

# Flygt Submersible Pumps

AVAILABLE FOR RENTAL AND SALE



## Flygt 3000 Series

#### Better heat transfer

Our specially designed and manufactured motor provides enhanced cooling because heat losses are concentrated around the stator. Trickle impregnated in resin (Class H insulation), the stator windings are rated at 180°C (355°F) and enable up to 30 starts per hour.

#### **Efficient cooling**

These pumps are cooled either by the surrounding liquid or, in more demanding applications, with an internal closed-loop cooling system.

#### Inspection chamber

To increase operational reliability, an inspection chamber between the seal unit and the bearings enables rapid spot checks and maintenance. In the case of a seal failure, a built-in sensor provides an early warning of any fluid build-up, thus reducing the risk of expensive repair work.

#### Compliance

Each pump is tested and approved in accordance with national and international standards, including IEC 34-1 and CSA. Pumps are available in explosion-proof versions for use in hazardous environments, and are approved by the Factory Mutual, European Standard and IEC.

#### Cable entry

Water-resistant cable entry provides both sealing and strain relief functions to ensure a safe installation.

#### Sensors

Thermal sensors embedded in the stator windings prevent overheating, and a leakage sensor in the inspection chamber minimizes the risk for bearing and stator failure.

#### Long-life bearings

Durable bearings provide a minimum service life of 50,000 hours.

#### Enduring seals

The Flygt Plug-in<sup>™</sup> seal with the Active Seal<sup>™</sup> system offers increased sealing reliability and zero leakage into the motor, thereby reducing the risk of bearing and stator failure.

#### Flygt Plug-in<sup>™</sup> seal with Active Seal<sup>™</sup> system



Inner seal with laser-cut spiral grooves. The Flygt Plug-in<sup>™</sup> seal is a seal unit that eliminates the risks associated with incorrect installation and careless handling. It comprises the Active Seal<sup>™</sup> system in one easy-to-handle unit.

The Active Seal<sup>™</sup> system is a patented zero-leakage double-seal system that actively prevents liquid from entering the motor cavity, thereby reducing the risk for bearing and stator failure. It comprises a unique inner seal that acts as a micro-pump and an outer seal that prevents leakage of pumped media into the buffer chamber.

Laser-cut grooves on the inner seal create a hydrodynamic pumping effect that prevents any leakage from entering the motor.

This translates into enhanced sealing reliability, reduced downtime and fewer unscheduled maintenance checks. In addition, regular service inspections can be prolonged in many applications.

## Stainless Steel 3000 Series Sludge and Solids-Handling Sewage Pumps

#### CS/DS 3060 (SS)



Model number:	3060.390					
Motor rating:	1ø: 2.5 HP@3400 RPM 3ø: 3.7 HP@3300 RPM					
Voltage (1ø): Full load amps:	<u>230V</u> 11A					
Voltage (3ø):	<u>200V</u>	<u>230V</u>	<u>460V</u>	<u>575V</u>		
Full load amps:	10.8A	9.4A	4.7A	3.8A		
Versions:	CS: 3″ Standard Imp. Code 226 (1ø), 222 (3ø)					
	DS: 3″ Vortex Imp. Code 276 (1ø), 274 (3ø)					
Hose connection:	Slip-on					
Pump dimensions:	16 <sup>1</sup> /₂″ V	/ (max.) ×	23 <sup>1</sup> /₂″ H	(max.)		
Max. weight (lbs.):	95					
Description:	CS/DS: Stainless steel construction; rests on bottom strainer. CS: Open impeller, with diffuser. DS: Vortex type impeller.					



#### CS 3201 (SS)



Model number:	3201.280				
Motor rating:	30 HP@860 RP 35 HP@1170 R				
	47 HP@1760 R				
Voltage (3ø):	230V				
Full load amps:	82/94/116A				
	<u>460V</u>	575V			
	41/47/58A	33/38/46A			
Versions:	6" High hd., Imp. Code 452 (47 HP)				
	8" Std., Imp. Co	ode 636 (35 HP)			
	10" High volum Imp. Code 821	ne (30 HP)			
Hose connection:	Slip-on				
Pump dimensions:	56" W (max.) x	63″ H (max.)			
Max. weight (lbs.):	1600				
Description:		construction; andling impeller, s on bottom stand.			
Options:	Explosion proc variant 3201.29	of (FM approved) 20			



CS 3300 (SS)



22

Model number: Motor rating:	3300.280 60 HP @ 11 45 HP @ 87 77, 88 HP @	5 RPN		
Voltage (3ø, 60 HP) Full load amps:	: <u>460V</u> 73/80A	575\ 58/0		
Voltage (3ø, 45/77/88HP): Full load amps:	460V 60/91/10	 8A	575V 48/73/86A	
Versions:	6" High hd., Imp. Code 464 (88 HP)			
	8″ Standar Imp. Code	-	60HP), 642 (77HP)	
	10″ High v Imp. Code		e 45 HP), 804 (60 HP)	
Hose connection:	Slip-on			
Pump dimensions:	56 <sup>3</sup> / <sub>4</sub> " W (	max.)	x 75³/₄″ H (max.)	
Max. weight (lbs.):	2590			
Description:	Stainless steel construction; closed, solids handling impeller, wear rings; rests on bottom stand.			



## 3000 Series Solids-Handling Sewage Pumps

#### CLOSED IMPELLERS

CS models feature closed wastewater impellers designed for pumping typical wastewater solids as found in many sewage applications. Usually, a stationary brass or nitrile rubber wear ring is set into the volute bottom, surrounding the lower part of the impeller, to prevent wear and maintain hydraulic efficiency. Larger models may also utilize a stainless steel rotating ring, tightly fitted around the lower part of the impeller, to further reduce wear.



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•	Model number: Motor rating:	3127.182 1ø: 7.5HP@1730RPM 3ø: 10HP@1730RPM							
	Voltage (1ø): Full load amps:	230V 30A							
-	Voltage (3ø): Full load amps: Versions:	6" Std., Ir	de 462 (1 np.Code	433(1ø),	432(3ø)				
	Hose connection:	8" Std., Imp. Code 412 (1ø), 411 (3 nection: 4" & 6" NPSM threaded, or 4", 6" & 8" slip-on							
	Pump dimensions: Max. weight (lbs.): Description:	400 Cast iro solids ha	V (max.) x n constru andling ir wear ring	ction; clc npeller w	osed vith				
	Options:	variant 3	on proof ( 3127.091 quid vers						



#### CS3152



Model number: Motor rating:	3152.181 14HP @ 1160 RPM 15HP @ 1745 RPM 20HP @ 1750 RPM 23HP @ 3500 RPM						
Voltage (3Ø, 14 / 15HP): Full load amps:	<u>200V</u> 41/45	<u>230V</u> 37/39	<u>460V</u> 18/20	<u>575V</u> 14/16			
Voltage (3Ø, 20 / 23HP): Full load amps:	200V 58/61	230V 51/53	460V 26/26	575V 20/21			
Versions:	lmp. Čo	4" High head Imp. Code 454 (20HP), 268 (SH, 23HP) 6" Standard, Imp. Code 436 (15HP)					
	10" High	n Volume,	Imp. Cod	e 620 (14HP)			
Hose connection:		4" & 6" NPSM threaded, or 4", 6" & 8" slip-on					
Pump dimensions: Max. weight (lbs.):	42″ W ( 940	42" W (max.) x 48-1/4" H (max.)					
Description:	solids h	Cast iron construction; closed solids handling impeller with thrulat waar ring; racts on stand					
Options:	Explosi variant	thrulet, wear ring; rests on stand. Explosion proof (FM approved) variant 3127.091					
	Warm l	iquid ver	sion avai	lable			



FLOW GPM

#### CS 3300



Model number: Motor rating:	3300.181 60 HP @ 1170 RPM & 875 RPM 45 HP @ 875 RPM 75 HP, 88 HP @ 1170 RPM				
Voltage (3ø, 60 HP):	<u>460V 575V</u>				
Full load amps:	73/80A 58/65A				
Voltage (3ø, 45/75/88 HP):	460V 575V				
Full load amps:	60/91/108A 48/73/86A				
Versions:	6″ High head, Imp. Code 464 (88 HP)				
	8" Standard				
	Imp. Code 646 (60 HP), 642 (75 HP)				
	10" High volume Imp. Code 807 (45 HP), 804 (60 HP)				
Hose connection:	Slip-on				
Pump dimensions:	66″ W (max.) x 75³/₄″ H (max.)				
Max. weight (lbs.):	1915				
Description:	Cast iron construction; closed solids handling impeller with thrulet, wear ring; rests on stand.				
Options:	Explosion proof (FM approved)				



### 3000 Series N-Pump Sewage Pumps **N-IMPELLERS**

These pumps are equipped with Flygt's innovative "self-cleaning" N-impeller. The open impeller works with a special relief groove at the bottom of the volute to continually keep it free from solids build-up. This proven design not only reduces clogging but also ensures continued long-term efficiencies, which significantly reduce electrical operating costs. An excellent choice where troublesome solids are present in the water to be pumped.

#### NS 3085



Model number:	3085.183				
Motor rating:	1ø: 2.4HP@1750RPM 3ø: 2.2, 3HP@1750RPM				
Voltage (1ø): Full load amps:	230V 10A				
Voltage (3ø):	200V	230V			
Full load amps:	7.8/10A	6.7/9A			
	460V	575V			
	3.4/4.5A	2.7/3.6A			
Versions:	3″ Standard Imp. Code 463 (1ø, 3ø), 462 (3ø)				
Hose connection:	NPSM threaded, or slip-on				
Pump dimensions:	<u>.</u>				
Max. weight (lbs.):	175				
Description:	backswept	onstruction; semi-open, multi-vane, self-cleaning ests on stand.			
Options:	variant 308				
	Warm liquid version available				



NS 3102



Model number: Motor rating:	3102.181 5 HP @ 1730 RPM					
0						
Voltage (3ø):	200V	230V	460V	575V		
Full load amps:	15A	13A	6.6A	5.3A		
Versions:	4" & 6" High volume Imp. Code 422, 423					
Hose connection:	NPSM threaded, or slip-on					
Pump dimensions:	27″ W (max.) x 28 <sup>1/</sup> 2″ H (max.)					
Max. weight (lbs.):	118					
Description:	Cast iron construction; semi-open, backswept multi-vane, self-cleaning impeller; rests on stand.					
Options:	Explosion proof (FM approved) variant 3102.090 Warm liquid version available					



#### NS 3127



Model number:	3127.185					
Motor rating:	1ø: 7.5HP@1730RPM 3ø: 10HP@1740RPM					
Voltage (1ø): Full load amps:	230V 30A					
Voltage (3ø): Full load amps:	200V 29A	230V 26A	460V 13A	575V 10A		
Versions:	4" & 8" Standard Imp. Code 420 (1ø), 438 (3ø)					
	8" High volume Imp. Code 422 (1ø), 421 (3ø) 4" High head Imp. Code 489 (1ø), 488 (3ø)					
Hose connection:	4" & 6"NPSM threaded, or slip-on 4", 6" & 8" Slip-on					
Pump dimensions:	31 <sup>1</sup> / <sub>2</sub> ″ V	V (max.) x	30 <sup>3</sup> /₄″ ⊢	l (max.)		
Max. weight (lbs.):	400					
Description:	Cast iron construction; semi-open, backswept multi-vane, self-cleaning impeller; rests on stand.					
Options:	variant 3	3127.095				
	Warm liquid version available					



#### NS 3153



Model number: Motor rating:	3153.185 20 HP @ 1755 RPM 23 HP @ 3510 RPM						
Voltage (3ø): Full load amps:	200V 59A	230V 52A	460V 26A	575V 21A			
Versions:	4" Super high head, Imp. Code 274 4" High head, Imp. Code 461 6" Standard, Imp. Code 433 8" High volume, Imp. Code 413						
Hose connection:	4", 6" &	8" Slip-o	n .				
Pump dimensions:	42″ W (	42″ W (max.) x 47 <sup>1</sup> /₄″ H (max.)					
Max. weight (lbs.):	840 - Hi	840 - High volume, 530 - Standard					
Description:	backsw	Cast iron construction; semi-open, backswept multi-vane, self-cleaning impeller; rests on stand.					
Options:		on proof 3153.095	(FM app	roved)			



#### NS 3171



#### NS 3171 (Continued)



Model number:	3171.185				
Motor rating:	30 HP @ 1740 RPM 34 HP @ 3525 RPM				
Voltage (3ø):	230V	460V			
Full load amps:	74/79A	37/40A			
	575V				
	25/30/31A				
Versions:	4″ Super high	n head			
	Imp. Code 275				
	4" High head				
	Imp. Code 45	54			
Hose connection:	4", 6" & 10" S	lip-on			
Pump dimensions:	45 <sup>1</sup> / <sub>2</sub> " W (max.) x 51 <sup>1</sup> / <sub>4</sub> " H (max.)				
Max. weight (lbs.):	1060 - High v	olume, 770 - Standard			
Description:	Cast iron construction; semi-open, backswept multi-vane, self-cleaning impeller; rests on stand.				
Options:	Explosion pro variant 3171.	oof (FM approved) 095			



#### NS 3202



Model number:	3202.185	20	0							
Motor rating:	60 HP@1170 RPM & 1775 RPM	_								
-	70 HP@1775 RPM	17	5		458					
Voltage (3ø):	460V <u>575V</u>	_			450					
Full load amps:	72/68/80A 58/55/63A	15	0							
Versions:	6" High head Imp. Code 458 8" Standard Imp. Code 640 10" High volume	12	5		$\mathbf{f}$					
	8" Standard H Imp. Code 640	10	00							
	10" High volume <b>5</b> Imp. Code 614	75	;			7				
Hose connection:	6", 8" & 10" Slip-on	50					_	-		_
Pump dimensions:	52 <sup>1</sup> /₂″ W (max.) x 62″ H (max.)	50	,				6	40		
Max. weight (lbs.):	1985 - High volume 1340 - Standard	25	;	I		1			_	
Description:	Cast iron construction; semi-open, backswept multi-vane, self-cleaning impeller; rests on stand.			0		2000	FLO	40 SW 0	000 GPM	
Options:	Explosion proof (FM approved) variant 3202.095									

NS 3301



Model number:	3301.185			300
Motor rating:	85 HP @ 1185 RPM 105 HP @ 1780 RPM			
Voltage (3ø):	460V	575V		250
Full load amps:	109/121A	88/97A		
Versions:	6″ High head Imp. Code 462		OTAL HEAD FEET	200
	10" Standard Imp. Code 636		AL HEA	150
	12″ High volume Imp. Code 624		TOT	100
Hose connection:	6″, 10″ & 12″ Slip-on			
Pump dimensions:	56 <sup>3</sup> / <sub>4</sub> " W (max.) x 67 <sup>1</sup> / <sub>4</sub> " H (max.)			50
Max. weight (lbs.):	1985 - High volume 1340 - Standard			50
Description:	backswept	onstruction; semi-open, multi-vane, self-cleaning sts on stand.		
Options:	Explosion p variant 330	roof (FM approved) 1.095		



614

6000

8000

### 3000 Series Heavy-Duty Sewage Pumps for Rental

When higher capacity is required, these models deliver unprecedented pumping power - reliably and efficiently.

#### NS 3315



#### NS 3312

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10000

#### CS 3400



Model number: Motor Rating:	3400/805 240HP @ 890 RPM
Voltage: Full load amps: Versions:	<u>460V</u> 295 16" Standard Imp. Code 830
Hose connection: Pump dimensions: Max. weight (lbs.): Description:	(510mm trim) ANSI Flange 63 1/2" W x 102 1/2" H 6350 Cast iron construction; closed solids-handling impeller with thrulet, wear ring; rests on stand.



CS 3531



Model number: Motor Rating:	3531/835 335HP @ 890 RPM
Voltage: Full load amps: Versions:	460V 430 20" Standard Imp. Code 840
Hose connection: Pump dimensions: Max. weight (lbs.):	(560mm trim) 24" ANSI Flange Elbow 102" W x 132" H 13,405 (including stand, elbow, vortex plate
Description:	Cast iron construction; closed solids-handling impeller with thrulet, wear ring; rests on stand.

