6.0 hp	8.3 hp	
Thrust Range – 60 Hz, N	1200N	1200-1500N	
Propeller Diameter, m (in)	0.580 m (22.8 in)	0.580 m (22.8 in)	
4660.310-00	53 COMPACT N	/IXER	
Power – 60 Hz (hp)	11.0 hp	15.0 hp	
Power – 60 Hz (hp) Thrust Range – 60 Hz, N	11.0 hp 1200-2300	15.0 hp 1200-3100	
(17)			
Thrust Range – 60 Hz, N Propeller Diameter, m (in)	1200-2300	1200-3100 0.580 m (22.8 in)	
Thrust Range – 60 Hz, N Propeller Diameter, m (in)	1200-2300 0.580 m (22.8 in)	1200-3100 0.580 m (22.8 in)	
Thrust Range – 60 Hz, N Propeller Diameter, m (in) 4670.310-00	1200-2300 0.580 m (22.8 in) 23 COMPACT N	1200-3100 0.580 m (22.8 in)	

FLYGT 4410 & 4430 LOW-SPEED MIXERS

Part Numbers: 4410.011-2000 & 4430.010-1938

Flygt low-speed mixers feature several components that contribute to reliable operation and reduced energy costs.

Their unique propeller design maximizes the amount of thrust delivered, while minimizing energy consumption. Engineered for hydraulic excellence with high-strength materials, Flygt's signature banana blade large-diameter propellers, with backswept self-cleaning design, provide non-clogging performance that lasts and lasts.

The low-speed mixer's squirrel-cage induction motor is carefully manufactured by Flygt for durability and dependability. Stator windings are trickle impregnated in resin and rated at Class H 180°C (355°F) to provide excellent resistance to overheating and exceptionally long service life.

A vital component for reliable operation, Flygt's mechanical shaft seals feature a unique design with an intermediate barrier fluid. Made of corrosion-resistant tungsten carbide (WCCR), our specially manufactured seals provide exceptional mechanical strength and superior sliding properties. This results in significantly less wear between the seal surfaces. It also reduces the risk of leakage and prolongs seal service life.





DEPENDABLE, LOW COST INSTALLATION SYSTEMS

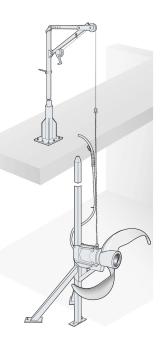
Flygt installation equipment is rigid enough to withstand the weight and reaction forces exerted by the mixer throughout its operating life. It is also robust and easy to work with. To help withstand fatigue from strongly fluctuating forces within the tank, Flygt low-speed mixers are installed along rigid guide bars at appropriate depths for optimal mixing efficiency. Used together with our lifting equipment, guide bar systems enable easy access for inspection and service.

Raising and lowering Flygt low-speed mixers with our lifting equipment is as easy and convenient as it is safe. The CE-approved lifting davit is mounted in a holder at its lower end, which enables easy turning of the davit. To reduce investment cost, one davit can be used for several mixers.

TECHNICAL SPECIFICATIONS CHART

4410.011-2000 LOW-SPEED MIXER		
Shaft Power – 60 Hz (hp)	3.5 hp	
Thrust Range – 60 Hz, N	600-2300N	
Propeller Diameter, m (in)	1.4-2.5 m (55-98 in)	
4430.010-1938 L	OW-SPEED MIXER	
Shaft Power – 60 Hz (hp)	6.2 hp	
Thrust Range – 60 Hz, N	700-3800N	
Propeller Diameter, m (in)	1.4-2.5 m (55-98 in)	

No costly modifications to existing tanks are required.







The guide bar system makes mixers easily accessible.

Skinner AgSolutions specifies the Flygt 4410 and 4430 Low-Speed Mixers for many agricultural waste handling applications.

FLYGT 4460 BIOGAS MIXERS

Part Numbers: 4460.010-0135, 4460.010-0296 and 4460.020-0014

Flygt 4460 Biogas Mixers combine superior hydraulic design with large diameter propellers and low speeds. That combination results in optimized thrust and maximized biogas production profitability, by generating required bulk flow with minimum energy consumption.

- · Low energy costs due to high efficiency in biogas media
- Maximum robustness when dealing with corrosive and abrasive liquids due to duplex steel propellers
- · Clog-free operation even with fibrous substrates
- · Easy installation and service
- · Extended system lifetime thanks to reduced level of vibration
- · Propeller sizes tailored to fit standard roof openings
- Flygt motors and heavy-duty gearboxes guarantee reliability and non-stop performance

Skinner AgSolutions offers three models of the Flygt 4460 Biogas Mixer – one low-speed and two mid-sized mixers.





FLYGT 4460 BIOGAS MIXERS

4460 BIOGAS LOW-SPEED MIXER

When mixing and horizontal flow is essential in biogas production systems, Flygt 4460 Biogas low-speed mixers deliver outstanding cost-effective performance for applications that involve gentle mixing of large fluid volumes.

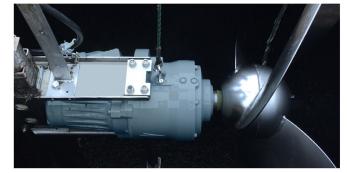
Engineered for more efficient bulk flow, lower energy consumption and positioning flexibility, these mixers offer highly efficient solutions.

4460 BIOGAS MID-SIZED MIXERS

Flygt 4460 Biogas mid-sized mixers bring your biogas production to new heights. With its large diameter duplex steel propellers and superior hydraulic design running at low speeds, customers can be assured of maximum thrust, minimum power consumption and maintained substrate homogeneity.

Flygt 4460's duplex steel propellers provide efficient and effective mixing of challenging digester content. The propeller's' spherical hub design ensures clog-free operation even with fibrous substrates. Flygt motors and heavy-duty gearboxes guarantee reliability and non-stop performance.

Flygt 4460 mid-sized mixer is specifically made to perform in high yield stress and high viscosity liquids, providing effective mixing and low energy cost.



Installed on the dedicated biogas installation equipment BIS-1, with depth and angle adjustment, Flygt 4460 mid-sized mixers offer the most flexible configuration for proper digester operation, to optimize biogas production.

4460 SERIES BIOGAS MIXERS			
Part Number	4460.010-0135	4460.010-0296	4460.020-0014
Mixer Type	Low-Speed	Mid-Sized	Mid-Sized
Rated Output Power (60 Hz)	8.4 hp	11 hp	16.1 hp
Propeller Diameter, m (in)	2.5 m (98 in)	1.25 m (49 in)	1.25 m (49 in)
Thrust (60 Hz)	4000N	2940N	3560N
Installation	Tripod Guide Bar	Biogas Support System (BIS-1)	Biogas Support System (BIS-1)

TECHNICAL SPECIFICATIONS CHART

KNIFE GATE VALVES FROM SA VALVES



SA Valves, a division of Skinner AgSolutions, Inc., offers best in class valves to achieve reduced maintenance, lowest cost of ownership, and the highest reliability.

Our complete line of Knife Gate Valves will suit any application. Whether a new installation, a retrofit or update of an existing piping and plumbing system — SA Valves has the solution for your specific needs.

SA Valves offers a full line of uni-directional and bi-directional knife gate valves. Heavy duty construction, with options for metal and resilient seated designs. We stock valves in sizes ranging from 2" to 24".

Choose the SA Valves knife gate valve series that fits your needs -

SAV SERIES KNIFE GATE VALVES

SAV Series Knife Gate Valves are heavy duty uni-directional, full lug design valves manufactured per MSS SP-81 standard and TAPPI TIS 405-8 and AWWA C-520 for industrial service applications. The SAV Series design assures non-clogging shutoff of suspended solids. We stock valves in sizes ranging from 2" to 24".

SAV Series valves can be installed in a vertical, horizontal, or an inclined position. They can be used for liquid, solid-liquid or slurry mixes, or dry bulk solids. The SAV Series Knife Gate Valves are provided with a 100% bore opening, which does not restrict the flow in the pipeline.

SAV-S model knife gate valves are resilient seated valves, offering a leak tight shutoff. SAV-M model knife gate valves are metal seated valves, offering leakage within permissible limits, as per applicable MSS SP-81 standard.

SAV-B SERIES KNIFE GATE VALVES

SAV-B Series Knife Gate Valves are high-performance shut-off valves, with superior flow characteristics, offering bi-directional zero leakage shut-off up to 150 psi/10 bar. They're suitable for media such as pulp stock, chemicals, sludge, biomass, slurry and water. The fully lugged body design is suitable for dead-end services. We stock valves in sizes ranging from 2" to 24".

The SAV-B Series Knife Gate Valve is an all stainless steel, full-lugged valve body, with a highly polished gate and gland. A smooth cycling and tight shut-off, independent of valve position, is achieved by the high strength top works that provide an essential alignment for the gate.

The valve utilizes stainless steel tie rods, encapsulated inside the structural beams. The SAV-B Series Knife Gate Valve meets the requirements of MSS SP-81, and is designed, manufactured, inspected and tested according to pressure equipment directives.



SAV Series Knife Gate Valves



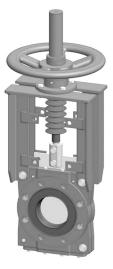
SAV-B Series Knife Gate Valves

KNIFE GATE VALVES FROM SA VALVES

SAV-SL SERIES KNIFE GATE VALVES

SAV-SL Series Knife Gate Valves are bi-directional wafer equipped valves, with two reinforced metal sleeves, designed for applications with abrasive slurries.

SAV-SL Series Knife Gate Valves are manufactured in sizes ranging from 2" to 36".



SAV-SL Series Knife Gate Valves

SAV-SQ SERIES KNIFE GATE VALVES

SAV-SQ Series Knife Gate Valves are uni-directional valves, fabricated with a square or rectangular port low-pressure valve. They are designed for highly solid, loaded fluids or solids, and mainly used in bulk handling or silo outlet applications.

SAV-SQ Series Knife Gate Valves from SA Valves are available in sizes ranging from 6"x6" to 24"x24".



SAV-SQ Series Knife Gate Valves

For more information on all the agricultural waste management valves available from SA Valves, a division of Skinner AgSolutions, Inc., please visit the valves section of our website at https://skinneragsolutions.com/valves/

To view the entire line of valves for industrial and agricultural use, including valve automation controls, please visit the SA Valves website at https://savalves.us/

ACCESSORIES

Skinner AgSolutions, Inc. offers a wide range of accessories for your manure handling and biogas equipment systems.

Work with the Skinner AgSolutions team to select the right accessory components to complete your custom-engineered waste/biogas management system.

CONTROL PANELS

Skinner AgSolutions and the Flygt engineering team can design and build custom panels to meet your specialized needs and specifications. From the simplest to the most complex application, we offer full technical and design support while maintaining the highest quality.

Flygt has standardized on the best components, equipment and processes, based on more than twenty years of experience in control systems. Panels are built to strict ISO 9002 manufacturing quality standards.

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LIQUID LEVEL CONTROLS

Proper level regulation is critical for operational reliability. Lack of proper regulation can cause improper operation, pump damage or, in the worst case, overflow resulting in environmental and economic consequences.

The Flygt Liquid Level Controls are the ideal choice for most level control applications, such as waste pumping stations. When the liquid level reaches the regulator, the bulb tilts, activating the internal micro switch, which starts or stops a pump or triggers an alarm device.



PUMP LIFT SYSTEMS

Pump lift systems are an essential part of most agricultural waste handling systems, providing easy access to pumps for installation and service.



MIXER LIFT SYSTEMS

Mixer lift systems need to be heavy-duty and reliable, providing access to mixers for installation and service in your agricultural waste handling system.

CRANES

Crane Lifts provide quick access to a submerged pump/mixer for inspection and service. Choose between holders for floor or wall installation. Skinner AgSolutions offers both composite and stainless-steel lifts, depending on the customer's requirements.



BIS-1 BIOGAS SUPPORT SYSTEM

The Flygt BIS-1 biogas support system offers easy installation and operation of submersible mixers for both new and existing biogas digesters.

Flygt submersible mixers installed on the BIS-1 biogas support system creates a complete mixing system for biogas digesters. This biogas support system ensures proper digester operation and reliably maximizes gas production, with minimum installation, maintenance and service time.

The Flygt BIS-1 biogas support system was engineered to support critical functions for optimal biogas digestion operation, including the ability to:

- Move the mixer up and down on the guide bar without opening the digester roof or hatch.
- Rotate the mixer +/- 45 degrees in the horizontal plane without opening the digester roof or hatch.
- Simply lift the mixer out of the digester without emptying the tank.

This adjustable feature allows the operator to raise the mixer to break up a crust, or lower it to suspend settling solids.

Both Flygt mid-size mixers and Flygt compact mixers can be installed with the BIS-1 guide bar for vertical and angular adjustability. These mixers can be combined and matched for optimal digester operation.



MINICAS II

MiniCAS II is a monitoring relay used primarily with small and medium-sized pumps and mixers. It provides protection for the most common threats against a submersible pump: high temperature and leakage. In case of alarm, the pump is stopped or an alert is given by means of lamps and relays.

The following monitoring is possible with MiniCAS II:

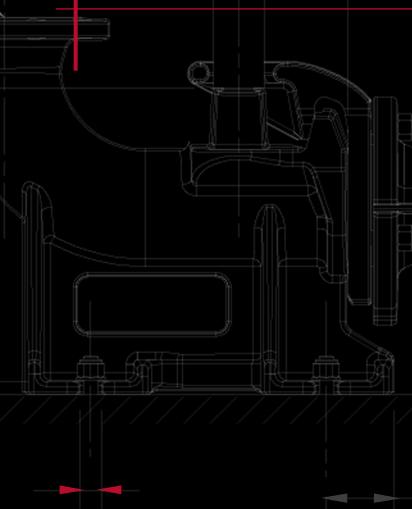
- · Thermal switches to detect overheating in the stator windings.
- · FLS leakage sensor in the stator housing or junction box.
- · FLS10 leakage sensor in the inspection chamber.
- · CLS, water in oil sensor in the oil housing.

As a standard feature, MiniCAS II combines monitoring of thermal switches with either of the leakage sensors. However, up to two leakage sensors can be monitored.

For more information on all the accessories available from Skinner AgSolutions, Inc., please visit the accessories section of our website at https://skinneragsolutions.com/accessories/



CONTACT AND ORDERING INFORMATION





Skinner AgSolutions, Inc. has the expertise to answer your questions and assist you with a custom-engineered solution for your agricultural waste management needs.

Our inside sales team and onsite consultants will review your agricultural waste/biogas equipment needs and prepare a customized quote for your project requirements.

REQUEST A QUOTE

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Contact us today!