

For Rent.



Xylem Rental Guide

RENTAL SOLUTIONS FOR YOUR PUMPING
OR TREATMENT CHALLENGES

0845 707 8012

24/7 Rapid Response



godwin®



LOWARA®



WEDECO®

Xylem is a force to be reckoned with when providing total solutions for fluid handling and control. With a history spanning 100 years, it is a company passionate about innovation and determined to solve the most challenging water issues. Xylem's powerful combination of products, services and applications expertise serves market sectors including Public Utilities, Infrastructure, Municipal, Building Services and Industry.

Our Rental division, specialises in the rental of Flygt electric submersible pumps, Godwin prime assisted diesel pumps, Wedeco and Sanitaire treatment systems. Xylem remain unique in the market place supporting rental applications with the products that Xylem also manufacture as Original Equipment Manufacturers of each of the famous brands included in the range. Our skilled team of engineers offer unprecedented technical backup and design of bespoke pumping and treatment systems, whether temporary or semi-permanent, for anything from a small amount of nuisance water to the movement of sewage and major flow diversion schemes.

By choosing Xylem for your rental requirements, you gain automatic access to a wealth of experience and technical knowledge. Our engineers can assess your needs, design your pumping or treatment system and install it. Offering a 24/7 rapid response service, with fully owned transportation including lifting cranes and strategically located regional depots throughout the UK and Ireland, you can be confident in our ability to react quickly to your rental needs.

4▶	General Guide to Pump Selection
5▶	Guide to Performance Data
6▶	Pumping Definitions
7 - 12▶	2000/BS Series - Drainers
13 - 18▶	2600 Range - Drainers
19 - 22▶	2800 Range - Drainers
23▶	Flygt 2000 Series Electrical Information
24 - 27▶	Flygt Bibo Alpha
28 - 31▶	Flygt Concertor™
32 - 38▶	3000/N Series - Sewage
39 - 40▶	N Type Chopper Pumps
41 - 49▶	Great and Grey – Sewage
50▶	Flygt 3000 Series Electrical Information
51 - 52▶	Godwin Dri-Prime Add On
53▶	Lowara Clean Water Booster Sets
54▶	Monitoring & Control
55▶	Rental Ultrasonic Controller Specification
56▶	Electrical Equipment
57 - 59▶	Soft Starter Panels - Specification
60 - 64▶	VFD Starter Panel - Specification
65▶	Notes
66▶	Godwin
67 - 73▶	Godwin CD series
74 - 76▶	Godwin HL series
77 - 79▶	Godwin NC series
80▶	Godwin Dri Prime Pump NC150S
81 - 83▶	UV Water Treatment
84 - 87▶	Mixers
88 - 89▶	Aeration - Radial Aerators
90▶	Radial Aerators - Oxygen Transfer Rate
91▶	Aeration - Flyjet
92▶	Pump Flotation Modules
93 - 94▶	Hoses and Fittings
95▶	Friction Loss in Pipe Fittings Chart
96 - 97▶	Weight Reference Guide
98 - 99▶	Conversion Factors
100▶	Flange Sizes
101▶	Contact Us

Items to check:

The electrical supply available – What voltage, single or 3 phase and the maximum amperage. If the power supply is inadequate, please ask for details of generators or consider using a Godwin prime assisted diesel pump.

Total head requirement – The most important calculation to get right! It is the sum of the total static head (the vertical distance from the suction strainer to the point of discharge) plus any friction loss allowances. When sizing a pump, the critical thing to determine is the total generated head (TGH) requirement.

Calculation

Static suction (strainer to the pump) + **static delivery** (from pump to the point of discharge) + **friction loss** (resistance incurred by liquid when flowing through hoses) = **total generated head**.

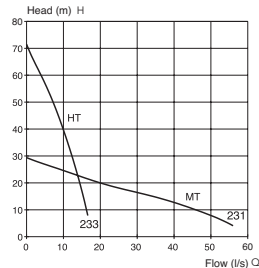
Dirty Water or Solids Handling?

Use drainer submersibles (BS Series) and general purpose diesels for dirty water pumping and where particles are relatively small e.g. sand and gravel.

Use sewage submersibles (N Series) and solids handling diesels for sewage pumping and where particles are larger e.g. stones and debris.

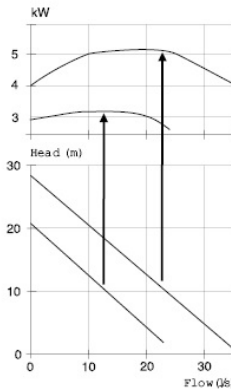
The following curves are QH charts showing the performance of the hydraulic unit at constant shaft speeds. Q is represented as litres per second, and total head, H, is in metres.

The data represented in this section is for your guidance only. Detailed information can be obtained from your local Xylem sales engineer.



BS Pumps

The curve is the specified performance of the impeller selected. The values shown are for a BS 2125 pump. Impeller characteristics are coded as follows: LT=Low head. MT=Medium head. HT=High head. SH=Super high head.



N Pumps

The power consumption is shown on the chart. The power consumption values for two selected performance duty points are shown by plotted straight lines from the lower to the upper chart. The lower chart and corresponding table provide performance data for different impellers used in a high head 3102 pump. Additional charts for LT, MT and SH models are shown for each respective pump type.

Impeller Code	No. of vanes	Outlet dia. mm NP vers	Through let, mm	Motor rating kW	rpm	Available versions
252	1	80	Ø52	4.4	2850	NP/NS
254	1	80	Ø46	4.4	2850	NP/NS

Pumping is the addition of energy to a fluid, which is used mainly for the purpose of moving the fluid from one point to another.

Centrifugal pumps

One which transfers energy to the liquid by means of an impeller; i.e. "A rotating device equipped with suitable vanes". (The liquid is therefore delivered in a continuous and uninterrupted flow).

Positive displacement pumps

One which transfers energy to a liquid by means of a reciprocating piston, or similar device, giving an intermittent or "pulsed flow".

Ejector or jet pumps

By mixing a high speed drive medium with a low velocity pumped medium, an energy exchange is achieved converting velocity energy into pressure, giving a continuous flow.

Q= capacity or volume

H= total head

Total head= static head + friction loss head.

Static head

The head against which the pump must work when the liquid is stationary.

Friction loss head

The head generated by friction of moving liquid, against the walls of the discharge pipes.

Net positive suction head (npsh)

Energy from an outside source i.e. static head or atmosphere pressure required to ensure liquid enters the pump volute.

Cavitation

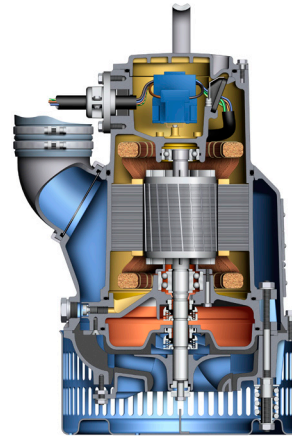
Cavitation occurs when there is insufficient n.p.s.h. i.e., too low a suction pressure induces cavitation. This causes erosion to the metal surfaces due to the vapour bubble collapsing, allowing the liquid to rush into the subsequent spaces at high velocity, thus creating a water hammer effect.

Introduction

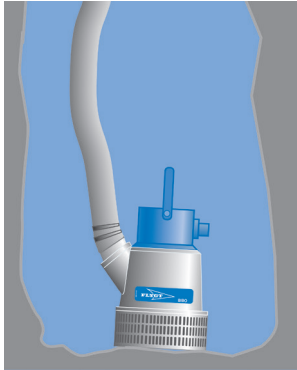
Flygt type BS - Pumps are suitable for a very broad field of application. They are used for dewatering on construction sites for houses, streets and roads, tunnels and rock caverns, harbours and dams, for drainage and ballast pumping in shipyards, for drainage in the event of flooding in mines and industrial plants, for cooling, clean water and raw water supply, water spraying, etc.

The type BS - Pump is of transportable design and requires no installation. All you need to do is to lower it into water and start it. There is a type BS pump suitable for all applications - be it for high capacities, high heads, confined spaces or explosive environments.

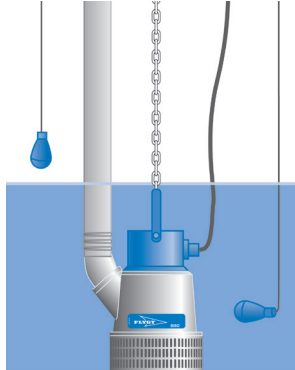
The type BS - Impeller is an open or semi-open channel impeller, made of abrasion resistant high chromium steel and designed specifically for handling media containing highly abrasive materials, such as clay, sand and drilling fines etc.



Can be installed in a variety of applications



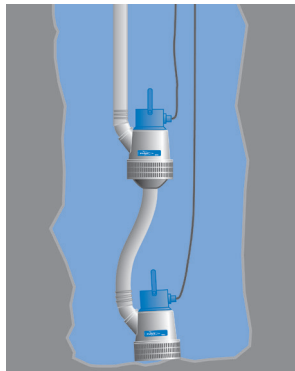
The type BS - Pump can stand directly on the pump floor



or can be suspended from a rope or chain

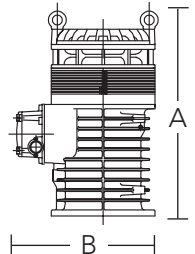
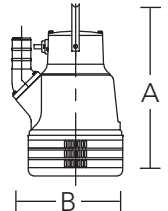


The compact design enables type BS - Pumps to be used in confined spaces
- A 200mm diameter pipe is sufficient for the slimmest pump

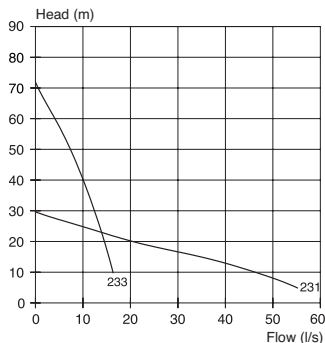


The head generated can be increased by connecting two or more type BS - Pumps in series

Pump type	A (mm)	B (mm)	Strainer Opening (mm)
BS2125			
MT	710	485/515/535	6x50
HT	710	465/390	6x50
BS2151			
LT	745	640/655	10x42
MT	745	640/655	10x42
HT	745	570/590	10x42
BS2201			
Cast Iron			
MT	1200	620	15x45
HT	1050	430	10x10
Aluminium			
MT	1253	500	15x45
HT	1050	430	10x10
BS2250			
MT	1144	885/912	15x45
HT	1144	830	15x45
BS2400			
MT	1250	780	10x10
HT	1250	680	10x10
BS2610	570	230	7 x 16
BS2620	620	275	7 x 16
BS2640			
MT	760	375	8 x 18
HT	760	342	8 x 18
BS2660			
MT	832	430	9 x 18
HT	832	430	9 x 18
BS2670			
MT	955	500	10 x 20
HT	955	480	10 x 20
BS2840			
MT	762	592	10mm Dia
HT	762	553	10mm Dia
BS2860			
MT	889	668	10mm Dia
HT	889	646	10mm Dia
BS2870			
MT	991	740	12mm Dia
HT	991	719	12mm Dia



BS 2125 MT & HT

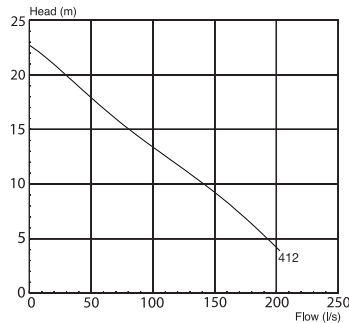


Motor MT: 8.0kW, 2800rpm
Max. power input: 9.5kW
Weight MT: 83kg HT 92kg

Dimensions:
A - 710mm
B - MT 485/515/535mm HT 465mm
Hose size: HT 75mm MT 150mm



BS 2201 LT

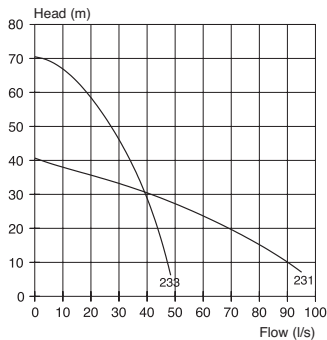


Motor: 37kW, 1465rpm
Max. power input: 41kW
Weight: 280kg

Dimensions:
A - 1330mm
B - 500mm
Hose size: 200mm



BS 2151 MT & HT

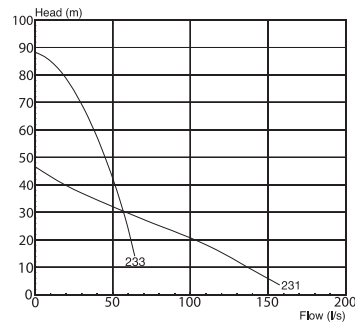


Motor: 20kW, 2900rpm
Max. power input: 23kW
Weight: 165kg

Dimensions:
A - 745mm
B - MT 640/655mm MT - 570/590mm
Hose size: HT 100mm LT 150mm



BS 2201 MT & HT

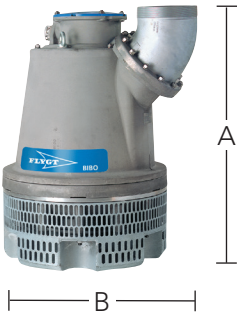
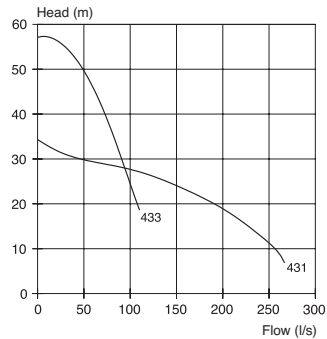


Motor: 37kW, 2920rpm
Max. power input: 41kW
Weight: 280kg

Dimensions:
A - 1330mm
B - 500mm
Hose size: MT 200mm, HT 100mm



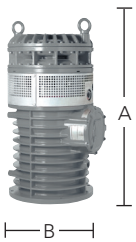
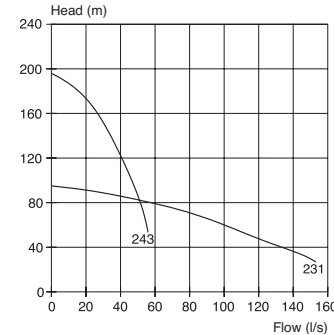
BS 2250 MT/HT



Motor: 54kW, 1470rpm
Max. power input: 58kW
Weight: 540kg

Dimensions:
A - 1100mm
B - 950mm
Hose size: HT 150mm, MT 200mm, MT 250mm

BS 2400 MT & HT



Motor: 90kW, 2970rpm
Max. power input: 97kW
Over temperature protection in stator windings
Weight: MT 900kg HT 985kg

Dimensions:
A - MT 1250mm HT 1251mm
B - MT 778mm HT 680mm
Hose size: HT - 100mm MT - 150mm



Introduction

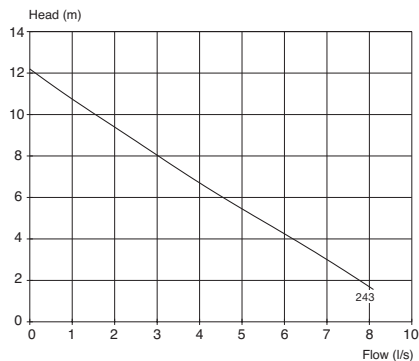
Clearing your worksite of unwanted water is critical to productivity. Flooding means time delays, cost overruns and unsafe working conditions. To get to the bottom of any dewatering job, you can rely on Flygt 2600 pumps.

Undertaking tough dewatering jobs is what the Flygt 2600 series does best. It ensures that you can get on with the work at hand safely and reliably. All this, thanks to extreme portability, automatic operation, easy maintenance, lasting performance.

The Flygt 2600 series is built to last. Radically engineered from the ground up, these robust dewatering pumps feature innovative hydraulics, durable materials and a practical, ergonomic design. The result is unmatched wear resistance, consistent performance over time.

Flygt 2600 pumps cover low, medium, high and super-high pressures to handle most any application for worksites of every size.

BS 2610 MT 110V Single Phase

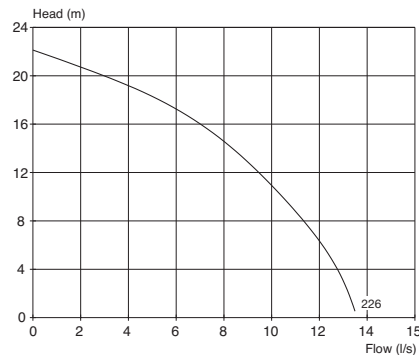


Rated power: 0.85kW
Weight: 21kg



Dimensions:
Max. height: 570mm
Max. width: 230mm
Discharge: Ø - 2"
Strainer hole: 7x16mm

BS 2620 MT

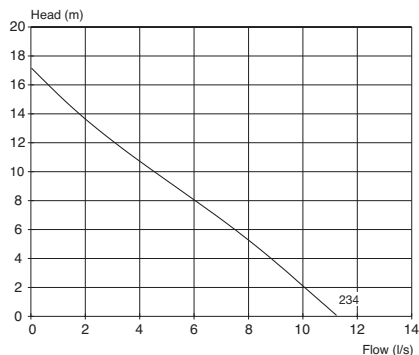


Rated power: 2.2kW
Weight: 32kg



Dimensions:
Max. height: 620mm
Max. width: 275mm
Discharge: Ø - 3"
Strainer hole: 7x16mm

BS 2610 MT 400V 3 Phase

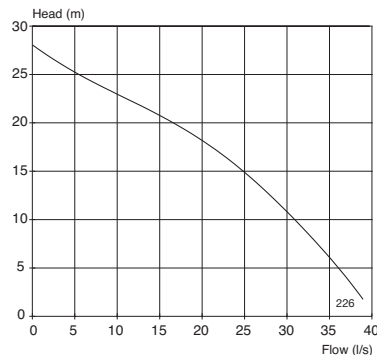


Rated power: 1.2kW
Weight: 21kg



Dimensions:
Max. height: 570mm
Max. width: 230mm
Discharge: Ø - 2"
Strainer hole: 7x16mm

BS 2640 MT

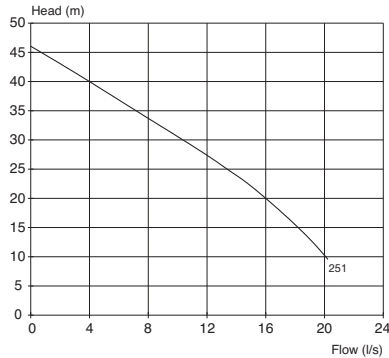


Rated power: 5.6kW
Weight: 51kg



Dimensions:
Max. height: 760mm
Max. width: 375mm
Discharge: Ø - 4"
Strainer hole: 8x18mm

BS 2640 HT

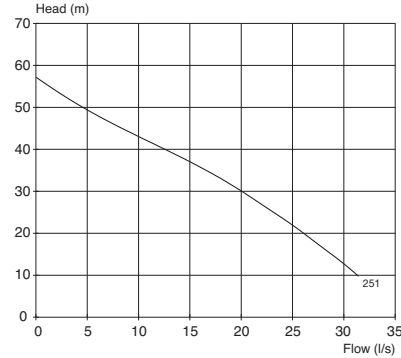


Rated power: 5.6kW
Weight: 51kg



Dimensions:
Max. height: 760mm
Max. width: 342mm
Discharge: Ø - 3"
Strainer hole: 8x18mm

BS 2660 HT

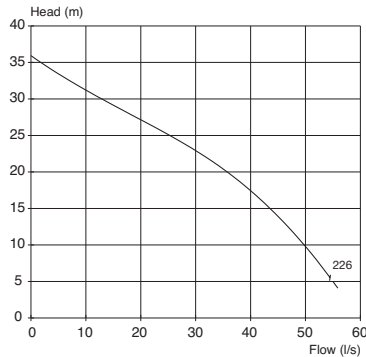


Rated power: 10kW
Weight: 78kg



Dimensions:
Max. height: 832mm
Max. width: 430mm
Discharge: Ø - 4"
Strainer hole: 9x18mm

BS 2660 MT

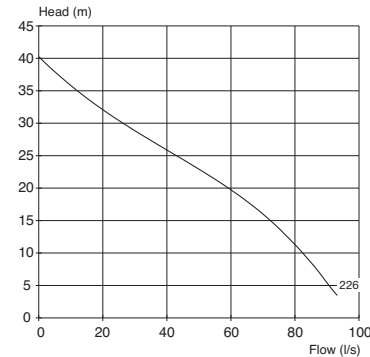


Rated power: 10kW
Weight: 78kg



Dimensions:
Max. height: 832mm
Max. width: 430mm
Discharge: Ø - 6"
Strainer hole: 9x18mm

BS 2670 MT

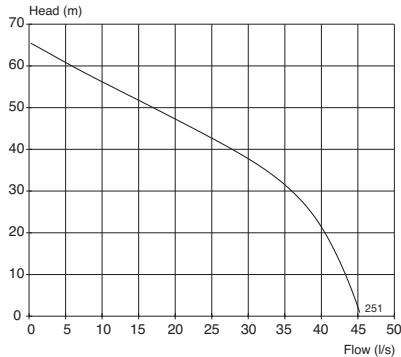


Rated power: 18kW
Weight: 141kg



Dimensions:
Max. height: 955mm
Max. width: 500mm
Discharge: Ø - 6"
Strainer hole: 10x12mm

BS 2670 HT



Rated power: 18kW
Weight: 141kg

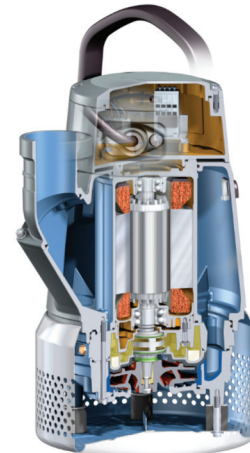
Dimensions:
Max. height: 955mm
Max. width: 480mm
Discharge: Ø - 4"
Strainer hole: 10x12mm



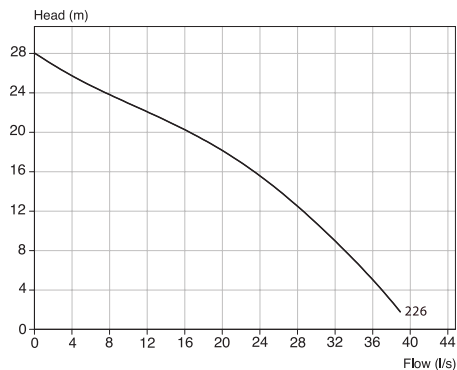
For decades whenever a dewatering challenge seemed too tough or too harsh, the answer has been simple; Flygt BIBO.

From the product brand and pumps that set the standard in dewatering comes a new and superior series of submersible dewatering pumps: Flygt BIBO 2800 series. It still has the iconic look; a shape that means stability and robustness. Inside the pumps you will find the latest technology such as the DuraSpin hydraulic system and plug-in seal. The range handles flows of up to 100 l/s with heads to 90 m and available with power ratings from 3.7 to 18kW.

Specifically targeted at mining operations, tunnelling and construction site applications.



BS 2840 MT

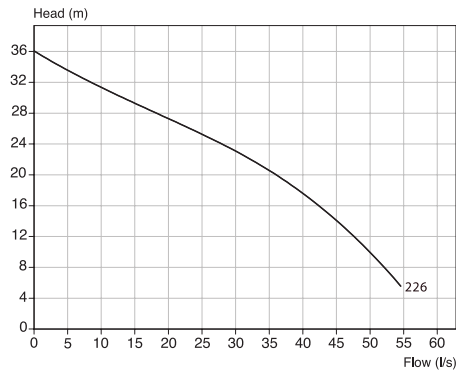


Rated power: 5kW
Weight: 56kg



Dimensions:
Height: 762mm
Width: 367mm
Discharge: 100mm

BS 2860 MT

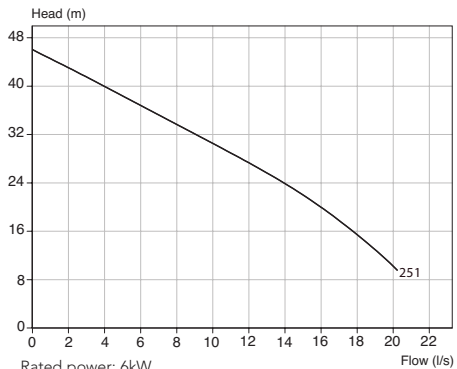


Rated power: 10kW
Weight: 91kg



Dimensions:
Height: 889mm
Width: 425mm
Discharge: 150mm

BS 2840 HT

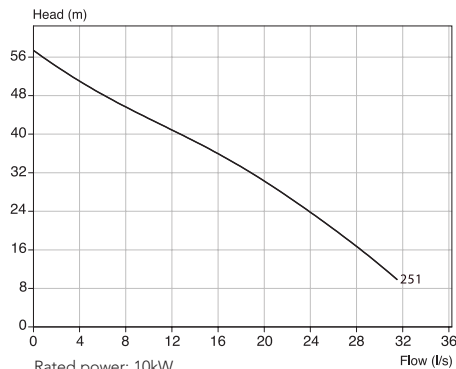


Rated power: 6kW
Weight: 56kg



Dimensions:
Height: 762mm
Width: 367mm
Discharge: 80mm

BS 2860 HT



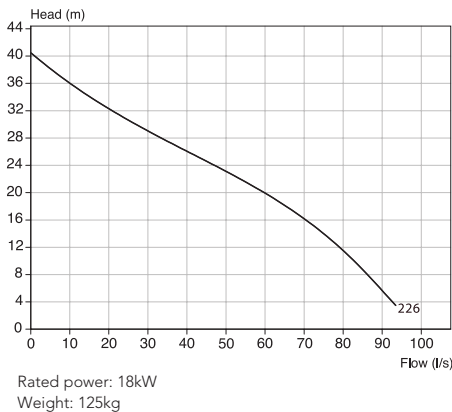
Rated power: 10kW
Weight: 91kg



Dimensions:
Height: 889mm
Width: 425mm
Discharge: 100mm

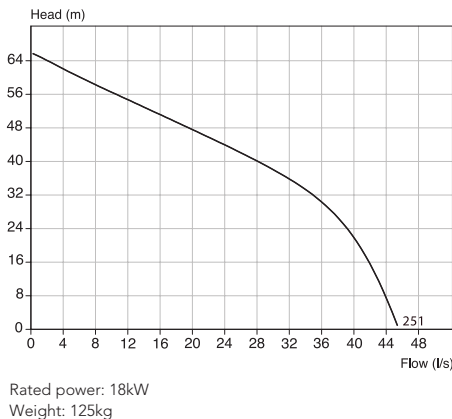
Flygt BS 2870

BS 2870 MT



Dimensions:
Height: 991mm
Width: 500mm
Discharge: 150mm

BS 2870 HT



Dimensions:
Height: 991mm
Width: 500mm
Discharge: 100mm

Flygt 2000 Series Electrical Information

Pump Model	kW (Shaft Power)	Voltage	Phase	FLC Amps	DOL Starting Current AMPS	Starting Method	Minimum Generator in kVA to Start/Run
BS2125	8.0	400	3	15.0	125	DOL	90
BS2151	20.0	400	3	35.0	281	SOFT	100
BS2201	37.0	400	3	65.0	430	SOFT	150
BS2250	54.0	400	3	104.0	590	SOFT	450
BS2400	90.0	400	3	148.0	1245	SOFT	425
KS2610	0.9	110	1	11.0	38	CAP	5
KS2610	1.2	400	3	2.7	12	DOL	10
BS2620	2.2	400	3	4.7	27	DOL	20
BS2640	5.6	400	3	11.0	48	DOL	35
BS2660	10.0	400	3	19.0	107	DOL	75
BS2670	18.0	400	3	32.0	213	DOL	150
BS2840	5.6	400	3	11.0	78	DOL	55
BS2860	10.0	400	3	19.0	115	DOL	80
BS2870	18.0	400	3	33.0	238	SOFT	85

When two pumps are driven by the same generator, the rating required is 1.5 times that indicated for a single pump

Some form of time lag should be connected to prevent both pumps from starting simultaneously, unless the generator has been selected for pumps to start simultaneously.

The Information contained within this document is for guidance only and is accurate to the best of our knowledge at time of going to print.

Introducing a new generation of dewatering pumps.

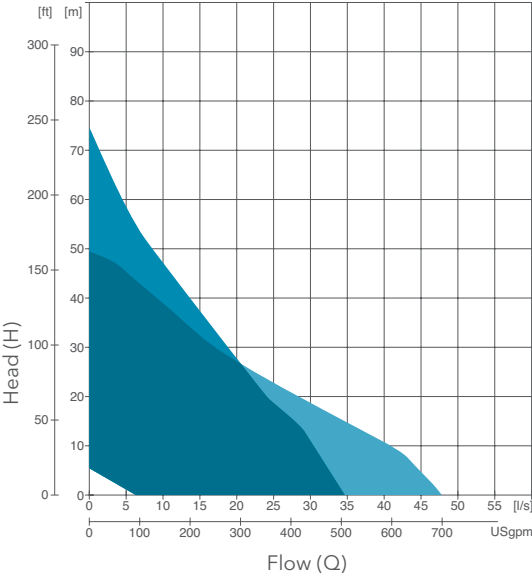
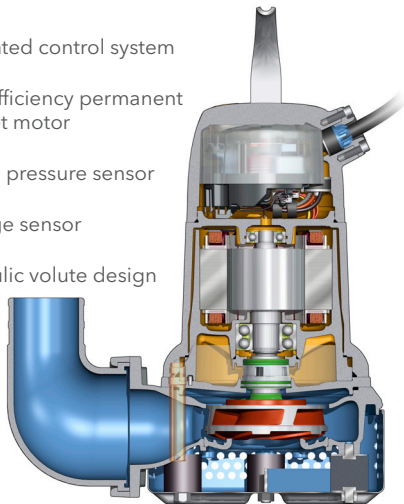
Bibo Alpha is a true plug and play pump, always adapting to optimise efficiency thanks to integrated intelligence.

To meet the increasing needs from the mining and construction industries to lower the total cost of pumping water, this pump is developed to be extremely robust, compact, stable and just as quick and easy to set-up as a traditional pump.

This is the first submersible dewatering pump that adjusts to a flow and head performance field instead of a static curve to meet the needs of any application.

This new technology provides a new level of flexibility adapted to today's and future needs in dewatering.

- Integrated control system
- High efficiency permanent magnet motor
- Built-in pressure sensor
- Leakage sensor
- Hydraulic volute design



Voltage (V)	Rated current (A)	Starting current (A)
380	13.50	13.50
400	12.83	12.83
415	12.36	12.36
440	11.66	11.66
460	11.15	11.15
480	10.69	10.69

Denomination	50Hz	60Hz
Product code	2960.180	
Installation	Portable (S)	
Discharge connection	3" & 4"	
Impeller characteristics	HT: High head wear resistant impeller with DuraSpin MT: Medium head wear resistant impeller with DuraSpin	

Process data

Liquid temperature	40°C	104°F
Depth of immersion	max 20 m	max 65 ft
Liquid density	max 1,100 kg/m ³	max 9.2 lb/US gal
Strainer hole dimension	Ø10 mm	Ø0.39"
pH of pumped liquid	pH 5-8	

Motor data

Frequency	50 Hz	60 Hz
Insulation class	H (180°C)	H (356°F)
Voltage variation	max +/- 10%	
Voltage imbalance	< 3%	

Monitoring equipment

Leakage sensor	FLS 40, direction independent sensor	
Pressure sensor	Absolute pressure sensor, 0-2 bar	

Cables

Submersible cable	SUBCAB®	
-------------------	---------	--

Materials

Outer casing	Aluminum
Impeller	Hard-Iron™
Wear parts	Hard-Iron™ /Cast iron
Stator housing	Aluminum
Strainer	Stainless steel
Shaft	Stainless steel
O-rings	Nitrile rubber
Discharge connection	Aluminum

Weight & dimensions

Weight (excl. cable)	68 kg	150 lbs
Height	658 mm	25.9"
Width	500-523 mm	19.69-20.59"

Options

Shielded cable	SHD/GC (Canada)
	Quick couplings
	Zinc anodes

Rating

380-480 V	
120-4000 rpm	
7.4 kW	10 hp

To meet the growing challenges of modern wastewater, we're proud to introduce Flygt Concertor™, a breakthrough in wastewater pumping.

A new way of thinking

Using a combination of advanced software functions and state-of-the-art hardware, Flygt Concertor™ senses the operating conditions of its environment and adapts the pumping performance in real time, making smart decisions and providing feedback to pumping station operators.

One powerful solution, unlimited possibilities

Flygt Concertor™ combines a fully integrated control system with IE4 equivalent motor efficiency, our patented Adaptive N-hydraulics and intelligent functionalities such as clog detection and pump cleaning as well as soft start and motor protection.



Flygt Concertor™ N - State-of-the-art N-hydraulics

A new generation of our Adaptive N-technology enables high efficiency and lower energy usage. The Adaptive N-impeller moves axially upward when needed, allowing bulky fibrous material and debris to pass through smoothly. After the debris has passed, the hydraulic pressure returns the impeller to its original position. Not only does this prevent clogging and reduce stress on the shaft, seals and bearings, but it enables a sustained low usage of energy. As with all Flygt N-pumps, this feature delivers constant self-cleaning functionality.

Flygt Concertor™ offers a pump performance field covering a wide range of pump curves. No need for the perfect station design data. No need for a large inventory. One pump can be adjusted to suit specific conditions without having to change impeller diameters or motor sizes.

- Selection from a performance field instead of a fixed performance curve allows for enhanced operational flexibility
- Performance can be fine-tuned and pre-selected without changing the impeller
- Allows direct connection of the motor cable to the existing control panel contactor. Supply requires short circuit protection
- Connects to DOL starter (No overload required) can also be connected to star delta starter provided the configuration meets with certain criteria – please contact Xylem for details
- Anti-clogging protocol
- Advanced motor protection
- Adjustable performance with service tool via Laptop

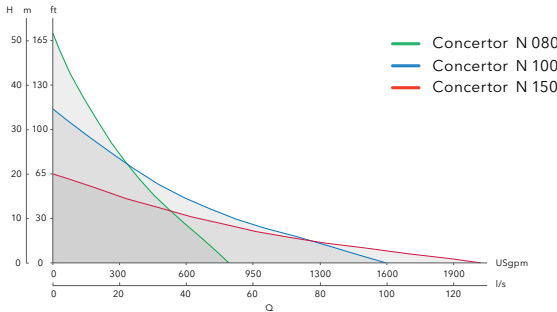


Easier product selection and reduced inventory

With Flygt Concertor™, pump selection has never been easier due to the unlimited number of performance curves and enables pump performance to be easily changed on site or remotely.

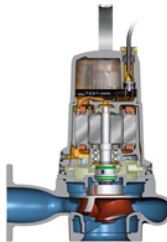
Choose from a performance field

With Flygt Concertor™, you can now choose the exact pump performance from a field rather than from fixed curves. This simplifies the selection process, since calculating your exact duty point is no longer critical.



Model	Kw (shaft)	Discharge Size		
		80mm	100mm	150mm
N6020	2.2	X	X	X
N6020	4.0	X	X	X
N6020	5.5	X	X	X
N6020	7.3	X	X	N/A

Guide rail sliding bracket/flange 80mm dia. Adapter Claw
 Guide rail sliding bracket/flange 100mm dia. Adapter Claw
 Guide rail sliding bracket/flange 150mm dia. Adapter Claw



Supply: 400/3/50

Motor: IE4 Synchronous concentrated windings, permanent magnet motor

Rated power: 2.2kW - 7.3kW depending on model

Hydraulics: Adaptive N Impeller c/w guide pin

Discharge size: 80mm - 150mm depending on model

Speed range: 500-3600 RPM

Cooling system: Liquid free heat conduction technology

Replacement of 3000 series by Flygt Concertor™ N

Xylem Rental will configure the Flygt Concertor™ pump with the correct motor rating and performance characteristics to enable it to replace the conventional Flygt 3085, 3102, 3127 and 3153 pump models.

Model	Impeller	Rated Shaft Power	DN	Concertor	DN	* Concertor Maximum Shaft Power
N 3085 MT	462	1.3	80	Concertor N 80	80	2.2
N 3085 MT	463	1.3	80	Concertor N 80	80	2.2
N 3085 MT	460	2.0	80	Concertor N 80	80	2.2
N 3085 MT	461	2.0	80	Concertor N 80	80	2.2
N 3085 MT	462	2.0	80	Concertor N 80	80	2.2
N 3085 MT	463	2.0	80	Concertor N 80	80	2.2
N 3085 SH	253	2.4	80	Concertor N 80	80	4.0
N 3085 SH	254	2.4	80	Concertor N 80	80	4.0
N 3085 SH	255	2.4	80	Concertor N 80	80	2.2
N 3085 SH	256	2.4	80	Concertor N 80	80	2.2
N 3102 LT	420	3.1	100	Concertor N 100	100	4.0
N 3102 LT	421	3.1	100	Concertor N 100	100	4.0
N 3102 LT	423	3.1	100	Concertor N 100	100	2.2
N 3102 LT	420	3.1	150	Concertor N 150	150	4.0
N 3102 LT	421	3.1	150	Concertor N 150	150	4.0
N 3102 LT	423	3.1	150	Concertor N 150	150	2.2
N 3102 SH	255	4.2	80	Concertor N 80	80	4.0
N 3102 SH	256	4.2	80	Concertor N 80	80	4.0
N 3102 MT	460	3.1	100	Concertor N 100	100	4.0
N 3102 MT	461	3.1	100	Concertor N 100	100	4.0
N 3102 MT	462	3.1	100	Concertor N 100	100	4.0
N 3102 MT	463	3.1	100	Concertor N 100	100	2.2
N 3102 MT	464	3.1	100	Concertor N 100	100	2.2
N 3127 HT	488	4.7	100	Concertor N 100	100	4.0
N 3127 HT	489	4.7	100	Concertor N 100	100	4.0
N 3127 HT	486	5.9	100	Concertor N 100	100	7.3
N 3127 HT	487	5.9	100	Concertor N 100	100	5.5
N 3127 HT	488	5.9	100	Concertor N 100	100	4.0
N 3127 HT	489	5.9	100	Concertor N 100	100	4.0
N 3127 SH	245	7.4	80	Concertor N 80	80	7.3
N 3127 SH	246	7.4	80	Concertor N 80	80	7.3
N 3127 SH	247	7.4	80	Concertor N 80	80	5.5
N 3127 SH	248	7.4	80	Concertor N 80	80	5.5
N 3127 LT	424	5.9	150	Concertor N 150	150	5.5
N 3127 LT	425	4.7	150	Concertor N 150	150	4.0
N 3127 LT	425	5.9	150	Concertor N 150	150	4.0
N 3127 LT	426	4.7	150	Concertor N 150	150	4.0
N 3127 LT	426	5.9	150	Concertor N 150	150	4.0
N 3127 MT	437	5.9	100	Concertor N 100	100	5.5
N 3127 MT	437	5.9	150	Concertor N 150	150	5.5
N 3127 MT	438	4.7	100	Concertor N 100	100	5.5
N 3127 MT	438	4.7	150	Concertor N 150	150	5.5
N 3127 MT	438	5.9	100	Concertor N 100	100	5.5
N 3127 MT	439	4.7	100	Concertor N 100	100	4.0
N 3127 MT	439	4.7	150	Concertor N 150	150	4.0
N 3127 MT	439	5.9	100	Concertor N 100	100	4.0
N 3127 MT	439	5.9	150	Concertor N 150	150	4.0
N 3153 MT	436	7.5	150	Concertor N 150	150	7.3
N 3153 HT	454	7.5	100	Concertor N 100	100	7.3
N 3153 HT	455	7.5	100	Concertor N 100	100	7.3
N 3153 HT	456	7.5	100	Concertor N 100	100	7.3
N 3153 SH	275	11.0	80	Concertor N 80	80	7.3
N 3153 SH	276	11.0	80	Concertor N 80	80	7.3

*Xylem Rental will configure the Concertor™ pump with the correct Motor rating and performance characteristics prior to delivery.

N Pump Technology

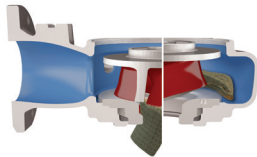
Sustained high efficiency for wastewater handling with its unique semi-open, self-cleaning impeller, the N-pump series can handle fluids with high concentrations of fibrous material, whilst still maintaining a high level of pumping efficiency over long duty periods. The special relief groove in the volute reduces the risk of clogging by creating a self-cleaning flow path through the pump.

N Series Pumps

N series pumps are available, contact your local Xylem representative for curve details: N 3085, N 3102, N 3127, N 3153, N 3171, N 3202, N 3301



Adaptive N-impellers

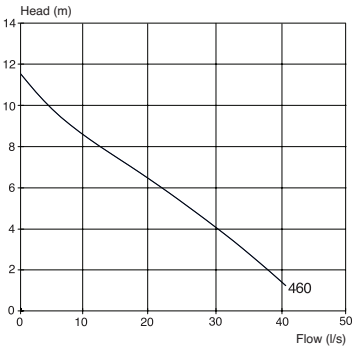


The Adaptive N-hydraulics further improves the self-cleaning characteristics of N-technology with unmatched clog-free performance. This is achieved through the unique axial movement of the Adaptive N-impeller.

The Adaptive N-impeller is designed to move axially upwards when needed, allowing the most bulky of rags and toughest of debris to pass through smoothly. After the debris has passed, the hydraulic pressure returns the impeller to its original position.

The axial movement of this hydraulic reduces stress on the shaft, seals, and bearings, thereby extending their lifespan. Ultimately clog-free performance requires almost none, or at the very most, simple maintenance and servicing. All in all, the Adaptive N-hydraulics is your assurance of highly economical and reliable pumps that give you peace of mind.

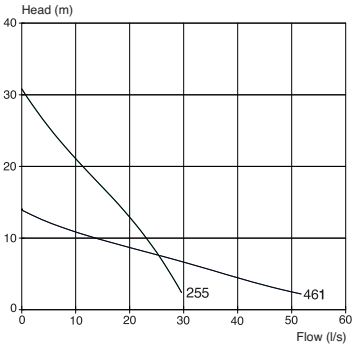
N 3085 MT



Discharge size: 75mm
Height: 655mm
Motor rating: 2.0kW
Weight: 71kg
Maximum width: 450mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
460 MT	2	80	2.0	1400	NP/NS/NT

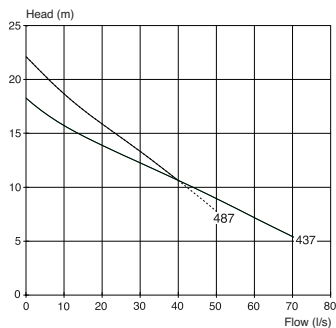
N 3102 MT/SH



Discharge size: 80mm/100mm
Height: 705mm
Motor rating: 3.1/4.2kW
Weight: 116kg
Maximum width: 610mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
461 MT	2	100	3.1	1440	NP/NS
255 SH	2	80	4.2	2890	NP/NS

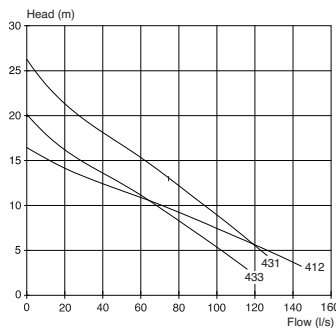
N 3127 MT/HT



Discharge size: 100/150mm
Height: 765mm
Motor rating: 5.9kW
Weight: 170kg
Maximum width: 725mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
437 MT	2	100/150	5.9	1450	NP/NS/NT
487 HT	2	100	5.9	1450	NP/NS/NT

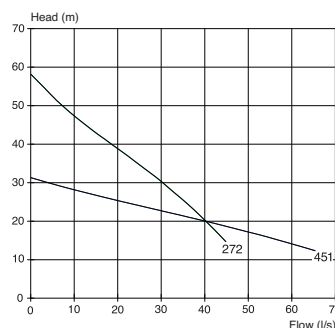
N 3153 LT/MT



Discharge size: 150/200mm
Height: 1068mm
Motor rating: 13.5kW
Weight: 252kg MT 279kg LT
Maximum width: 834mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
412 LT	2	200	13.5	1455	NP/NT/NS
431 MT	2	150	13.5	1455	NP/NT/NS
433 MT	2	150	13.5	1455	NP/NT/NS

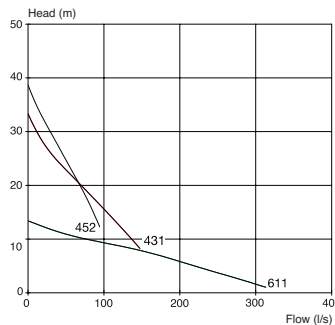
N 3153 HT/SH



Discharge size: 80/100mm
Height: 1052mm
Motor rating: 13.5/15.0kW
Weight: 242kg
Maximum width: 763mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
451 HT	2	100	13.5	1455	NP/NT/NS
272 SH	2	80/100	15.0	2910	NP/NT/NS

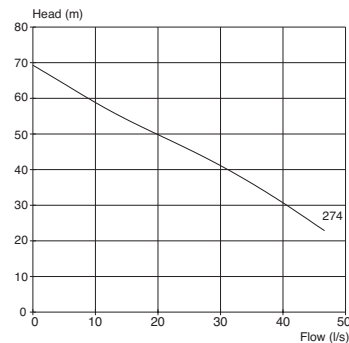
N 3171 LT MT and HT



Discharge size: 100/250mm
Height: 1299mm
Motor rating: 15/22kW
Weight: 460kg
Maximum width: 1151mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
611 LT	2	250	15.0	965	NP/NS/NT
431 MT	2	150	22.0	1460	NP/NS/NT
452 HT	2	100	22.0	1460	NP/NS/NT

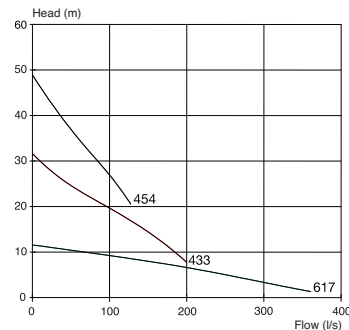
N 3171 SH



Discharge size: 100mm
Height: 1179mm
Motor rating: 22kW
Weight: 366kg
Maximum width: 884mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
274 SH	2	108	22.0	2925	NP/NS/NT

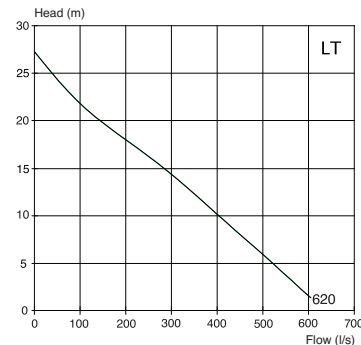
N 3202 LT MT and HT



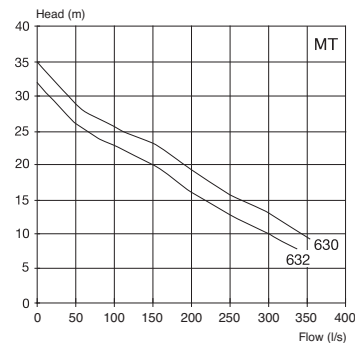
Discharge size: 150/300mm
Height: 1571mm
Motor rating: 22/45kW
Weight: 900kg
Maximum width: 1439mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
617 LT	2	250	22.0	970	NP/NS/NT
433 MT	2	200	30.0	1475	NP/NS/NT
454 HT	2	150	45.0	45.0	NP/NS/NT

N 3301 LT and MT 55kW

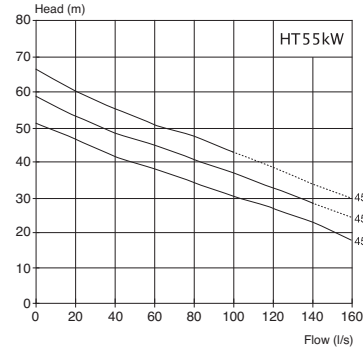


Discharge size: 250mm
Height NS: 1705mm
Motor rating: 55kW
Weight: 1110kg
Maximum width NS: 1439mm

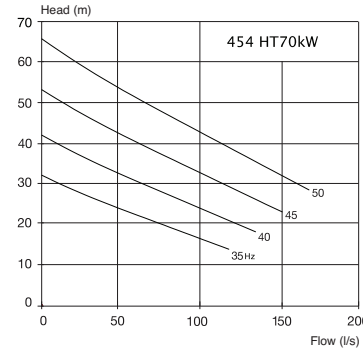


Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
620 LT	2	250	55	985	NP/NT/NS/NZ
630 MT	2	250	55	985	NP/NT/NS/NZ
632 MT	2	250	55	985	NP/NT/NS/NZ

N 3301 HT 55kW



N 3301 454 HT Impeller 70kW VFD Curves



Discharge size: 150mm
Height NS: 1641mm
Motor rating: 55/70kW
Weight: 920kg
Maximum width NS: 1242mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
454 HT	2	150	70	1475	NP/NT/NS/NZ
454 HT	2	150	55	1400	NP/NT/NS/NZ
456 HT	2	150	55	1400	NP/NT/NS/NZ
458 HT	2	150	55	1400	NP/NT/NS/NZ

A selection of impellers are available on request; also Variable Frequency Drive Starters

Introduction

Chopper pumps with N-impeller Technology. Flygt Chopper pumps have the unique patented N-impeller along with a hard iron chopper ring which drastically reduces the risk of clogging. Rugged, wear resistant and self cleaning, it cuts through solids without clogging or sacrificing pump efficiency.

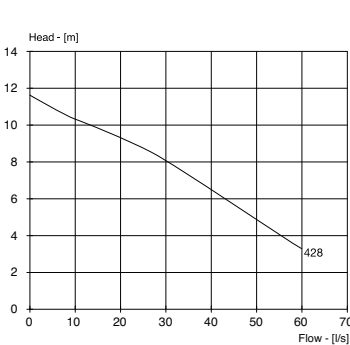
The Flygt Chopper pump range brings to an end troublesome and costly clogging with its heavy-duty and highly dependable chopping abilities. By adding the chopper function to the well proven Flygt N-pump, outstanding performance in heavy duty applications has been achieved. This new pump design has undergone extensive testing in the field. The results from these tests show considerably fewer running problems and considerably lower energy consumption.

Typical applications:

- Agriculture
- Aquaculture
- Food processing
- Pulp and paper
- Harsh wastewater facilities



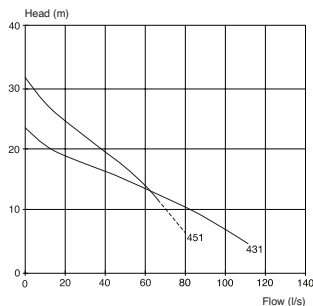
N 3127 Chopper MT



Discharge size: 100/150mm
Height NS: 765mm
Motor rating: 4.7kW
Weight: 170kg
Maximum width NS: 725mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
428 MT	2	100/150	4.7	1455	NP/NS/NT/NZ

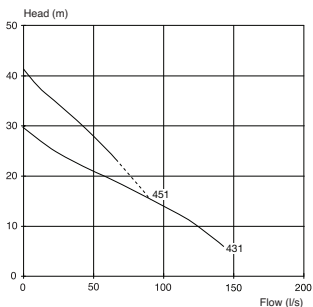
N 3153 Chopper MT and HT



Discharge size: 100/150mm
Height NS: 1068mm
Motor rating: 13.5kW
Weight: 252kg
Maximum width NS: 763mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
431 MT	2	150	13.5	1455	NP/NS/NT
451 HT	2	100	13.5	1455	NP/NS/NT

N 3171 Chopper MT and HT



Discharge size: 100/150mm
Height NS: 1225mm
Motor rating: 22.0kW
Weight: 362kg
Maximum width NS: 884mm

Impeller code	No. of vanes	Outlet dia. mm NP vers	Motor rating kW	rpm	Available versions
431 MT	2	150	22.0	1460	NP/NS/NT
451 HT	2	100	22.0	1460	NP/NS/NT

Introduction

After revolutionising the market for small and midrange wastewater pumps, the Flygt N pumps are now available in larger units.

- Incorporating the N pump technology the potential for blockage is substantially reduced
- Due to sustained efficiency, energy costs can be cut by up to 50%
- Heads of up to 90mts achieved
- Flows in excess of 700l/s

Applications

- General by-pass over-pumping
- Pump replacement
- Application proving
- Storm water handling
- Industrial effluent handling
- Irrigation

Pumps from 90 to 250kW available to rent in NP/NS/NT and NZ build (see Page 42). Ex units available on request.



Flygt centrifugal pumps are designed to pump wastewater containing solids and fibres in suspension. The pump can also be used for pumping raw water.

- Liquid temperature: max 40°C (105°F)
- Liquid density: max 1100kg/m³
- The pH of the pumped liquid: 6 - 11
- Depth of immersion: max 20 m (65 ft)

For pumping in an explosive or flammable environment the pump can be ATEX certified.

The Flygt pump is fully submersible, compact and easy to install. It is available in four versions, depending of the type of installation:

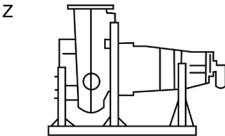
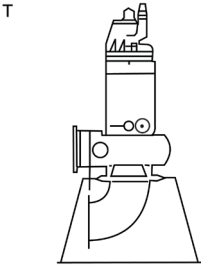
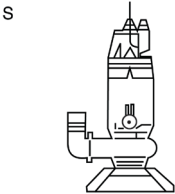
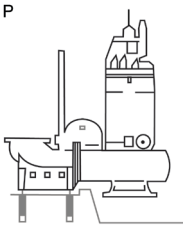
NP: This system with guide bars and discharge connection permits automatic connection of the pump to the discharge line. The pump can be lifted up for inspection without anyone having to enter the sump. The pump works completely or partially submerged under water.

NS: A transportable pump designed for operating completely or partially submerged in the pump liquid. It is equipped with base stand and hose connection.

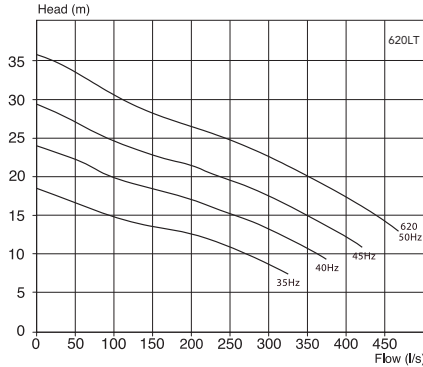
NT: The pump is installed vertically dry on a base stand and connected directly to the inlet and outlet lines. The submersible design of the pump prevents damage in the event of flooding.

NZ: The pump is installed horizontally dry on a base stand and connected directly to the inlet and outlet lines. The submersible design of the pump prevents damage in the event of flooding.

For other applications, contact your local sales representative for information.



N 3315 90kW 620/470mm

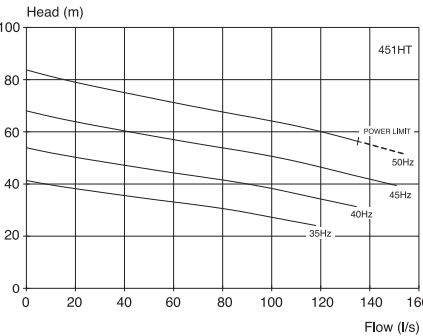


Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
620	3	300	90	985	NP/NS/NT/NZ



Rated power: 90kW
Weight: 1330kg
Dimensions:
Height: 2056mm
Width: 1330mm
Discharge: 300mm

N 3315 105kW 451/440mm

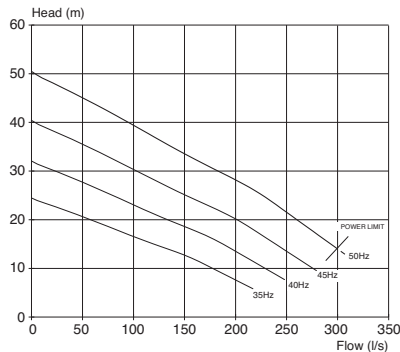


Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
451	3	150	105	1480	NP/NS/NT/NZ



Rated power: 105kW
Weight: 1150kg
Dimensions:
Height: 1992mm
Width: 1017mm
Discharge: 150mm

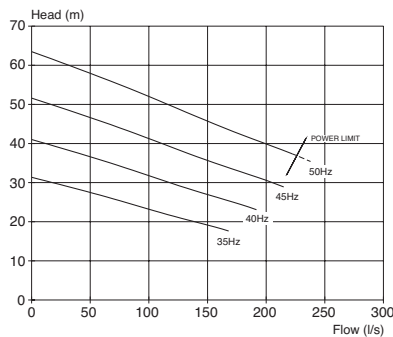
N 3231 85kW 480/360mm



Rated power: 85kW
Weight: 1380kg
Dimensions:
Max. height: 2060mm
Max. width: 1570mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
480-360	3	200	85	1475	NP/NS/NT/NZ

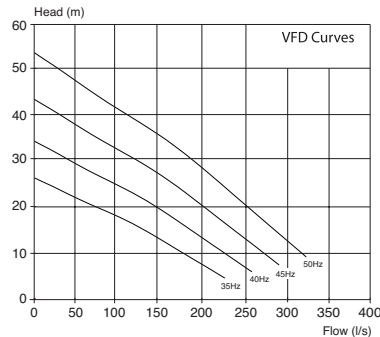
N 3231 105kW 480/400mm



Rated power: 105kW
Weight: 1590kg
Dimensions:
Max. height: 2060mm
Max. width: 1570mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
480-400	3	200	105	1480	NP/NS/NT/NZ

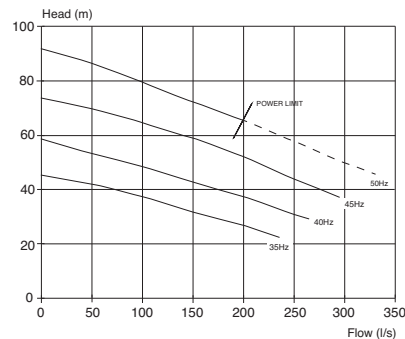
N 3231 125kW 470/370mm



Rated power: 125kW
Weight: 1760kg
Dimensions:
Max. height: 2185mm
Max. width: 1390mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
470-370	3	200	125	1450	NP/NT/NS/NZ

N 3231 170kW 470/490mm



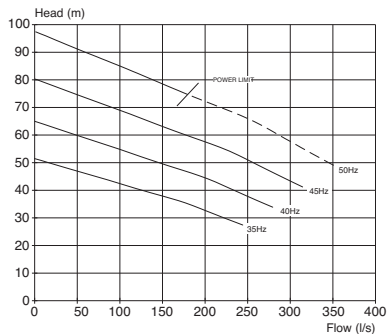
Rated power: 170kW
Weight: 1760kg
Dimensions:
Max. height: 2305mm
Max. width: 1570mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
470-490	3	200	170	1480	NP/NT/NS/NZ

A Selection of impellers are available on request; also Variable Frequency Drive Starters

Flygt N 3231

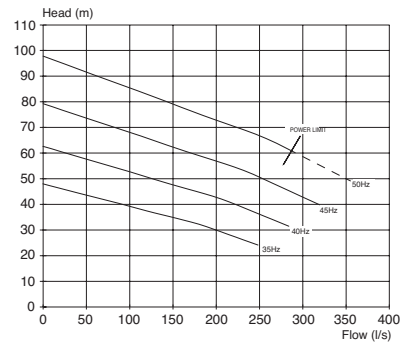
N 3231 170kW 480/490mm



Rated power: 170kW
Weight: 1760kg
Dimensions:
Max. height: 2305mm
Max. width: 1570mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
480-490	3	200	170	1480	NP/NS/NT/NZ

N 3231 215kW 480/490mm

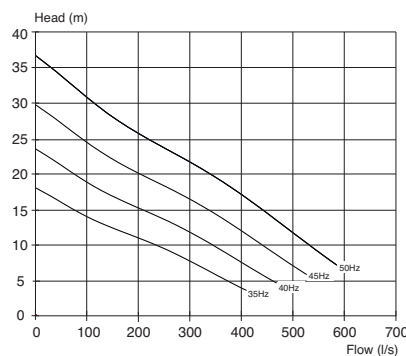


Rated power: 215kW
Weight: 1910kg
Dimensions:
Max. height: 2305mm
Max. width: 1570mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
480-490	3	200	215	1485	NP/NS/NT/NZ

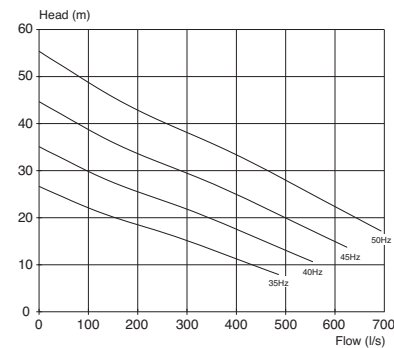
Flygt N 3312

N 3312 100kW 670/450mm



Rated power: 100kW
Weight: 1975kg
Dimensions:
Max. height: 2240mm
Max. width: 1650mm

N 3312 180kW 670/545mm

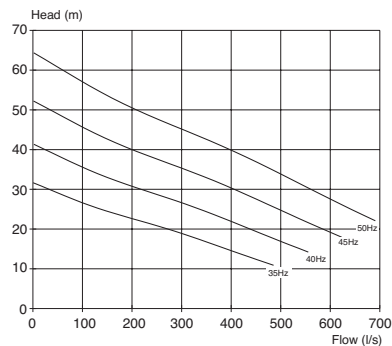


Rated power: 180kW
Weight: 2275kg
Dimensions:
Max. height: 2975mm
Max. width: 1875mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
670-450	3	300	100	985	NP/NT/NS/NZ
670-545	3	300	180	990	NP/NT/NS/NZ

A Selection of impellers are available on request; also Variable Frequency Drive Starters

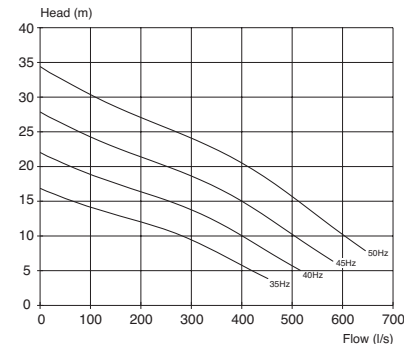
N 3312 250kW 670/585mm



Rated power: 250kW
Weight: 3125kg
Dimensions:
Max. height: 2975mm
Max. width: 1875mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
670-585	3	300	250	990	NP/NS/NT/NZ

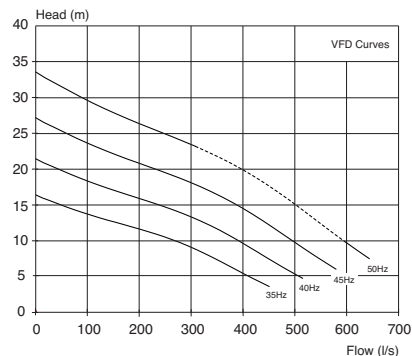
N 3356 100kW 670/475mm



Rated power: 100kW
Weight: 1750kg
Dimensions:
Max. height: 2275mm
Max. width: 1900mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
670-475	3	350	100	985	NP/NT/NZ

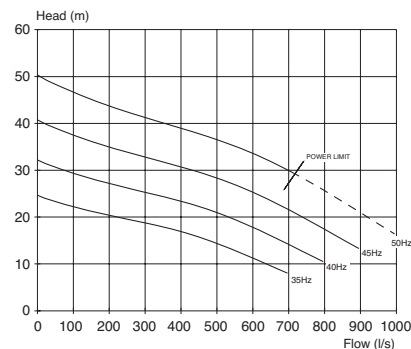
N 3356 90kW 670/470



Rated power: 90kW
Weight: 2200kg
Dimensions:
Max. height: 2400mm
Max. width: 1875mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
670-470	3	350	90	985	NP/NT/NS/NZ

N 3400 250kW 670/575mm



Rated power: 250kW
Weight: 3750kg
Dimensions:
Max. height: 3428mm
Max. width: 1900mm

Impeller code	No. of vanes	Outlet dia. mm NS vers	Motor rating kW	rpm	Available versions
670-575	3	400	250	990	NP/NT/NZ

Pump Model	kW (Shaft Power)	Voltage	Phase	FLC Amps	DOL Starting Current AMPS	Starting Method	Minimum Generator in kVA to Start/Run
3085	1.3	400	3	3.1	19	DOL	15
3085	2.0	400	3	4.5	19	DOL	15
3085	2.4	400	3	4.7	28	DOL	20
3102	3.1	400	3	6.9	33	DOL	25
3102	4.2	400	3	8.3	72	DOL	50
3127	4.7	400	3	9.6	56	DOL	40
3127	5.9	400	3	12.0	77	DOL	55
3127	7.4	400	3	14.0	114	DOL	80
3152 - 4 Pole	13.5	400	3	27.0	162	SOFT	40
3152 - 2 Pole	15.0	400	3	28.0	229	SOFT	55
3153	7.5	400	3	16.0	91	SOFT	25
3153	9.0	400	3	19.0	107	SOFT	25
3153	11.0	400	3	24.0	132	SOFT	35
3153 - 4 Pole	13.5	400	3	28.0	150	SOFT	35
3153 - 2 Pole	15.0	400	3	27.0	213	SOFT	50
3170	15.0	400	3	31.0	210	SOFT	50
3171	22.0	400	3	41.0	248	SOFT	60
3201	30.0	400	3	56.0	365	SOFT	85
3202	37.0	400	3	66.0	460	SOFT	110
3202	45.0	400	3	82.0	605	SOFT	150
3300	44.0	400	3	82.0	515	SOFT	150
3300	54.0	400	3	100.0	535	SOFT	150
3301 - 6 Pole LT	55.0	400	3	113.0	660	SOFT	225
3301 - 4 Pole MT	55.0	400	3	103.0	435	SOFT	150
3301	70.0	400	3	132.0	565	SOFT	195
3315LT - 6 Pole	90.0	400	3	185.0	1160	VFD	195
3315 HT - 4 Pole	105.0	400	3	199.0	1105	VFD	210
3231 - 4 Pole	85.0	400	3	159.0	710	VFD	170
3231 - 4 Pole	105.0	400	3	200.0	955	VFD	210
3231 - 4 Pole	125.0	400	3	234.0	1525	VFD	245
3231 - 4 Pole	170.0	400	3	300.0	2020	VFD	315
3231 - 4 Pole	215.0	400	3	395.0	2945	VFD	415
3312 - 6 Pole	100.0	400	3	202.0	1150	VFD	210
3312 - 6 Pole	180.0	400	3	360.0	2215	VFD	375
3312 - 6 Pole	250.0	400	3	465.0	2645	VFD	485
3356 - 6 Pole	90.0	400	3	185.0	1160	VFD	195
3356 - 6 pole	100.0	400	3	202.0	1150	VFD	210
3400 - 6 Pole	250.0	400	3	465.0	2645	VFD	485

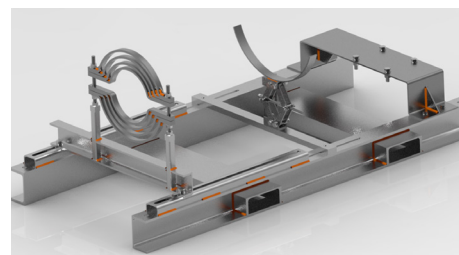
When two pumps are driven by the same generator, the rating required is approximately 1.5 times that indicated for a single pump.

Some form of time lag should be connected to prevent both pumps from starting simultaneously, unless the generator has been selected for that number of pumps to start simultaneously.

The information contained within this document is for guidance only and is accurate to the best of our knowledge at time of going to print.

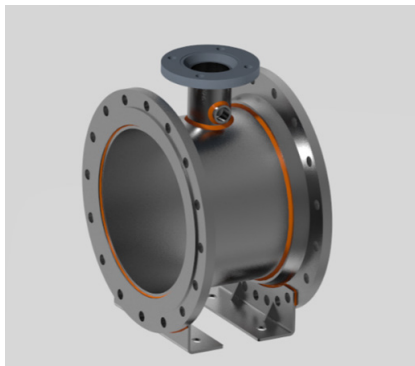
Self Priming Pump

Our inhouse designed and manufactured Dri-Prime rental add on solution for site applications where an electric Flygt pump is the pump of choice. Flygt submersible pumps, renowned for their exceptional performance and energy efficiency, can now be hired and equipped with a state-of-the-art Dri-Prime rental add on kit, enabling seamless operation in above-ground, multi-pump suction lift applications.

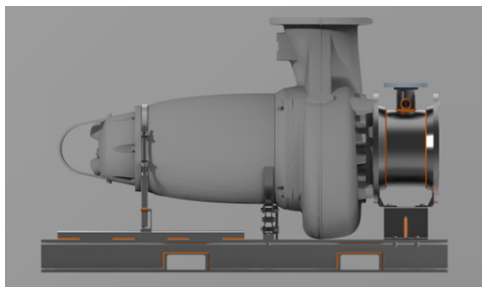


Technical Data:
1.85m x 0.86m approximate
height of 0.76m
185kg structural steel

Flygt rental Dri-Prime add on provides the ability to self-prime Flygt submersibles, ensuring hassle-free setup and operation. With the Dri-Prime rental add on kit, self-priming the pump becomes a breeze, achieving maximum efficiency and allowing pumping tasks to be up and running swiftly.



Convenience is key, and that's why our Flygt pumps with the Dri-Prime rental add-on kit are available for hire from our strategically located Xylem rental hubs across the UK. Xylem's nationwide presence ensures quick access to these high-performance pumps, no matter where your project is located.



With our new Dri-Prime rental add-on kit, maximum efficiency for operations and energy can be achieved in above-ground applications, all powered by clean electricity. Contact us today to experience the future of pumping technology.

Lowara GHV20 Booster Set

Lowara GHV series booster sets are designed to transfer and increase the pressure of water, in the following applications:

- Hospitals
- Schools
- Public buildings
- Industries
- Hotels
- Sports facilities
- Mains water systems

The GHV series booster set is a variable speed pump set with two e-SV series multistage vertical pumps. Each pump is equipped with a HYDROVAR® frequency converter. This means the pumps are capable of variable speed operation. The pumps are installed on a single skid base and connected to each other by means of suction and delivery pipes complete with manifolds and isolation and non-return valves.

Technical Information

Model: GHV20/66SV3/2AG150T - 2 pumps skid mounted c/w with panel and Hydrovar unit
 Supply: 400/3/50
 Pump FLC: 27A, per pump
 Motor: IE3 Three phase surface motor
 Shaft power: 13kW
 Inlet: 150mm
 Discharge: 125mm
 Nominal flow: 15l/s
 Maximum flow: 23l/s
 Nominal head: 50m
 Maximum head: 76m
 Maximum working pressure: 7.7 Bar
 Panel & pumps protected to IP55
 Dimensions: 1551 L x 960 W x 1376 H
 Weight: 860kg



The same great knowledge and experience that builds the best pumps in the world lets you control and monitor your assets.

At Xylem we are continually striving to find ways to improve our customer experience, through the development of new systems and products to remotely monitor and control essential equipment, providing cost effective intelligent solutions.

As well as supplying the hardware such as pump controllers, sensors, electrical start equipment and control panels; we also have software for running the system.

The Flygt SCADA software provides PC based SCADA (Supervision, Control and Data Acquisition) know-how. The applications range from those operating in wastewater treatment plants and pump stations to products pumping ground water from building sites.

By combining these new system controls with our Service Solution provision, we can help to ensure the on-going quality and life of customers' pumps, whilst weekly electronic preventative checks increase the pumps operational effectiveness.

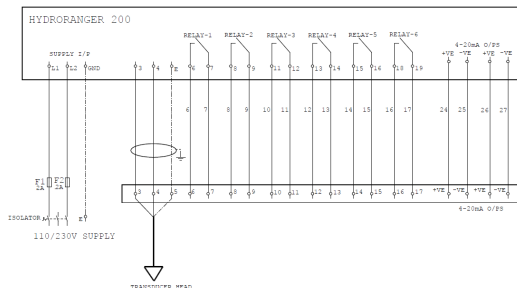
- Pump control panels
- Starters
- Level/pump/flow sensors
- Pump controller/supervision
- SCADA software systems
- Inverters VFD/VSD – PumpSmart/Smartrun
- WITS accredited Telemetry Outstations/RTU's /Pump Controllers
- Harmonic surveys for drive installations
- System design/integration
- Design consultancy
- Energy audits
- Optimisation of assets
- Reduction of OPEX leading to better TOTEX
- Project management inc. CDM
- Solar panel demand calculation



- IP54 floor standing enclosure
- Lifting hook
- Rain canopy
- Cable storage hooks
- Controls up to 6 starters or VFD's
- Door interlocked isolator
- Door mounted siemens hydroranger 200 controller
- XPS 15 ultrasonic transducer head c/w 25m cable - measuring range: min. 0.3m - max. 15m
- Mains terminals – 110/230v SP supply
- Control terminals
- 4-20mA output

Dimensions

- Height: 960mm
- Width: 420mm
- Depth: 400mm
- Weight: 25kg



We specialise in electrical submersible pumps, therefore, it is logical that we are the experts when it comes to the starter and controls that are required for a temporary pumping installation. From a simple single phase starter to a complex multi pump 3 phase control panel, rental engineers are available to give advice on all aspects of electromotive power.

Our rental team carries a comprehensive range of starters, isolators, control equipment, alarm and monitoring devices. Sufficient cable to suit day-to-day usage is stocked both at Nottingham and at all rental depot locations. For the larger and more complex installations we are able to select and supply the appropriate extension cables and junction boxes to connect the pump to the control panel. We can also supply ATEX Certified "Ex" junction boxes and cables glands for use in hazardous areas. If level regulators (floats) are used as the level control we can supply the required I/S protection relays.



Specification:

- IP54 Zintex panel
- Load break door interlocked isolator
- Soft starter
- Special wide ranging overload unit (WOL) to protect different size pumps
- Pump setting via keypad
- Earth leakage protection
- 1000 event data log
- USB port for up loading and downloading parameters
- Hand/auto switch
- Door mounted alphanumeric keypad
- Door mounted emergency stop (also to terminals)
- Klixon thermal trip circuit
- Inter-panel interlock system
- Motor & control connections wired to terminals
- 24vdc control for floats
- 24vdc 100ma for alarm
- 24vdc 500ma for the ultrasonic unit
- 24vac power supply customer use
- Eart stud terminal
- Main contractor (to provide isolation when WOL detects short circuit setting level)
- Avensor (telemetry) unit
- Aerial for Avensor
- Alarm signals wired to Avensor



The heart of the panel

- Pin locked menu
- Adjustable pump range by amps
- Adjustable too many starts protection
- Electric overload
- Underload trip
- Electronic shear pin
- Thermal switch connections

Digital display

- Running amps
- Hand, auto, running and tripped LED
- Start and stop pushbutton
- Last eight fault history
- Motor current
- Run hours
- Motor status
- Printable 1000 event data log

Dimensions

- Height: 925mm
- Width: 400mm
- Depth: 400mm
- Weight: 30kg

Soft Starter Panel 2.2-22kW - Pump FLC 44A

Specification:

- IP54 floor standing enclosure finished to RAL 2000 yellow orange
- Lifting hook
- Rain canopy
- Door interlocked isolator
- Control terminals
- 4-20mA output
- Load break door interlocked isolator
- Main contactor
- Emergency stop facility
- Built in by-pass contactor
- Door mounted keypads
- Earth leakage protection
- Local hand off auto remote selector switch
- Thermistor/klixons protection
- IS barrier for float circuit
- Fuse protection for control circuits
- 24v AC control circuit
- 415v~24vac control transformer
- Output terminals for motor connections
- I/O wired to terminals
- Interlock circuit
- Floats wired to terminals
- Telemetry connections wired to terminals
- Battery backup for telemetry
- 24v DC PSU
- Avensor (telemetry) unit
- Aerial for Avensor
- Alarm signals wired to Avensor
 1. Run
 2. Trip
 3. High level
 4. Power fail (In built from telemetry)
- Provision for ultrasonic down to terminals



The heart of the panel

- Pin locked menu
- Adjustable pump range by AMPS
- Adjustable too many starts protection
- Wide rangin electronic overload max FLC 44A
- Underload trip
- Electronic shear pin

Digital display

- Running amps
- Hand, auto, running and tripped LED
- Start and stop pushbutton
- Last eight fault history
- Motor current
- Run hours
- Motor status
- Printable 1000 event data log

Dimensions

- Height: 925mm
- Width: 400mm
- Depth: 400mm
- Weight: 30kg

Soft Starter Panel 22-90kW - Pump FLC 170A

Specification:

- IP54 floor standing enclosure finished to RAL 2000 yellow orange
- Lifting hook
- Rain canopy
- Door interlocked isolator
- Control terminals
- 4-20mA output
- Load break door interlocked isolator
- Main contactor
- Emergency stop facility
- Built in by-pass contactor
- Door mounted keypads
- Earth leakage protection
- Local hand off auto remote selector switch
- Thermistor/klixons protection
- IS barrier for float circuit
- Fuse protection for control circuits
- 24v AC control circuit
- 415v~24vac control transformer
- Output terminals for motor connections
- I/O wired to terminals
- Interlock circuit
- Floats wired to terminals
- Telemetry connections wired to terminals
- Battery backup for telemetry
- 24v DC PSU
- Avensor (telemetry) unit
- Aerial for Avensor
- Alarm signals wired to Avensor
 1. Run
 2. Trip
 3. High level
 4. Power fail (In built from telemetry)
- Provision for ultrasonic down to terminals



The heart of the panel

- Pin locked menu
- Adjustable pump range by amps
- Adjustable too many starts protection
- Wide Rangin electronic overload max flc 170A
- Underload trip
- Electronic shear pin

Digital display

- Running AMPS
- Hand, auto, running and tripped LED
- Start and stop bush button
- Last eight fault history
- Motor current
- Run hours
- Motor status
- Printable 1000 event data log

Dimensions

- Height: 1570mm
- Width: 1000mm
- Depth: 400mm
- Weight: 160kg

VFD Starter Panel 22kW - Pump FLC 48A

The Variable Speed Drive multifunctional control panel for motors rated up to 22KW. The control panel is floor standing suitable for outdoor use.

Specification:

- 415V AC Transformers
- Fuse protection for control circuit
- Thermostat controller
- Anti condensation heater
- Door mounted potentiometer
- Hand/Auto selector switch
- Pot/4-20mA selector switch
- 4-2mA input terminals
- Start/stop push buttons
- Running LED indicator
- Door safety micro switch
- Pad-lockable door clasps
- IP54 Zintex steel enclosure
- Load break door interlocked 63A MCCB
- Frame, enclosure and lifting facility
- Main contactor
- Emergency stop facility (Cat0)
- Intake filter and exhaust top box
- Door mounted keypad
- 22kW VLT Aqua drive VSD
- 24vac control circuit
- 110vac control circuit
- Provision for ultra-sonic input
- Stud terminals for motor connection
- Steel document holder for drawings and manual

Dimensions

- Height: 1400mm
- Width: 800mm
- Depth: 400mm
- Weight: 120kg



VFD Starter Panel 75kW - Pump FLC 145A

The Variable Speed Drive multifunctional control panel for motors rated up to 75kW. The control panel is floor standing suitable for outdoor use.

Specification:

- 415V AC Transformers
- Fuse protection for control circuit
- Thermostat controller
- Anti condensation heater
- Hand/Auto selector switch
- 4-20mA selector
- 4-2mA input terminals
- Start/stop push button
- Running LED indicator
- Door safety micro switch
- Pad-lockable door clasps
- IP54 Zintex steel enclosure
- Load break door interlocked 250A S/FUSE
- Frame, enclosure and lifting facility
- Emergency stop facility (Cat0)
- Door mounted keypad
- 110vac control circuit
- Provision for ultra-sonic input
- Stud terminals for motor connection
- I/S barrier for float switches

Dimensions

- Height: 1830mm
- Width: 700mm
- Depth: 600mm
- Weight: 205kg



VFD Starter Panel 90kW - Pump FLC 169A

The Variable Speed Drive multifunctional control panel for motors rated up to 90kW. The control panel is floor standing suitable for outdoor use.

Specification:

- 415V AC transformers
- Fuse protection for control circuit
- Thermostat controller
- Anti condensation heater
- Hand/Auto selector switch
- 4-20mA selector
- 4-2mA input terminals
- Start/stop push button
- Running LED indicator
- Door safety micro switch
- Pad-lockable door clasps
- IP54 Zintex steel enclosure
- Load break door interlocked 250A S/FUSE
- Frame, enclosure and lifting facility
- Emergency stop facility (Cat0)
- Door mounted keypad
- 110vac control circuit
- Provision for ultra-sonic input
- Stud terminals for motor connection
- I/S barrier for float switches

Dimensions

- Height: 1830mm
- Width: 700mm
- Depth: 600mm
- Weight: 230kg



VFD Starter Panel 30kW-160kW-Pump FLC280A

The Variable Speed Drive multifunctional control panel for motors rated from 30kW and up to and including 160kW. The control panel is floor standing suitable for outdoor use.

Specification:

- Weather proof enclosure to IP65 rating and complete with mounting stand and lifting eye bolts
- Incoming mains isolator
- Line contactor
- ABB 160kW, 415V, 3 phase, 50Hz ACS800 type variable speed drive
- Multifunction control
- Motor thermal switch relay
- Mains and motor terminals
- Telemetry control terminals
- Remote control terminals
- Door mounted indication lamps
- Door mounted VSD keypad
- Door mounted start, stop, reset and E Stop push buttons
- E stop to category 0
- Hand/off/auto selector switch

Dimensions

- Height: 1800mm
- Width: 800mm
- Depth: 600mm
- Weight: 400kg



[illegible]

- IP65 floor standing enclosure finished to RAL 2000 yellow orange
- Lifting hooks
- Rain canopy
- Door interlocked isolator
- Max motors size 430A FLC
- ABB 250kW, 415V, 3 phase, 50Hz Variable Speed Drive
- 2-20mA output
- Load break door interlocked isolator
- Main contactor
- Door mounted start, stop, reset and E Stop pushbuttons
- Door mounted keypad
- Door mounted indication lamps
- Earth leakage protection
- Local hand off auto remote selector switch
- Klixon protection
- IS barrier for float circuit
- Fuse protection for control circuits
- 415v~110v control transformer
- Output terminals for motor connections
- I/O wired to terminals
- Floats wired to terminals
- Telemetry connections wired to terminals
- Alarm signals wired to Terminals
 1. Drive ready
 2. Drive tripped
 3. Drive running
 4. High level



- Height: 1900mm
- Width: 940mm
- Depth: 750mm
- Weight: 320kg

Godwin

Godwin Pumps one of our own market leading brands, has over 100 years of experience in the design, manufacture, and supply of diesel pumps. Godwin Pumps is renowned for quality, reliability, and long life.

Today, the product range is used throughout the world, in construction, industry, oil refineries, chemical plants, mines, specialist offshore pumping, irrigation and water distribution.

Our Rental division offers Godwin's range of automatic self-priming pumps with an additional and wider range of Diesel driven Dri - Prime® pumps. The Godwin pumps can be skid or trailer mounted for use in mobile applications which can provide exceptional energy efficiency and a significantly reduced clogging capability.

Godwin CD series

The Godwin CD range is ideal for high volume, medium head pumping and is capable of handling large solids.

Godwin HL series

The Godwin HL range is ideal for medium volume, high head pumping and is also capable of handling large solids-handling.

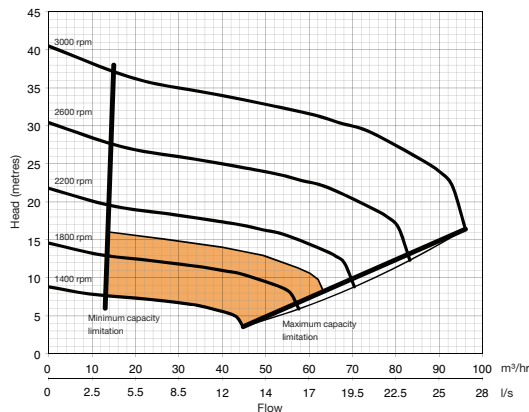
Godwin CD, HL, Heidra and NC series pumps are available to rent from Xylem. All models are available trailer mounted for safe on site transportation or with a skid base. Cast Iron pump end construction, and sound attenuated enclosures.



Godwin CD series

CD80D Dri-Prime® Hush-Pac

The CD80M can handle solids up to 40mm in diameter. Allows for dry running for prolonged periods while automatically priming and repriming. This makes it an extremely effective pump, suitable for both slurry, clean water applications as well as small dewatering and bypass applications.



Overall dimensions

Length:

1621mm

Width:

853mm

Height:

1333mm

Engine option

 Kubota Z482

CD80M Kubota Z482

Suction connection: 80mm

Delivery connection: 80mm

Max capacity: 65m³/hr

Max head: 15M

Max solids: 40mm

Max suction lift: 8.5M

Wet weight: 725kgs

Impeller diameter: 166mm

Max working pressure: 4.0bar

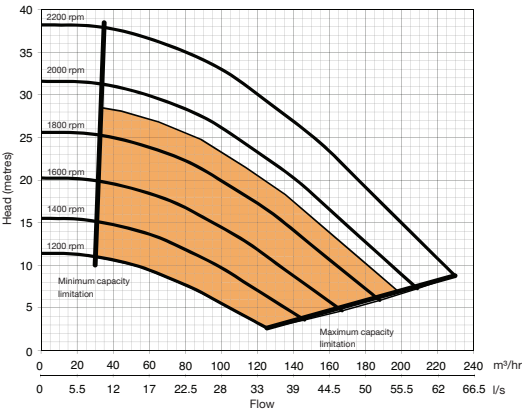
Max operating speed: 2000rpm

Engine: Kubota Z482

Dba rating (at 3m): 65

CD100M Dri-Prime®
Hush-Pac

Able to perform in the toughest conditions, the CD100M can handle solids up to 45mm in diameter. Allows for dry running for prolonged periods while automatically priming and repriming. This makes it an extremely effective pump, suitable for both slurry, clean water, sewer bypass and general dewatering and many other applications.



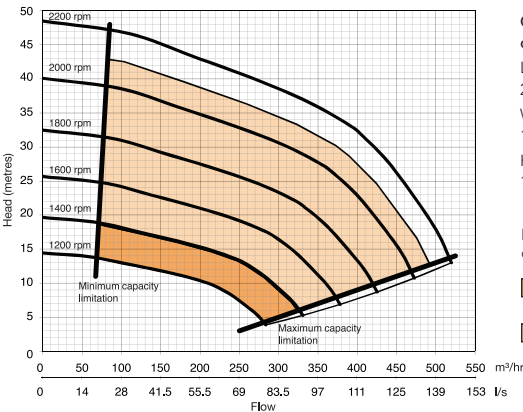
CD100M Perkins 403D-15

Suction connection: 100mm
Delivery connection: 100mm
Max capacity: 200m³/hr
Max head: 29M
Max solids: 45mm
Max suction lift: 8.5M

Wet weight: 1168kgs
Impeller diameter: 220mm
Max working pressure: 3.8bar
Max operating speed: 2000rpm
Engine: Perkins 403D-15
Dba rating (at 3m): 70

CD150M Dri-Prime®
Hush-Pac

Able to perform in the toughest conditions, the CD150M can handle solids up to 75mm in diameter. Allows for dry running for prolonged periods while automatically priming and repriming. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful CD150M has proven itself a pump of choice for contractors, local authorities, industrial and environmental companies.



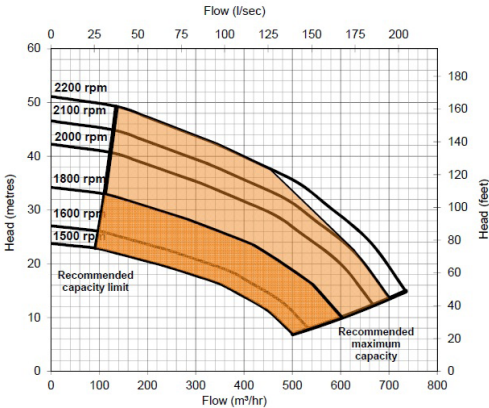
CD150M Perkins 404D-22

Suction connection: 150mm
Delivery connection: 150mm
Max capacity: 329m³/hr
Max head: 19M
Max solids: 5mm
Max suction lift: 8.5M

Wet weight: 1403kgs
Impeller diameter: 260mm
Max working pressure: 4.8bar
Max operating speed: 1500rpm
Engine: Perkins 404D-22
Dba rating (at 3m): 70

CD225M Dri-Prime® Hush-Pac

The Godwin Dri-Prime CD225M pump is an extremely powerful yet compact pump with flow capabilities to 735 m³/hr and discharge heads to 49 metres. The CD225M features the unique Godwin liquid bathmechanical seal design. This allows for dry running for prolonged periods while automatically priming and repriming. Able to perform in the toughest conditions, the CD225M can handle solids up to 75 mm in diameter. This makes it an extremely effective pump, suitable for both slurry and cleanwater applications.



Overall dimensions

Length: 3110mm
Width: 1300mm
Height: 2200mm

Engine option

- JCB 444 TA4i-81
- JCB 444 TA4i-93

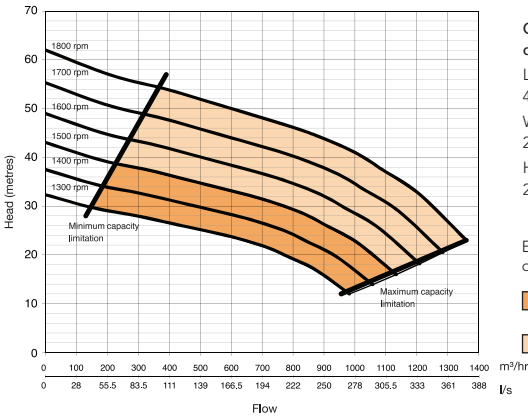
CD225M JCB 444 TA4i-93

Suction connection: 200mm
Delivery connection: 200mm
Max capacity: 735m³/hr
Max head: 49M
Max solids: 75mm
Max suction lift: 8.5M

Wet weight: 2660kgs
Impeller diameter: 290mm
Max working pressure: 5.0bar
Max operating speed: 2200rpm
Engine: JCB 444 TA4-93
DbA rating (at 3m): TBC

CD300M Dri-Prime® Hush-Pac

The CD300M can handle solids up to 95mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful CD300M has proven itself a pump of choice for mines, quarries and many other high capacity applications.



Overall dimensions

Length 4850mm
Width 2065mm
Height 2545mm

Engine options

- Perkins 1106D-E66TA
- Caterpillar C9

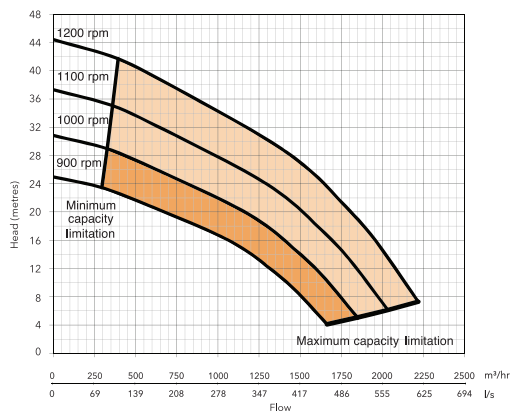
CD300M Caterpillar C9

Suction connection: 300mm
Delivery connection: 300mm
Max capacity: 1380m³/hr
Max head: 54M
Max solids: 95mm
Max suction lift: 8.5M

Wet weight: 6620kgs
Impeller diameter: 362mm
Max working pressure: 6.0bar
Max operating speed: 1800rpm
Engine: Caterpillar C9
DbA rating (at 3m): 80

CD400 Dri-Prime® Open Set

The CD400 can handle solids up to 125mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful CD400 has proven itself a pump of choice for mines, quarries, and environmental companies.



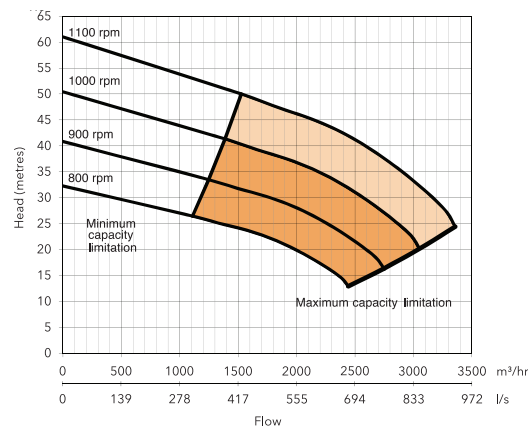
CD400 Caterpillar C9

Suction connection: 450mm
Delivery connection: 400mm
Max capacity: 2218m³/hr
Max head: 42M
Max solids: 125mm
Max suction lift: 8.5M

Wet weight: 7750kgs
Impeller diameter: 500mm
Max working pressure: 4.4bar
Max operating speed: 1200rpm
Engine: Caterpillar C9

CD500 Dri-Prime® Open Set

The CD500M features the unique Godwin high pressure oil bath mechanical seal design. This allows for dry running for prolonged periods while automatically priming and repriming. Able to perform in the toughest conditions, the CD500M can handle solids up to 80 mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful CD500M has proven itself a pump of choice for mines, quarries and many other high capacity applications.



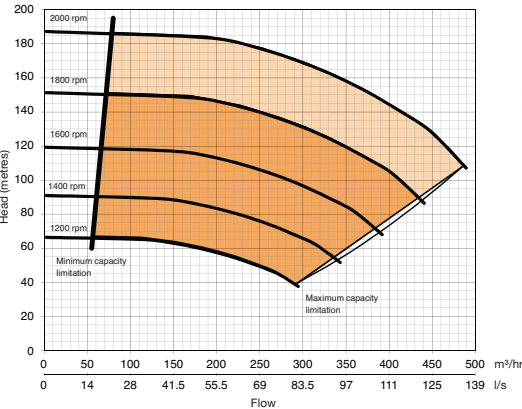
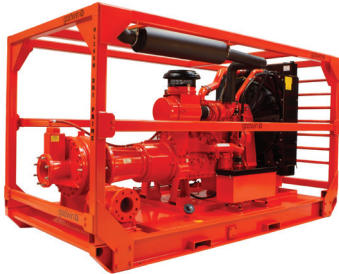
CD500 Caterpillar C18

Suction connection: 500mm
Delivery connection: 450mm
Max capacity: 3357m³/hr
Max head: 50M
Max solids: 80mm
Max suction lift: 8.5M

Wet weight: 11750kgs
Impeller diameter: 610mm
Max working pressure: 6.0bar
Max operating speed: 1100rpm
Engine: Caterpillar C18

**HL160M Dri-Prime®
Open Set**

The HL160M can handle solids up to 35mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful HL160M has proven itself a pump of choice for mines, quarries and many other high capacity applications.



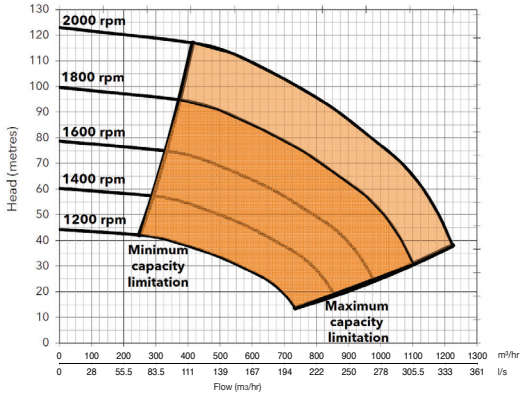
HL160M Caterpillar C15

Suction connection: 200mm
Delivery connection: 150mm
Max capacity: 486m³/hr
Max head: 187M
Max solids: 35mm
Max suction lift: 8.5M

Wet weight: 6442kgs
Impeller diameter: 508mm
Max working pressure: 18.5bar
Max operating speed: 2000rpm
Engine: Caterpillar C15

**HL250M Dri-Prime®
Open Set**

The HL250M features the unique Godwin high pressure oil bath mechanical seal design. This allows for dry running for prolonged periods while automatically priming and repriming. Able to perform in the toughest conditions, the HL250M can handle solids up to 65mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful HL250M has proven itself a pump of choice for mines, quarries and many other high capacity applications.



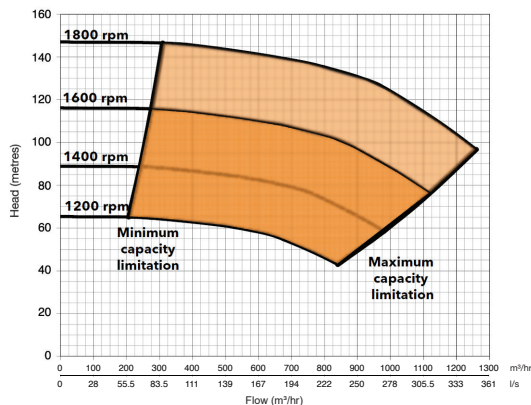
HL250M Caterpillar C15

Suction connection: 300mm
Delivery connection: 250mm
Max capacity: 1224m³/hr
Max head: 117M
Max solids: 65mm
Max suction lift: 8.5M

Wet weight: 9072kgs
Impeller diameter: 440mm
Max working pressure: 12.1bar
Max operating speed: 2000rpm
Engine: Caterpillar C15

HL260M Dri-Prime® Open Set

The HL260M features the unique Godwin high pressure Glycol mechanical seal design. This allows for dry running for prolonged periods while automatically priming and repriming. Able to perform in the toughest conditions, the HL260M can handle solids up to 50mm in diameter. This makes it an extremely effective pump, suitable for both slurry and clean water applications. The powerful HL260M has proven itself a pump of choice for mines, quarries and many other high capacity applications.



Overall dimensions

Length:
4300mm
Width:
1980mm
Height:
2525mm

Engine Options

- Volvo TAD1215VE
- Caterpillar C18

HL260M Caterpillar C18

Suction connection: 250mm
Delivery connection: 200mm
Max capacity: 1260m³/hr
Max head: 147M
Max solids: 50mm
Max suction lift: 8.5M

Wet weight: 7000kgs
Impeller diameter: 540mm
Max working pressure: 16bar
Max operating speed: 1800rpm
Engine: Caterpillar C18

Godwin NC series

The range of Godwin NC pumps are not only reliable, they come equipped with the non-clogging, performance of the proven Flygt N-technology.

This breakthrough combination gives you a best-in-class portable pump that delivers sustained hydraulic efficiency to handle tough wastewater pumping applications.



Self-cleaning Flygt N-technology saves costs

The high efficiency of Flygt N-technology is sustained over time due to its self-cleaning ability, keeping energy/fuel costs to a minimum.

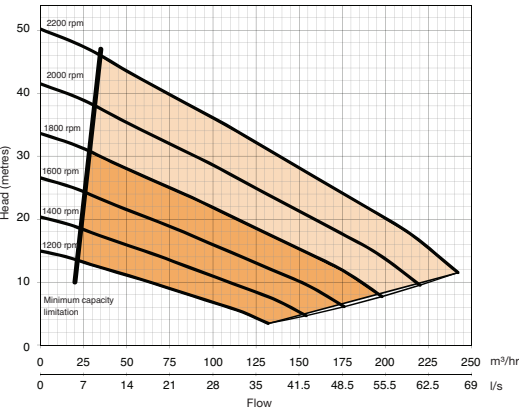
Without a doubt, no matter what the challenge, you will always have the peace of mind knowing that our Godwin NC Series Dri-Prime® pumps are on the job.

Godwin pumps, now with sustained high efficiency N hydraulics

- Self-cleaning reliability
- Hydraulic efficiency
- Non-stop optimum performance
- Long term energy/fuel savings
- Optimized operating speed for low energy/fuel consumption
- Low downtime
- Extended service intervals
- Minimum maintenance
- Service friendly

NC100 Dri-Prime® Hush-Pac

Features the unique patented N-technology with its innovative self-cleaning impeller. Able to perform in the toughest conditions, the NC100 can handle solids up to 35mm in diameter. This makes it an extremely effective pump, suitable for both sewage and clean water applications. The powerful NC100 has proven itself a pump of choice when pumping stringy material and general dewatering applications.



Overall dimensions
Length: 2190mm
Width: 1050mm
Height: 1500mm

Engine options
Perkins 403D-15
Perkins 404D-22

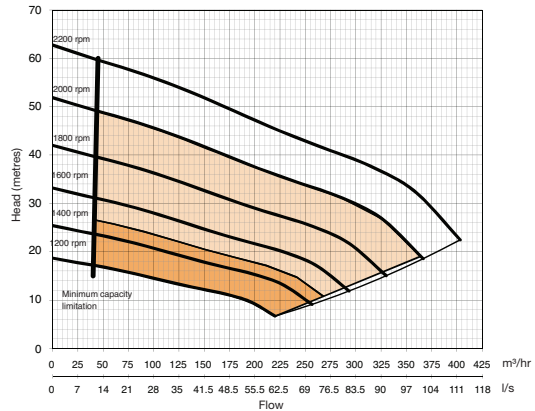
NC100 Perkins 403D-15

Suction connection: 100mm
Delivery connection: 100mm
Max capacity: 188 m³/hr
Max head: 27M
Max suction lift: 8.5M
Wet weight: 1345kgs

Impeller diameter: 256mm
Max working pressure: 5.0bar
Max operating speed: 1800rpm
Engine: Perkins 403D-15
DbA rating (at 3m): 69

NC150 Dri-Prime® Hush-Pac

Features the unique patented N-technology with its innovative self-cleaning impeller. Able to perform in the toughest conditions, the NC150 can handle solids up to 42mm in diameter. This makes it an extremely effective pump, suitable for both sewage and clean water applications. The powerful NC150 has proven itself a pump of choice when pumping stringy material and general dewatering applications.



Overall dimensions
Length: 2190mm
Width: 1050mm
Height: 1500mm

Engine options
Perkins 404D-22
Perkins 1104D-44T

NC150 Perkins 404D-22

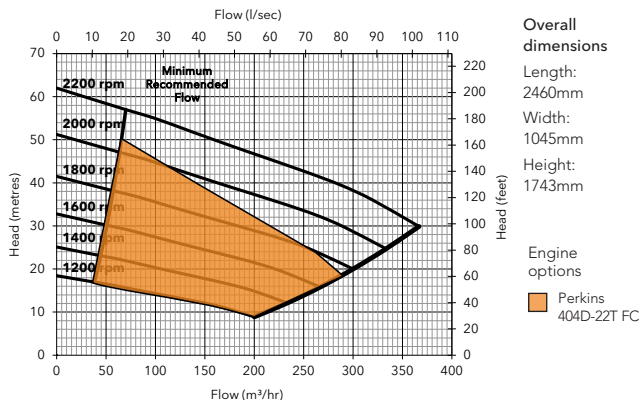
Suction connection: 150mm
Delivery connection: 150mm
Max capacity: 241m³/hr
Max head: 26M
Max suction lift: 8.5M
Wet weight: 1410kgs

Impeller diameter: 265mm
Max working pressure: 6.0bar
Max operating speed: 1600rpm
Engine: Perkins 404D-22
DbA rating (at 3m): 68

Godwin Dri-Prime® Pump

NC150S Dri-Prime® Pump

The Godwin NC150S Dri-Prime pump is designed for use in municipal wastewater applications that contain stringy, modern waste. This unique self-cleaning, non-clog pump is recommended for sewer, lift station, and bypass applications, and is ideal for permanent installations where reliability is absolutely critical, e.g. Diesel Backup Systems (DBS). This is the first in a series of Godwin S Series 'Smart' pumps, with significantly improved pumping efficiency, greater fuel economy, easier operation, and reduced maintenance.



NC150S Perkins 404D-22T FC

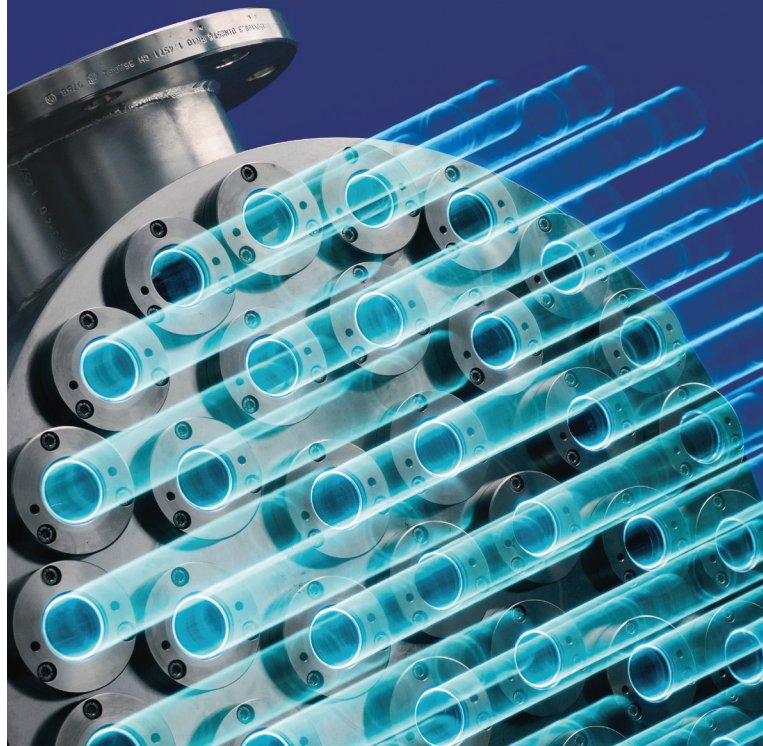
Suction connection: 150mm
 Delivery connection: 150mm
 Max capacity: 370 m³/hr
 Max head: 50M
 Max suction lift: 8.5M
 Wet weight: 1570kgs

Impeller diameter: 286mm
 Max working pressure: 6.0bar
 Max operating speed: 2200rpm
 Engine: Perkins 404D-22T FC
 Dba rating (at 7m): 63

Water Treatment

Our treatment rental division has a vast range of treatment products available for short term or semi-permanent treatment requirements in the event of compliance failure, short term outages or planned maintenance work. Xylem has the technology available to ensure you maintain consent whatever your needs.

Our range incorporates a number of the premium Xylem brands with market leading technology in both water and wastewater treatment combined with our nationwide service centres and 24/7 call out make Xylem truly a one-stop shop for both transport and treatment of both water and wastewater.



Wedeco Spektron - Clean Water

The Wedeco Spektron shines new light on the environmentally friendly process of using UV disinfection for drinking water. Featuring highly efficient UV lamp technology and advanced flow distribution, the Spektron series suits modern drinking water treatment plants and covers a wide array of applications from domestic water supply and industrial uses to large municipal water plants with a capacity of more than one thousand m³/h per unit.

Xylem has Wedeco Spektron UV reactors available to rent together with their own control panel for ease of use and inspection. The Spektron range can be used in a number of applications where water treatment is needed.



Description	kW	Voltage	Max flow rate m³/h
Clean Water Applications			
UV Spektron 250e-EW Skid 4 x 290w ECORAY® VLR30 UV lamps Dimensions: 2500 L x 700 W x 1750 H Weight: 330Kg	1.5	230/1/50	377
UV Spektron 650e-EW Skid 8 x 290w ECORAY® VLR30 UV lamps Dimensions: 2900 L x 900 W x 1880 H Weight: 620Kg	3	400/3/50	846
UV Spektron 900e Skid 12 x 290w ECORAY® VLR30 UV lamps Dimensions: 2900 L x 900 W x 1880 H Weight: 620Kg	4	400/3/50	1,037

LBX 850e Containerised UV Rig - Wastewater

The LBX reactor is a compact wastewater UV disinfection system suitable for low UV transmissivity applications. The reactor includes high efficiency low pressure Ecoray UV lamps and includes its own dedicated smart dose controller including SCADA connection. Housed in a dedicated enclosure for ease of installation and transport the unit is a self-contained UV disinfection solution for wastewater applications.



- Container size: standard 20 Foot ISO shipping container – 6.05m L, 2.44m W, 2.59m H
- Container weight: 3,800Kg - Dry
- Inlet connection: DN400 PN16
- Outlet connection: DN400 PN16
- Electrical supply: TP&N – 40A (400/3/50)
- Lamps: 32 x 285W Ecoray lamps
- Total load in kW drawn by panel & lamps: 13kW
- Max flow rate: 1,356 m³/h



Flygt submersible mixers consist of a drive unit and propeller, integrated into a compact unit. The mixer is mounted on a guide bar, to enable it to be raised and lowered, to operate at different depths. It can also be angled upwards or downward and can be swivelled to the sides. Its mixing action can therefore be directed to any point in a lagoon or tank.

This flexibility aided by the large blade propeller, running at relatively low speeds, sets in motion large volumes of sludge and water. The Flygt submersible mixer is at least three times as efficient as a conventional mixer. This is due to the high efficiency hydraulic design and the fact that the motor and propeller are integrated into a lightweight, compact unit. No energy is lost in complicated gearing, support bearings and heavy shafts. Also, the mixer can be run intermittently, thus providing further energy savings.

Compact design

The machines are either direct-driven or include a reduction gearbox between the motor and the propeller. However, all models are well integrated into a compact unit. So no energy is lost in long heavy shafts and support bearings.

Circular tanks

One mixer is normally sufficient for tank volumes up to 2,000m³. Depending on the characteristics of the liquid and the desired degree of agitation, more than one mixer may be necessary for larger tank volumes.

Rectangular tanks

If the length, width and depth dimensions of the tank differ considerably, several mixers may be necessary to ensure good results. Rectangular tanks are often located underground. Since Flygt mixers are installed from the top, installation in underground tanks is easy.

For specific duties on the range of Flygt submersible mixers please contact your local service centre.

Homogeneous liquid manure in a couple of hours

Flygt submersible mixers have an important role to play in agriculture, for homogenising liquid manure. Even if the manure is old, with a thick dry crust and all the solids have settled at the bottom of the tank, it will be possible by mixing for the whole tank contents to become homogeneous. This is due to the fact that the mixer can operate at different depths, can be orientated in any direction and will quickly set in motion large volumes of the manure.

Wide field of applications in industry

Flygt submersible mixers are used for keeping liquids of different viscosities in suspension, for mixing dry solids into liquids, for thickening after sedimenting and decanting, and for transporting liquids.

Good environment in fish farming

Whether in netting enclosures in open water or in dammed bays, Flygt submersible mixers will maintain ideal fish farming conditions at a modest cost. The mixer will supply a briskly-flowing current of fresh water with good oxygen contents and an abundance of natural food. At the same time, fish droppings will be removed. The risk of rotting and formation of decay gases is eliminated. By establishing circulation between the bottom and the surface, the mixer also evens out the water temperature, which favours the growth of the fish.

Improving the efficiency in sewage treatment plants

Flygt submersible mixers have been widely adopted in sewage treatment plants throughout the world. Particularly in thickening, sludge and storm water ponds, in buffer tanks and in the mixing of chemicals and lime into the water, the efficiency and low operating costs of the mixers can be utilised to the greatest possible extent.

Flow creation

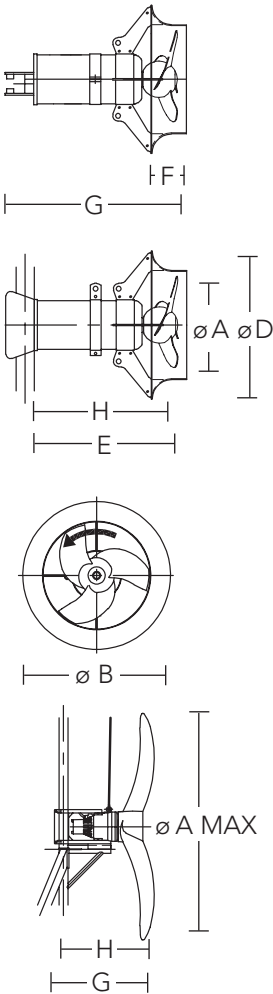
For low head, high capacity laminar flows the large propeller mixer can be used in lake reservoirs, fish farms as well as process mixing.

As shown:

4620 1.5kW mixer fitted on a portable, free standing steelwork - available to rent.



Type	A Max Ø mm	B Max Ø mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	Weights (max) kg (lbs)
4410	2500	-	-	-	-	-	1110	1010	100	230(507)
4430	2500	-	-	-	-	-	1110	1010	100	263 (580)
4630	390	636	405	559	469	117	574	457	50	61(134)
4640	390	636	405	559	509	117	614	497	50	64 (141)
4650	650	1027	675	931	721	195	878	700	100	177 (390)
4660	650	1027	675	931	831	195	988	810	100	218 (481)
4670	880	1372	908	1256	835	264	992	816	100	363 (800)
4680	880	1372	908	1256	985	264	1192	966	100/150	482 (1063)



Fields of application

The efficient mixing characteristics and the simple design of our ejectors and aerators make them suitable for aerating biological ponds, fishfarm ponds, lakes and waterways.

The function of the ejectors

The principle on which the ejector operates is simple and well-known. A drive jet from a Flygt submersible pump is led into the ejector. The drive jet flows through a nozzle into the ejector housing, which has a delivery pipe for the medium, e.g. air, which is to be pumped (the secondary flow). A drop in pressure occurs when the drive jet passes through the mixing tube. This partial vacuum automatically entrains the pump medium with the drive jet and the contents of the primary and secondary flows are mixed intensively with each other.

The function of the radial aerator

Aeration by means of high efficiency mixing. Air dispersion by the same method as the ejector is distributed radially within a tank, basin or lagoon, via the series of diffusers mounted around a central turbine impeller. As with the ejectors, being totally submerged significant advantages arise over other forms of aeration.

Low noise levels

No sprays or liquid dispersion in the atmosphere.

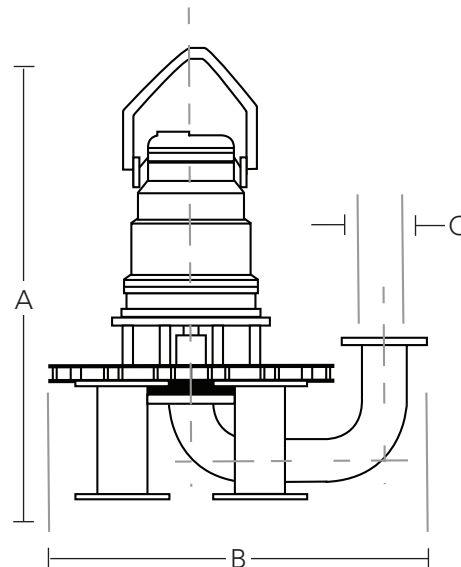
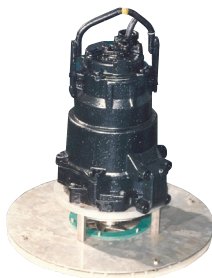
Installation

Installation of these aeration products is straightforward either by bolting to the tank floor or they even will be suspended by their own weight in certain circumstances.

Applications

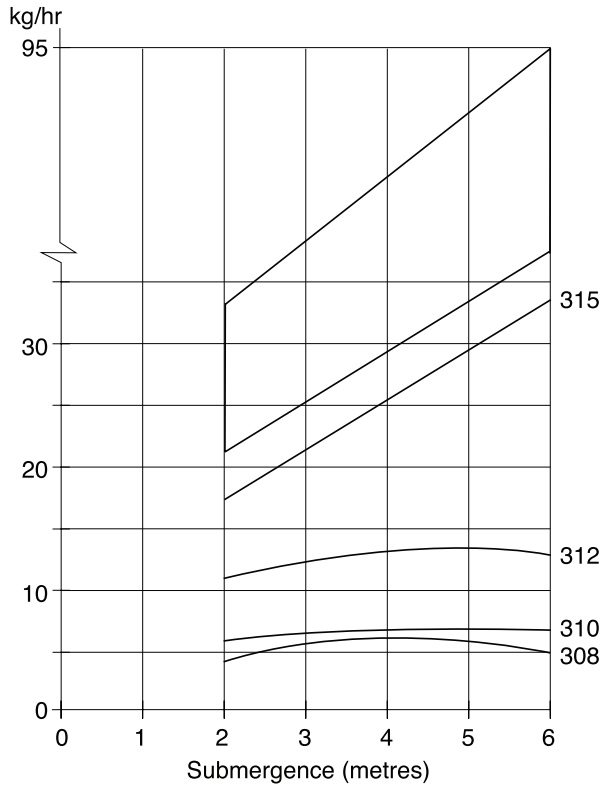
Subject to the tank configuration the ejector or aerator can be selected to:

- Replace existing aeration equipment during breakdown or maintenance periods.
- Upgrade existing treatment capacity without major investment. Increase oxygen levels. Reduce ammonia levels.



Type	Power	Current	Dimensions (mm)			Weight kg*
			a	b	c	
308	2.4	4.5	610	660	50	75
310	4.4	8.5	700	660	50	105
312	5.9	11.0	800	950	80	180
315	13.5	25.0	1130	995	100	295
320	22	42.0	1320	1150	150	500

* Weight includes 10m of cable



Utilising the principles of an ejector; the Flyjet can be used to resuspend solids which have settled in storage tanks.

They can be used in storm water retention tanks at sewage works; for example, 4" and 6" jet pipes are available.



The concept

Our range of pump flotation modules has been developed to provide a light-weight and cost-effective alternative to the traditional steel pontoon. The flotation modules are prefabricated from light-weight, foam-filled, GRP (Glass fibre Reinforced Polymer) and are available in four sizes.

General applications

Pump flotation modules can be supplied to suit Flygt 2000 Series / BS dewatering pumps, C/N-series wastewater pumps and slurry pumps.

Applications include:

- Mine dewatering
- Tailing dams
- Underground dams
- Sewage treatment
- Quarries
- Aeration ponds
- Construction site dewatering
- Flooding control

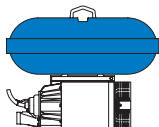
Installation

The pump and integral module can be simply installed by use of a central lifting attachment. Once in the water, the module can be towed by boat, if required, and secured in position by anchor or guy ropes. The float module remains visible above the water surface for easy recovery.

Design features:

- Compact and lightweight
- Stainless steel metal parts
- Easily mounted to pumps on site
- Lifting points for easy installation
- Easy to transport as an integral unit
- Foam filled to prevent sinking

By having the pump floating close to the surface, it increases service life through reduced maintenance since it is no longer working within high solids environment.



PFM550

PFM550

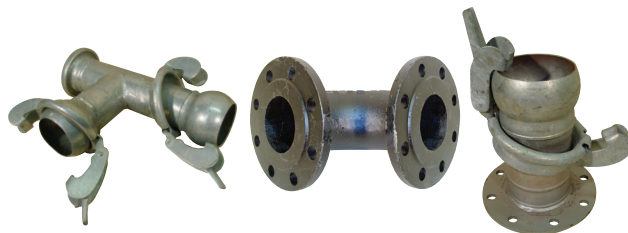
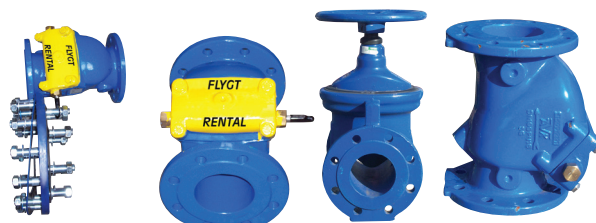
PFM 550	Part Number
2201	691 69 00
3140	*
3152/3153	*
3170/3171	*
5100 (<52kW)	*
5150 (<52kW)	*

* On request

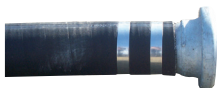
1400 x 1400 x 540mm 20kg

To complement our comprehensive range of pumps, extensive stocks of pipework and hoses are held. Our rental engineers can supply all your needs from 50mm hose increasing in size to steel pipes in excess of 450mm.

Also BSP pipe and cast iron fittings to suit most applications including valve, taper, hose spigot, flexible couplings and hose clamps, specialised hoses for high pressure applications are also stocked.



A pump relies on a secure link between the source and the discharge point. Poor hoses will leak, collapse and cause unwanted problems. So, at Xylem we only sell those hoses we use ourselves – “Cheap hose is expensive hose in the long run”.



Wire-armoured suction hose

Specification			
Bore dia. mm	Outside dia. mm	Working pressure bars	Weight per 6m incl. cpgs kg
51	63	8	12
76	89	8	26
102	116	8	35
150	169	5	60

A tough hose developed for the construction industry, with a tube of smooth synthetic rubber, covered with weather resistant synthetic rubber, reinforced with cords of synthetic textile and an embedded helix of high-tensile steel wire. It is flexible and heavy, yet easy enough to manoeuvre. It seals well onto the pipe fittings, withstands high pressure and is also tough. It is ideal for suctions and for discharge where the bend must not collapse.



PVC suction and discharge hose

Specification				
Bore dia. mm in.		Outside dia. mm	Working pressure bars	Weight per 6m incl. cpgs kg
50	2	58	5	6
75	3	87	5.5	10
100	4	115	4.5	25
150	6	167	3	40

PVC is a high grade hose, flexible, lightweight, with exceptional resistance to abrasion and weathering. The smooth bore offers minimum resistance to flow. The strengthened PVC helix is embedded in the hose wall for extra strength.



Polythene delivery hose

This is a proven semi-rigid delivery hose, which is well known throughout the industry. It is damage resistant, but also lightweight and simple to handle. Friction loss is kept to a minimum in this smooth bore hose.

Friction loss in smooth bore pipe

Losses in m/100 or ft./100ft

I.G.P.M.	2"	3"	4"	6"	8"	10"	12"	m ³ /h
50	10	1.4	0.3					10
75	20	3	0.7					15
100	35	5	1	0.1				20
150		12	2.5	0.35				30
200		18	4.5	0.6				50
300		40	10	1.2	0.4			75
400			18	2.2	0.7			100
500			28	3.5	1.1	0.35		125
600			38	4.5	1.5	0.5		150
700				6.5	2	0.7		175
800				8	2.7	0.8		200
900				10	3.4	1	0.4	225
1000				13	4	1.4	0.5	250
1200				18	6	2	0.8	300
1400				26	8	3	1	350
1600				32	11	4	1.5	400
1800				36	14	4.5	2	450
2000				38	17	5	2.5	500
2500					25	9	4	650
3000					38	12	5	750
4000						21	8	1000
5000						32	13	1250

m³/h x 4 = g.p.m. approx

The table refers to new pipes and moderate corrosion could increase resistance by 30%. To calculate resistance of bends and fittings, an 'equivalent length' for each accessory needs to be added to the actual length of pipe. The equivalent length in feet can be estimated by multiplying the factors in the adjacent table by the pipe diameter in inches.

Example :- A 6" Gate Valve is equivalent to 12 ft of extra pipe

Mitre elbow or tee	5
Round elbow	3
Slowbend	2
Square edged entrance	3
Gate valve fully open	2
Globe valve fully open	10
Non-return valve (flap type)	3
Foot-valve and strainer (clean)	5

Weight Reference Guide - Pumps and Starters

Pump Type	BS/NS Weight Inc. Base Stand	Pump Type	Weight
2052	18kgs	Large Submersible Pump Range	
2066	30kgs	3231 85Kw	1,380kgs-Pump Only
2102	50kgs	3231 105Kw	1,590kgs-Pump Only
2125 Aluminium	89kgs	3231 125Kw	1,530kgs-Pump Only
2125 Cast Iron	180kgs	3231 170Kw	1,760kgs-Pump Only
2151	165kgs	3231 215Kw	1,910kgs-Pump Only
2201MT Aluminium	280kgs	3312 100Kw	1,975kgs-Pump Only
2201MT Cast Iron	445kgs	3312 180Kw	2,275kgs-Pump Only
2201HT Aluminium	240kgs	3312 250Kw	3,125kgs-Pump Only
2201HT Cast Iron	350kgs	3356 100Kw	1,750kgs-Pump Only
2250	540kgs	3400 75Kw	2,700kgs-Pump Only
2400	985kgs	3400 250Kw	3,750kgs-Pump Only
2610 MT	21kgs	Godwin Diesel Range - Open Set or HushPac	
2620 MT	32kgs	CD80D-Kubota 2482 Engine-Wet Weight HushPac	725kgs
2640 MT & HT	51kgs	CD100M-Perkins 403D-15 Engine-Wet Weight HushPac	1'168kgs
2660 MT & HT	78kgs	CD150M-Perkins 404D-22 Engine-Wet Weight HushPac	1'403kgs
2670 MT & HT	141kgs	CD225M-JCB 444T1 Engine-Wet Weight HushPac	2'660kgs
3085MT	71kgs	CD300M-Caterpillar C9 Engine-Wet Weight HushPac	6'620kgs
3102MT	116kgs	CD400M-Caterpillar C9 Engine-Wet Weight Open Set	7'750kgs
3102SH	114kgs	CD500M-Caterpillar C18 Engine-Wet Weight Open Set	11'750kgs
3127MT	170kgs	HL160M-Wet Weight Open Set	6'442kgs
3127HT	155kgs	HL250M-Wet Weight Open Set	9'072Kgs
3152LT	426kgs	HL260M-Wet Weight Open Set	7'000Kgs
3152MT	321kgs	NC100-Perkins 403D-15 Engine-Wet Weight HushPac	1'345kgs
3152HT	280kgs	NC150-Perkins 404D-22 Engine-Wet Weight HushPac	1'410kgs
3153 LT	379kgs	NC150S-Perkins 404D-22T Engine-Wet Weight HushPac	1'570kgs
3153MT	252kgs	Heidra 150 Deutz FM2011 Power Pack-Wet Weight HushPac	1'500kgs
3153HT	232kgs	HNC100 Pump Only	135kgs
3153SH	242kgs	HNC150 Pump Only	155kgs
Concortor 5.5kW 150mm	130kgs	Mixers	
Concortor 7.3kW 100mm	112kgs	4620	18kgs
3171LT	460kgs	4630	60kgs
3171MT	362kgs	4640	63kgs
3171HT	321kgs	4650	174kgs
3201MT	588kgs	4660	209kgs
3201HT	540kgs	4670	345kgs
3202LT	900kgs	Starters	
3202MT	610kgs	15kW Soft Start	30kgs
3202HT	580kgs	90kW Soft Start	160kgs
3300LT	1,175kgs	22kW VFD	120kgs
3300MT	1,188kgs	75kW VFD	205kgs
3300HT	988kgs	90kW VFD	230kgs
3301LT	1,110kgs	160kW VFD	400kgs
3301MT	1,030kgs	Treatment Plant	
3301HT	920kgs	LBX850 UV Plant-20' Container-Dry Weight	3,800kgs Approx.
3315LT 90kW	1,330kgs	Spektron 250e UV-Skid-Dry Weight	330kgs Approx.
3315HT 105kW	1,220kgs	Spektron 650e UV-Skid-Dry Weight	620kgs Approx.
		Spektron 900e UV-Skid-Dry Weight	620kgs Approx.
		SAF Plant 20' Container-Dry Weight	9,500kgs Approx.

The weights above
DO NOT include Cable,
 Chains or Hoses

The weights contained within this guide are an estimate only and the actual weight of the item to be lifted must be separately assessed and verified

The information contained within this document is for guidance only and is accurate to the best of our knowledge at time of going to print.

Weight Reference Guide - Accessories

Cast Iron Pipe & Fittings	Size (M)	2" - 50mm kg	3" - 80mm kg	4" - 100mm kg	6" - 150mm kg	8" - 200mm kg	10" - 250mm kg	12" - 300mm kg
Gate Valve Metal Wedge	17	23	35	65	104	170	228	
NRV Cast Iron Flap Type	12	11	13	22	34	55	77	
D/F Bend Short	16	21	33	50	82	116		
D/F Bend Long	15	19	33	50	82	116		
Duck Foot Bend	17	21	36	54	87	121		
Equal Tee	26	34	55	83	121	164		
Radial Tee	8	10	15	22	33	46		
"Y" Piece	4	5	7	11	15	20		
Taper	16	20	30	40	52	66		
VJFA	5	6	8	10	15	19		
Cast Iron Pipe Cement lined kg/M No Flanges	6	12	26	35				
NP 16 Flange	6	10	25					
Hoses								
Wire Armoured Hose CW Bowers	6	6	8	14	43			
PVC Suction & Discharge Hose CW Bowers	6	8	14	43				
Polythene Semi Rigid Hose CW Bowers	3				35	50	95	
Wire Armoured Hose CW Bowers	3				65	95	125	
Wire Armoured Hose CW Flanges	3							
Steel "Bauer" Type Pipe & Fittings								
2" - 50mm	3	5	8	15	20			
3" - 76mm	7	11	16	32	40			
4" - 108mm	15	25	40	65	95			
6" - 159mm	35	55	82	121	164			
8" - 203mm	52	82	121	164	220			
10" - 254mm	82	121	164	220	289			
12" - 305mm	116	164	220	289	368			
14" - 357mm	155	220	289	368	467			
16" - 406mm	200	289	368	467	584			
18" - 457mm	254	368	467	584	720			
20" - 508mm	318	467	584	720	886			
22" - 561mm	391	584	720	886	1083			
24" - 613mm	474	720	886	1083	1312			
26" - 665mm	567	886	1083	1312	1574			
28" - 717mm	670	1083	1312	1574	1869			
30" - 769mm	784	1312	1574	1869	2198			
32" - 821mm	908	1574	1869	2198	2562			
34" - 873mm	1042	1869	2198	2562	2961			
36" - 925mm	1186	2198	2562	2961	3396			
38" - 977mm	1340	2562	2961	3396	3868			
40" - 1029mm	1504	2961	3396	3868	4378			
42" - 1081mm	1678	3396	3868	4378	4926			
44" - 1133mm	1862	3868	4378	4926	5514			
46" - 1185mm	2056	4378	4926	5514	6142			
48" - 1237mm	2260	4926	5514	6142	6810			
50" - 1289mm	2474	5514	6142	6810	7518			
52" - 1341mm	2698	6142	6810	7518	8266			
54" - 1393mm	2932	6810	7518	8266	9054			
56" - 1445mm	3176	7518	8266	9054	9882			
58" - 1497mm	3430	8266	9054	9882	10750			
60" - 1549mm	3694	9054	9882	10750	11658			
62" - 1601mm	3968	9882	10750	11658	12606			
64" - 1653mm	4252	10750	11658	12606	13594			
66" - 1705mm	4546	11658	12606	13594	14622			
68" - 1757mm	4850	12606	13594	14622	15690			
70" - 1809mm	5164	13594	14622	15690	16798			
72" - 1861mm	5488	14622	15690	16798	17946			
74" - 1913mm	5822	15690	16798	17946	19134			
76" - 1965mm	6166	16798	17946	19134	20362			
78" - 2017mm	6520	17946	19134	20362	21630			
80" - 2069mm	6884	19134	20362	21630	22938			
82" - 2121mm	7258	20362	21630	22938	24286			
84" - 2173mm	7642	21630	22938	24286	25674			
86" - 2225mm	8036	22938	24286	25674	27102			
88" - 2277mm	8440	24286	25674	27102	28570			
90" - 2329mm	8854	25674	27102	28570	29978			
92" - 2381mm	9278	27102	28570	29978	31426			
94" - 2433mm	9712	28570	29978	31426	32914			
96" - 2485mm	10156	29978	31426	32914	34442			
98" - 2537mm	10610	31426	32914	34442	36010			
100" - 2589mm	11074	32914	34442	36010	37618			
102" - 2641mm	11548	34442	36010	37618	39266			
104" - 2693mm	12032	36010	37618	39266	40954			
106" - 2745mm	12526	37618	39266	40954	42682			
108" - 2797mm	13030	39266	40954	42682	44450			
110" - 2849mm	13544	40954	42682	44450	46258			
112" - 2901mm	14068	42682	44450	46258	48106			
114" - 2953mm	14602	44450	46258	48106	49994			
116" - 3005mm	15146	46258	48106	49994	51922			
118" - 3057mm	15690	48106	49994	51922	53890			
120" - 3109mm	16244	49994	51922	53890	55898			
122" - 3161mm	16808	51922	53890	55898	57946			
124" - 3213mm	17382	53890	55898	57946	59934			
126" - 3265mm	17966	55898	57946	59934	61962			
128" - 3317mm	18560	57946	59934	61962	64030			
130" - 3369mm	19164	59934	61962	64030	66138			
132" - 3421mm	19778	61962	64030	66138	68286			
134" - 3473mm	20402	64030	66138	68286	70474			
136" - 3525mm	21036	66138	68286	70474	72702			
138" - 3577mm	21680	68286	70474	72702	74970			
140" - 3629mm	22334	70474	72702	74970	77278			
142" - 3681mm	22998	72702	74970	77278	79626			
144" - 3733mm	23672	74970	77278	79626	82014			
146" - 3785mm	24356	77278	79626	82014	84442			
148" - 3837mm	25050	79626	82014	84442	86910			
150" - 3889mm	25754	82014	84442	86910	89418			
152" - 3941mm	26468	84442	86910	89418	91966			
154" - 3993mm	27192	86910	89418	91966	94554			
156" - 4045mm	27926	89418	91966	94554	97182			
158" - 4097mm	28670	91966	94554	97182	99850			
160" - 4149mm	29424	94554	97182	99850	102558			
162" - 4201mm	30188	97182	99850	102558	105306			
164" - 4253mm	30962	99850	102558	105306	108094			
166" - 4305mm	31746	102558	105306	108094	110922			
168" - 4357mm	32540	105306	108094	110922	113790			
170" - 4409mm	33344	108094	110922	113790	116698			
172" - 4461mm	34158	110922	113790	116698	119646			
174" - 4513mm	34982	113790	116698	119646	122634			
176" - 4565mm	35816	116698	119646	122634	125662			
178" - 4617mm	36660	119646	122634	125662	128730			
180" - 4669mm	37514	122634	125662	128730	131838			
182" - 4721mm	38378	125662	128730	131838	134986			
184" - 4773mm	39252	128730	131838	134986	138174			
186" - 4825mm	40136	131838	134986	138174	141402			
188" - 4877mm	41030	134986	138174	141402	144670			
190" - 4929mm	41934	138174	141402	144670	147978			
192" - 4981mm	42848	141402	144670	147978	151326			

Normal Bore	Table	Dia. Flange	P.C.D	Bolt Dia.	No. of Bolts	Flange Thickness Grey Cast Iron
1"	D&E	4.50"	3.25"	.50"	4	.50"
1.25"	D&E	4.75"	3.44"	.50"	4	.625"
1.5"	D	6.00"	4.50"	.625"	4	.688"
2"	E	6.00"	4.50"	.625"	4	.750"
50mm	NP16	165mm	125mm	M16	4	20mm
2.5"	D	6.50"	5.00"	.625"	4	.688"
3"	E	6.50"	5.00"	.625"	4	.750"
80mm	D&E	7.25"	5.75"	.625"	4	.750"
	NP10	200 (7.87)	160 (6.30)	M16	8	21 (.83)
	NP16	200 (7.87)	160 (6.30)	M16	8	21 (.83)
4"	D	8.50"	7.00"	.625"	4	.750"
	E	8.50"	7.00"	.625"	8	8.75"
100mm	NP10	220 (8.66)	180 (7.09)	M16	8	22 (.87)
	NP16	220 (8.66)	180 (7.09)	M16	8	22 (.87)
5"	D	10.00"	8.25"	.625"	8	.813"
	E	10.00"	8.25"	.625"	8	.875"
6"	D	11.00"	9.25"	.625"	8	.813"
	E	11.00"	9.25"	.750"	8	8.75"
150mm	NP10	285 (11.22)	240 (9.49)	M20	8	23 (.91)
	N16	285 (11.22)	240 (9.49)	M20	8	23 (.91)
7"	D	12.00"	10.25"	.625"	8	.875"
	E	12.00"	10.25"	.750"	8	1.00"
8"	D	13.25"	11.50"	.675"	8	.875"
	E	13.25"	11.50"	.750"	8	1.00"
200mm	NP10	340 (12.38)	295(11.61)	M20	8	245 (.96)
	NP16	340 (12.38)	295(11.61)	M20	12	245 (.96)
9"	D	14.50"	12.75"	.625"	8	.875"
	E	14.50"	12.75"	.750"	12	1.00"
10"	D	16.00"	14.00"	.750"	8	1.00"
	E	16.00"	14.00"	.750"	12	1.00"
250mm	NP10	400 (15.75)	350(13.78)	M20	12	26 (1.02)
	NP16	400 (15.75)	355 (13.98)	M25	12	26 (1.02)
12"	D	18.00"	16.00"	.750"	12	1.00"
	E	18.00"	1.00"	.875"	12	1.125"
300mm	NP10	455 (17.91)	400 (15.75)	M20	12	27.5 (1.08)
	NP16	455 (17.91)	410 (16.14)	M25	12	27.5 (1.08)

NP10 and NP16 are for cold water pressure of 10 bar and 16 bar and are the current British Standard. They are unnecessarily heavy for most contractors' pumps.

Xylem rental centres



National Call Centre

0845 707 8012

Email: fgb.rental@xylem.com

Web: www.xylem.com/uk

Xylem |'zīl m|

- 1) The tissue in plants that brings water upward from the roots;
- 2) A leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com