



# The pumps that set the standard

GODWIN – THE BENCHMARK FOR RELIABILITY

YOUR TASK. OUR FORCE.

godwin   
a xylem brand

# When downtime is not an option

When there's fluid to move - and downtime is not an option - you want pumps you can trust. Whether it's a question of water, wastewater, or industrial fluids, Godwin pumps have earned a world-wide reputation for reliability. Here's why:

### Automatic self-priming from dry

Godwin pumps prime and re-prime automatically from dry. In fact, they are so dependable, you can just turn them on and forget them. This leads to significantly reduced costs for manually priming and repeated re-priming.

### Robust design for rough handling

Godwin pumps are made from the bottom up to withstand the wear and tear of rental. That's why the pump-end has a close-coupled design and runs dry without damage. And that's also why the castings are 4 mm thicker compared to a permanently installed process pump.

### Correct pump sizing

Reliable pumping is also a question of using the right size pump for the job. With the market's widest range of surface-mounted pumps, we make sure that the right Godwin pump is supplied to every application.

And now with Vac-Prime pumps, there's a range of smaller, lighter Godwin pumps for low to medium heads. In addition, the local and international expertise of TotalCare, ensure efficient pumping solutions.

### System engineering excellence

Accurately predicting flows is key to designing reliable pumping systems. The system engineering competence built up by Godwin - the result of over 100 years of experience - is now rooted in Xylem and an integral part of our TotalCare program.

### More efficient and even more reliable

In some wastewater applications, stringy material can build up on impellers, resulting in lower efficiency and higher fuel/electricity costs. It can even lead to motor failure and emergency call-outs. But by integrating Flygt's acclaimed N-technology™, Godwin NC pumps provide as-new efficiency month after month.

### Close by and available

And finally, reliability is about availability. You will find that Xylem is always close by, ready with pumps for rental or purchase, ready with service technicians to help you, and spares to keep your pumps pumping. We call it TotalCare services.

Where Godwin pumps are used:



### Municipal

- Sewer bypass
- Digester cleaning and sludge removal
- Emergency drainage of floodwaters



### Mining and quarrying

- Open pit and underground drainage
- Process water supply and transfer



### Industrial

- Wastewater bypass
- Temporary fire pumps
- Temporary raw water supply



### Construction and tunneling

- Site drainage
- Stream diversions
- Drill rig water supply



### Oil and gas

- Tank cleaning
- Water supply for hydraulic fracturing
- Product transfer
- Pipeline pigging

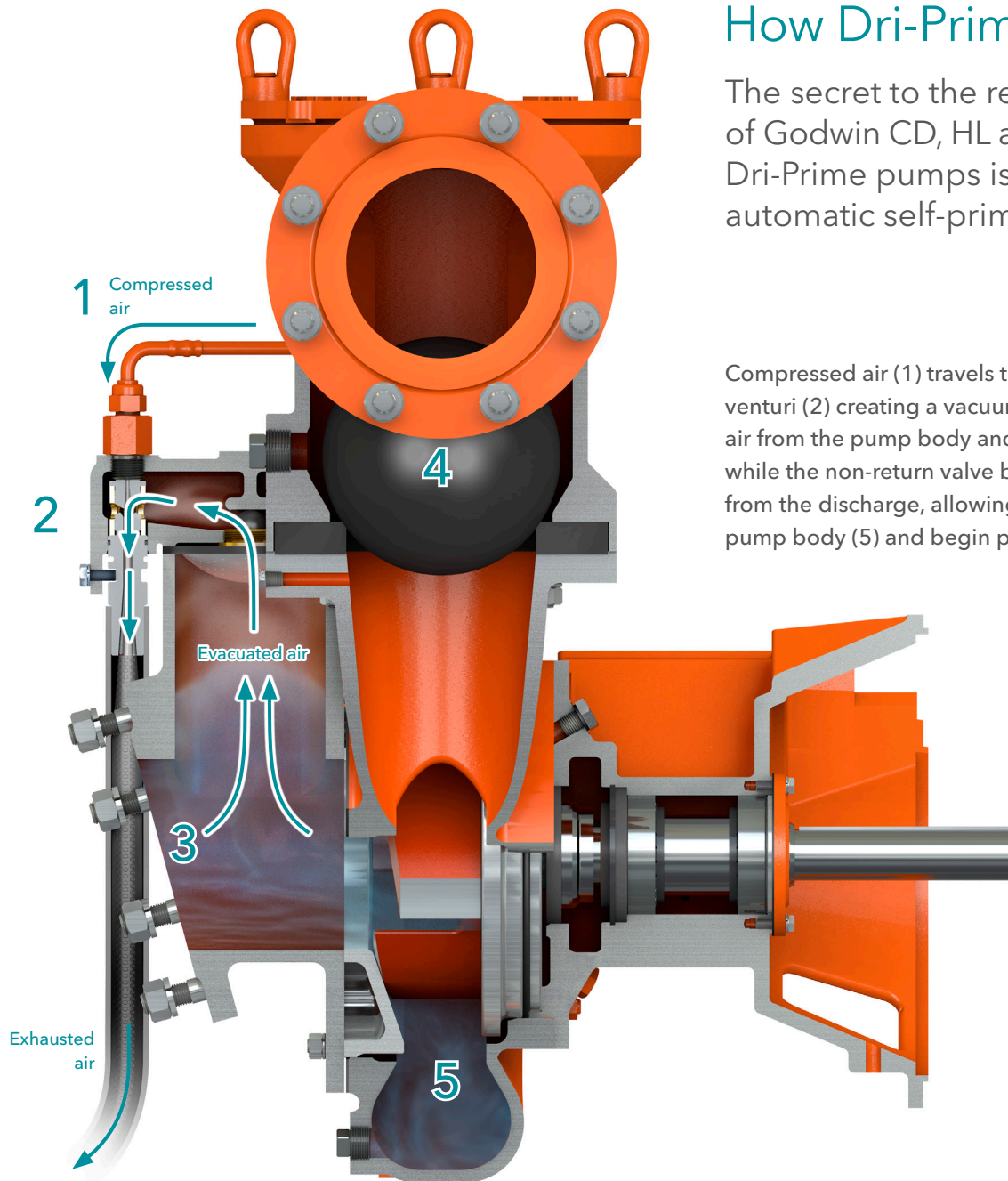


### Marine

- Barge ballasting
- Jetting

## How Dri-Prime® works

The secret to the reliability of Godwin CD, HL and NC series Dri-Prime pumps is the automatic self-priming system.



Compressed air (1) travels through the Godwin venturi (2) creating a vacuum by evacuating air from the pump body and suction hose (3), while the non-return valve ball (4) seals out air from the discharge, allowing fluid to enter the pump body (5) and begin pumping.



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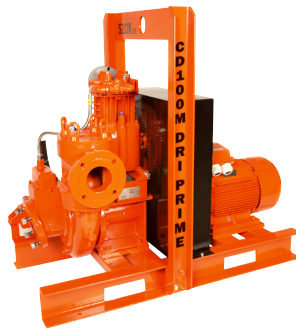
# Dri-Prime - the features that set the standard

Godwin Dri-Prime pumps transport raw sewage, sludges and fluids with solids up to 125 mm in diameter. The pumps prime automatically from dry to 8.5 m of suction lift, and can run dry. Choose between the high volume, medium-head CD series and the medium volume, high head HL series.



#### **Diesel powered**

Equipped with a diesel engine for stand-alone operation, these pumps will work on any site, no matter how remote. All diesel engines meet the latest emissions regulations.



#### **Electric powered**

All CD and HL series Dri-Prime pumps are available with electric motors, for both temporary and permanent installation. Electric-powered pumps do not need refueling, the motor requires less servicing, and they reduce the carbon footprint of any project.

#### **Dri-Prime = reduced labor costs and reliable operation**

Automatic priming from dry up to 8.5 m without an operator or foot valve. With no moving mechanical parts in the priming device, Godwin Dri-Prime CD and HL series pumps will prime and re-prime from dry day after day.

#### **Liquid bath mechanical seal = dry-running and reduced maintenance costs**

Seals in pumps that often run dry can overheat and fail. Godwin mechanical shaft seals run in a liquid bath, which dissipates heat through the pump casing and allows the pump to run dry. This provides more reliable operation, frees operators from closely monitoring the pumps, while reducing maintenance costs.

#### **Abrasion-resistant silicon carbide seal faces = trouble-free performance**

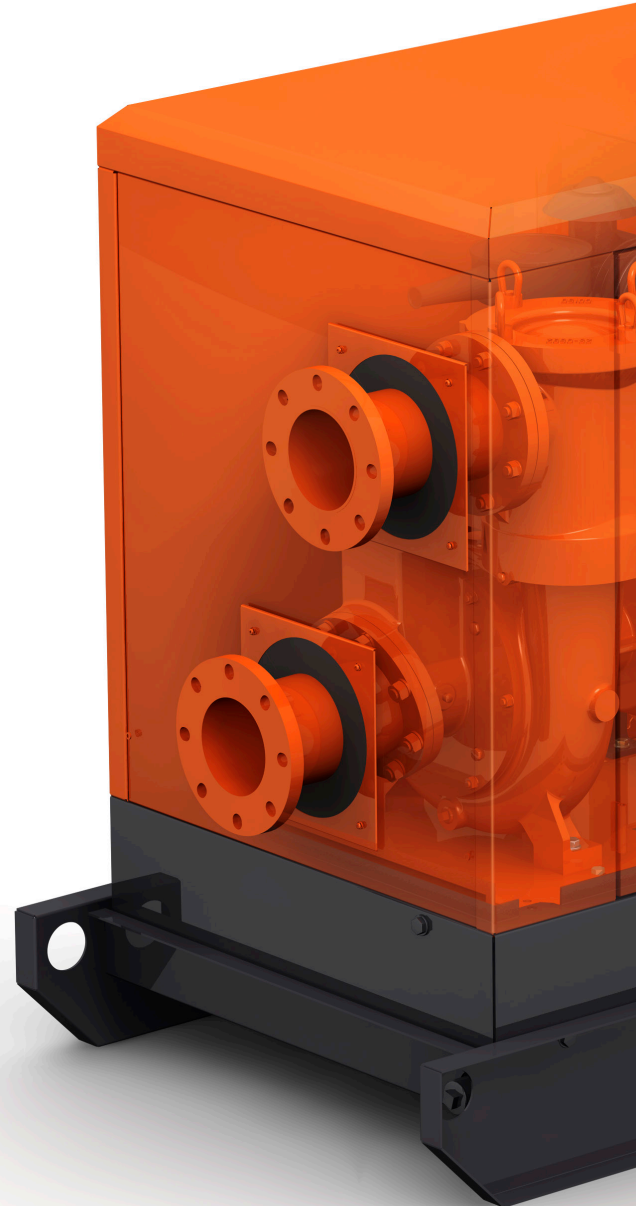
Godwin standard mechanical seals feature silicon carbide faces. They are highly resistant to abrasion and give you a long, trouble-free service lifetime.

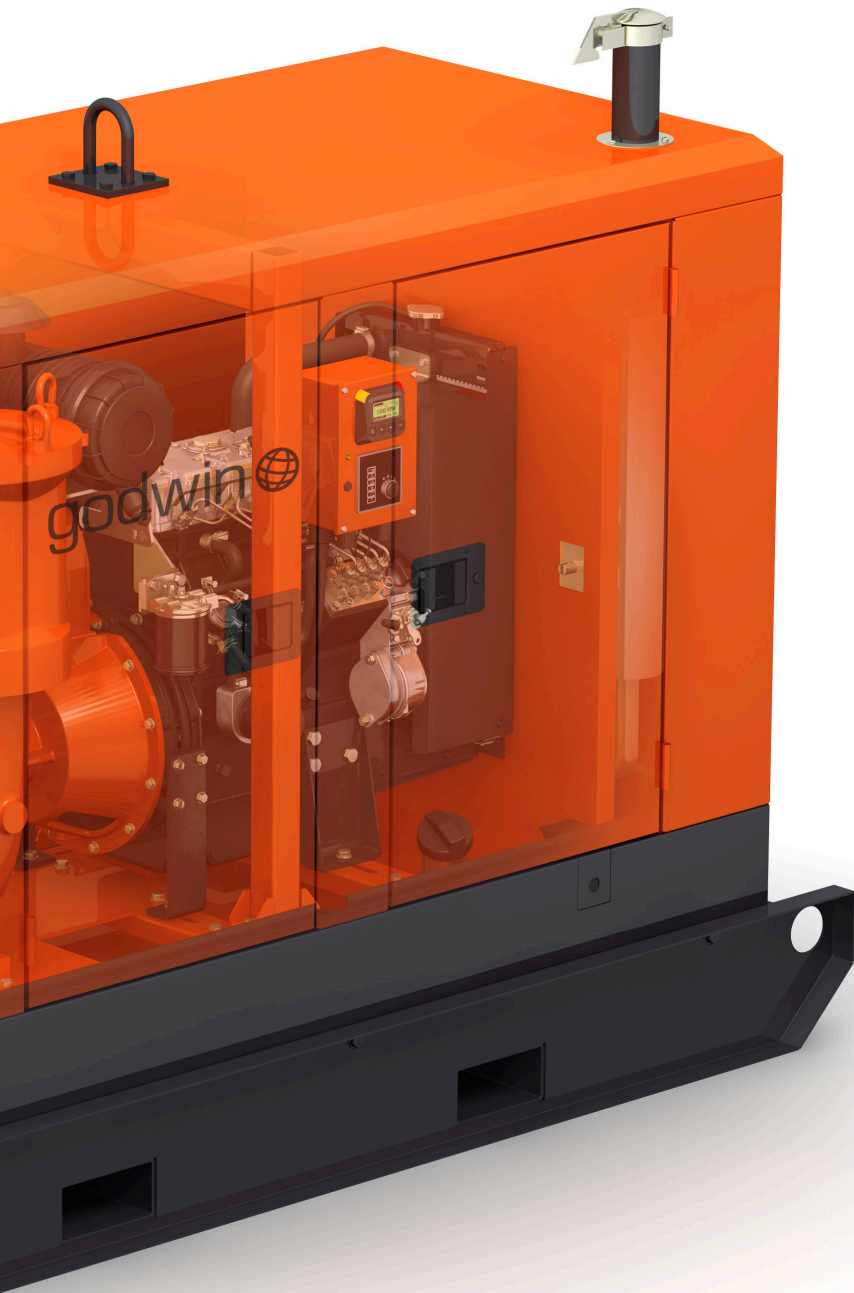
#### **Open impeller = versatility and fewer stoppages**

With their open impeller design, Godwin Dri-Prime pumps handle solids of up to 125 mm in diameter, reducing the risk of stoppages. The open impeller also means you can use Godwin pumps in a wide range of applications from water and wastewater, to drilling muds and industrial fluids.

#### **Durable pump-end = long lifetime**

Cast iron, the standard build, offers excellent durability. But different applications require greater resistance to abrasion, erosion or corrosion. That's why we offer a variety of other metals such as stainless steel, cast steel, hard iron and high chrome.





**Stainless steel options = superior resistance to abrasion and erosion-corrosion**

The pump-end is available with wetted parts in 316 or CD4MCu stainless steel for pumping liquids with pH values between 2 and 12. For pumping abrasive liquids, hardened wear plates are available as an option.

**Balanced lifting = easy onsite installation**

With a single lifting point and forklift pockets, it is easy to move Dri-Prime pumps around sites with standard construction equipment. Larger pumps weighing over 4,000 kg are equipped with four lifting points. Simple to install, regardless of the environment, you can have your pumps up and running quickly.

**Overnight fuel tank = reduced labor costs**

Diesel driven Dri-Prime pumps can run overnight without the need to refuel – a real saving in labor costs.

**Quiet enclosure = ideal for any environment**

Pumps are available with a sound attenuated enclosure that reduces operating noise – ideal for use in residential and densely populated areas where operating noise is an issue.

**Skid- or trailer-mounted = high mobility**

The skid-mounted pumps are designed for convenient maneuvering with a forklift, while the trailer-mounted pumps are built for road and highway transportation using standard construction vehicles.



**Variable speed operation = flexibility of use and energy savings**

The pumps can operate at various duty points, enabling you to use the same pump for different tasks. By matching the engine or motor speed to each job results in substantial fuel/energy savings.

**Intelligent control panel = automatic operation**

The intelligent control panel enables automatic operation, minimizing the need for manual monitoring. This, together with level control floats, provides increased fuel efficiency, reduced operating costs, plus greater peace of mind.

**Close-coupled design = easy to service pump-end**

The close-coupled design of the pump makes alignments unnecessary, which means that you benefit from simple pump-end changeover in the field.

**Compact design = longer seal and bearing lifetime**

The close-coupling of the impeller and engine/motor reduces shaft deflection at the seals. This results in lower vibration, quieter operation, as well as longer seal and bearing lifetime.

**Double-walled and banded fuel tanks = environmental protection**

Fuel tanks for pumps fitted with quiet enclosures are double-walled for environmental protection. Open set pumps feature a banded fuel tank to catch any spillage associated with fueling the diesel engine. This makes Godwin Dri-Prime pumps safe and easy to transport and store.

# Godwin Dri-Prime CD series

High volume, medium head,  
large solids-handling

The CD series at a glance:

- Flow: 80 to 3,500 m<sup>3</sup>/h
- Solids handling: up to 125 mm
- Head: 32 to 60 meters
- Elevated head pumps: three models with heads up to 85 meters



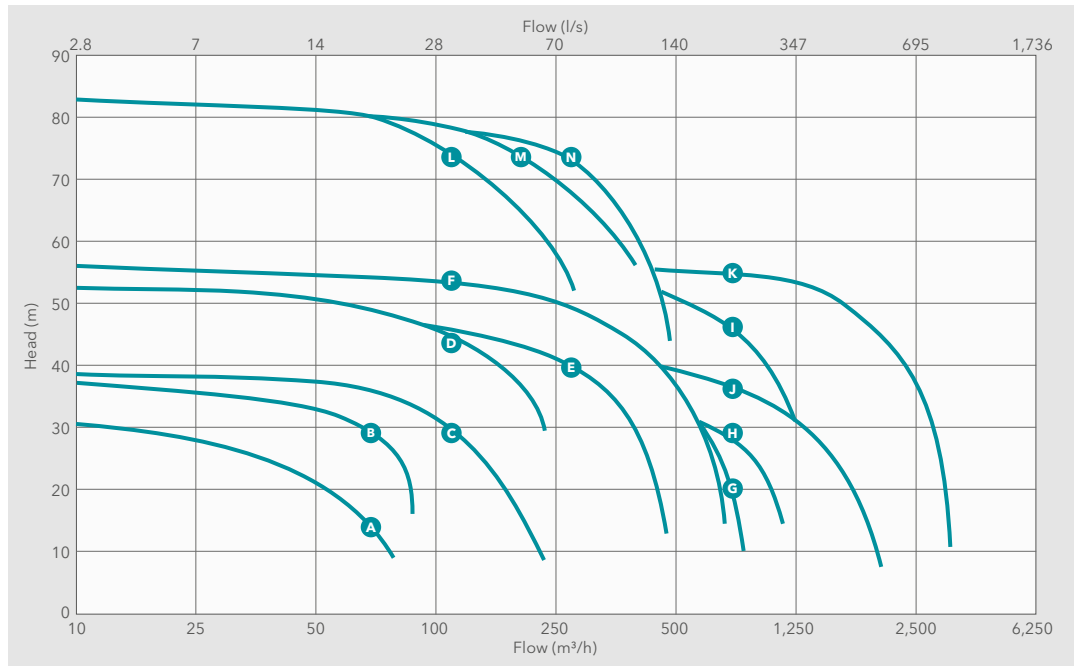
## Specifications

		CD75	CD80D	CD100M	CD103M	CD150M	CD225M
Diesel standard	Suction [mm]	50	80	100	100	150	200
	Discharge [mm]	50	80	100	100	150	200
	Solids handling [mm]	40	40	45	75	65	75
	Diesel engine*	Yanmar L100 AE	Kubota Z482	Perkins 403D	Perkins 404D-22T	Perkins 1104-44TA	Perkins 1106D-E66TA
	Fuel capacity [l]	5	72	72	170	390	475
	Operating speed [rpm]	1500 to 2500	1400 to 2000	1200 to 2000	1200 to 2000	1200 to 2100	1200 to 2200
	Consumed power [kW]	2 to 4	2 to 3.5	3 to 14	5 to 30	7 to 50	10 to 100
	Standard mount	Trolley	Skid	Skid	Skid	Skid	Skid
	Dimension L x W x H [mm]	1077x652x800	1300x784x1510	1300x680x1900	1800x1000x1900	2500x1300x1900	2950x1300x1900
Quiet enclosure	Weight with fuel [kg]	150	569	1050	1139	2131	3100
	dB(A) at 7 m	N/A	54	64	65	66	68
	Standard mount	N/A	Skid	Skid	Skid	Skid	Skid
	Dimension L x W x H [mm]	N/A	1621x853x1333	1940x1050x1500	2190x1050x1500	2890x1300x1800	3300x1300x1887
Electric standard	Weight with fuel [kg]	N/A	725	1168	1400	2300	3100
	Rating [kW]	15	15	7,5	15	22	30
	Voltage [V/phase]	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~
	Rated current [A]	29	29	15	29	41	54
	Operating speed [rpm]	1450 or 2900	1450 or 2900	1450	1450	1450	1450
	Dimension L x W x H [mm]	1300x480x900	1350x564x1025	1200x740x1260	1600x740x1260	1500x900x1100	1750x1140x1300
Weight [kg]	306	390	500	590	625	910	

\* Engines from John Deere, Cummins and other manufacturers are available on request.

## Performance curves

- A** CD75
- B** CD80D
- C** CD100M
- D** CD103M
- E** CD150M
- F** CD225M
- G** CD250M
- H** DPC300
- I** CD300M
- J** CD400M
- K** CD500M
- L** CD140M
- M** CD160M
- N** CD180M



Composite curves for comparison purposes only. Consult engineering data for exact flow and head capabilities.

					ELEVATED HEAD		
CD250M	DPC300	CD300M	CD400M	CD500M	CD140M	CD160M	CD180M
250	300	300	450	500 / 600	100	150	200
250	300	300	400	450	100	150	150
75	95	95	125	80	75	75	75
Perkins 1106D-E66TA	Perkins 1106D-E66TA	Caterpillar C9	Caterpillar C9	Caterpillar C18	Perkins 1104D-E44TA	Perkins 1106D-E66TA (129)	Perkins 1106D-E66TA (129)
475	850	850	550	1130	390	475	475
1200 to 2200	800 to 1200	1300 to 1800	900 to 1200	800 to 1100	1200 to 2000	1200 to 2000	1200 to 2000
15 to 95	27 to 120	65 to 180	80 to 180	120 to 460	10 to 78	17 - 105	20 - 110
Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid
2950×1300×1900	3700×1700×2200	3700×1700×2200	5000×2205×2405	5400×2670×2500	2500×1300×1900	2950×1300×1900	2950×1300×1900
3195	4314	5 531	7 750	11 750	2 060	2 780	2 758
68	N/A	70	N/A	N/A	66	68	68
Skid	N/A	Skid	N/A	N/A	Skid	Skid	Skid
3350×1300×1887	N/A	4580×2065×2545	N/A	N/A	2890×1300×1800	3350×1300×1887	3350×1300×1887
3350	N/A	6620	N/A	N/A	2500	3455	3400
30	75	90	90	350	30	45	45
400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~
54	131	157	157	588	54	80	80
1450	960	1450	960	960	1450	1450	1450
1750×1200×1300	2500×1300×1500	3250×1550×1900	4160×2100×2100	5200×2450×3000	1700×1140×1250	1850×1140×1250	1850×1140×1250
945	2750	3100	6200	9525	1210	1560	1600

With reservation for changes. For additional specifications, see product technical documentation.

# Godwin Dri-Prime HL series

Medium volume, high head,  
solids-handling

The HL series at a glance:

- Flow: 107 to 1,200 m<sup>3</sup>/h
- Solids handling: 65 mm
- Head: 100 to 160 meters
- Extreme high head pumps: three models with heads up to 193 meters with a single-stage impeller



## Specifications

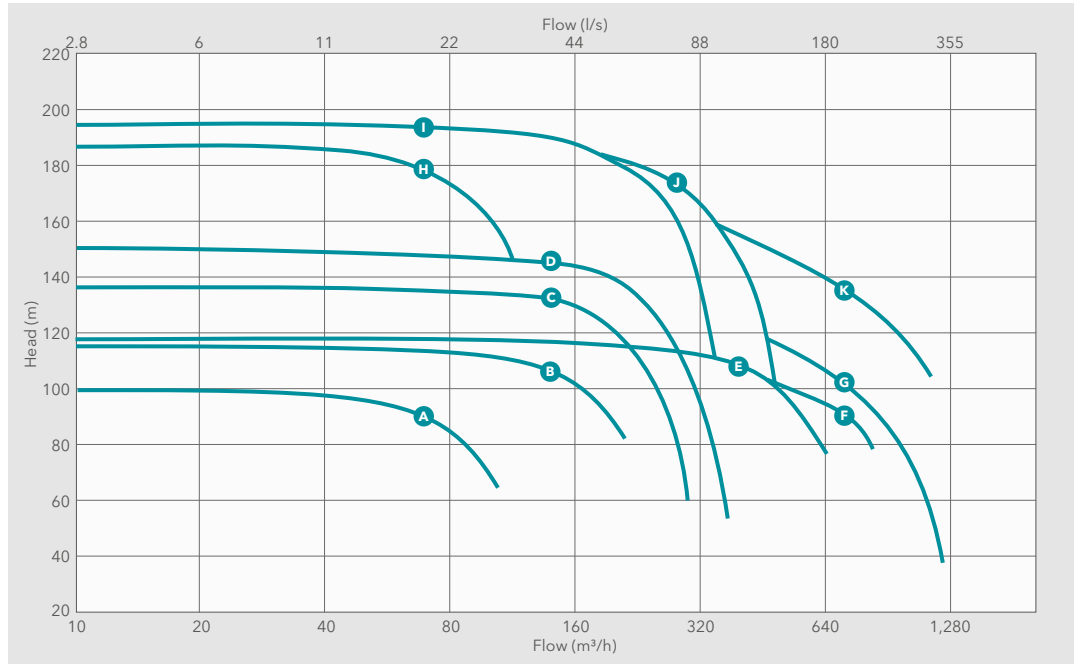
		HL80M	HL100M	HL125M	HL150M
Diesel standard	Suction [mm]	100	100	150	150
	Discharge [mm]	80	100	100	150
	Solids handling [mm]	25	35	35	35
	Diesel engine*	Perkins 1104-44T	Perkins 1104D-E44TA	Perkins 1106D-E66TA (129)	Perkins 1106-E66TA (168)
	Fuel capacity [l]	390	390	475	475
	Operating speed [rpm]	1400 to 2100	1400 to 2000	1400 to 2200	1400 to 2200
	Consumed power [kW]	8 to 55	12 to 72	10 to 135	15 to 180
	Standard mount	Skid	Skid	Skid	Skid
	Dimension L x W x H [mm]	2500x1300x1900	2500x1300x1900	2950x1300x1900	2950x1300x1900
Quiet enclosure	Weight with fuel [kg]	2030	2200	2600	3012
	db(A) at 7 m	65	66	68	71
	Standard mount	Skid	Skid	Skid	Skid
	Dimension L x W x H [mm]	2890x1300x1800	2890x1300x1800	3350x1300x1887	3350x1300x1887
Electric standard	Weight with fuel [kg]	2200	2450	3200	3400
	Rating [kW]	15	30	30	45
	Voltage [V/phase]	400/3~	400/3~	400/3~	400/3~
	Rated current [A]	28,1	54	54	80
	Operating speed [rpm]	1450	1450	1450	1450
	Dimension L x W x H [mm]	1500x800x1200	1800x980x1295	1825x980x1295	2005x1150x1450
Weight [kg]	685	1200	1225	1685	

\* Engines from John Deere, Cummins and other manufacturers are available on request.



## Performance curves

- A HL80M
- B HL100M
- C HL125M
- D HL150M
- E HL200M
- F HL225M
- G HL250M
- H HL110M
- I HL130M
- J HL160M
- K HL260M



Composite curves for comparison purposes only. Consult engineering data for exact flow and head capabilities.

EXTREME HIGH HEAD						
HL200M	HL225M	HL250M	HL110M	HL130M	HL160M	HL260M
200	250	300	100	150	200	250
150	200	250	80	100	150	200
38	65	65	20	22	35	50
8) Caterpillar C9	Caterpillar C15	Caterpillar C15	Perkins 1106D-E66TA (129)	Caterpillar C9	Caterpillar C15	Volvo TAD1643VE
850	850	685	390	850	685	685
1200 to 2100	1200 to 2000	1200 to 2000	1400 to 2200	1200 to 2000	1200 to 2000	1200 to 1800
25 to 220	30 to 275	40 to 305	20 to 105	30 to 240	30 to 300	60 to 560
Skid	Skid	Skid	Skid	Skid	Skid	Skid
3700×1700×2200	3700×1700×2200	4000×1950×2220	2500×1300×1900	3700×1700×2200	5000×2205×2210	4300×1980×2525
4750	6236	6330	3000	5331	6440	6900
70	64	64	68	70	64	N/A
Skid	Skid	Skid	Skid	Skid	Skid	N/A
4580×2065×2545	5500×2700×2500	5500×2700×2500	3350×1300×1887	4580×2065×2545	5500×2700×2500	N/A
5968	9050	9200	3600	6550	9200	N/A
75	110	132	37	75	132	280
400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~
131	191	229	66	131	229	470
1450	1450	1450	1450	1450	1450	1450
2550×1450×1750	2800×1510×1800	3000×1510×1800	2015×1150×1450	2680×1450×1750	3000×1510×1800	4000×1750×1900
2400	2950	3100	1700	2500	3125	4750

With reservation for changes. For additional specifications, see product technical documentation.

# Cut the cost of pumping - with the acclaimed Flygt N-technology

Imagine a pump with all the dry-priming reliability of a Godwin, combined with the acclaimed Flygt self-cleaning hydraulic end. A pump that will continue to pump with the same efficiency after 100 days as it did on the first. A pump that will not clog up and require emergency servicing.

That, in a nut-shell, sums up the Dri-Prime NC series - pumps that cut the cost of pumping.



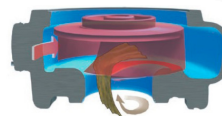
**Flygt N-technology** revolutionized wastewater handling in 1997. Over 300,000 installations later, it has become the benchmark for sustained high efficiency and non-clogging performance.

## How Flygt N-technology works

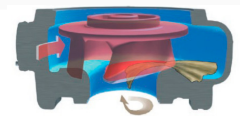
When pumping wastewater containing rags and other fibers, conventional impellers can suffer from a gradual build-up of stringy material. Over time, the passage in the impeller narrows, limiting the amount of water it can pump. The more the impeller clogs up, the less efficient the pump becomes.

### N-technology prevents build-up in two ways:

1. Fibers can not get stuck on the impeller's leading edge. This is because it has an extreme swept-back design. If an object catches on the leading edge, it will slide along the swept-back shape towards the edge of the impeller and get pumped away.
2. To help really stubborn material pass through the impeller, a guide pin forces all types of solids away from the center of the impeller, along the leading edge and out through a spiral-shaped relief groove.



**STAGE 1:** Stringy material entering the pump will be between the impeller vanes as it passed through the impeller. If an object catches on the leading edge of one of the vanes, it will slide along the backswept shape towards the perimeter of the inlet.



**STAGE 2:** Fibers will slide along the tip of the impeller vane inside the relief groove. A guide pin pushes all types of solids away from the center of the impeller, along the leading edge and out through the relief groove.



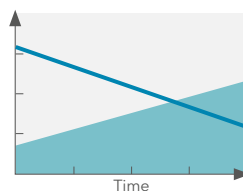
**Self-cleaning = reduced risk of motor failure = fewer call-outs**

By preventing the accumulation of fibers on the impeller, N-technology reduces the risk of motor failure and subsequent unplanned servicing.

**Self-cleaning = sustained high efficiency = low energy costs**

The proven self-cleaning properties of N-technology sustain efficiency at its original rated level month after month - and so reduce fuel/electricity costs.

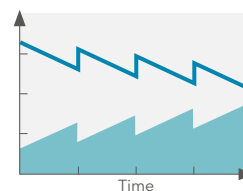
A. Conventional pump



■ Power consumption

Efficiency decreases as a conventional pump gets clogged up during continuous operation.

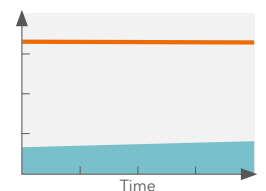
B. Conventional pump, running intermittently



■ Hydraulic efficiency

Only temporary efficiency gains may be achieved through back-flushing.

C. Pump equipped with N-technology



■ Sustained high efficiency

N-technology maintains high hydraulic efficiency and moderate power consumption over time.

**Modular hydraulics for a perfect fit**

Flygt N-technology allows you to tailor the hydraulics to meet the requirements of virtually any application - you can even switch modules if conditions change.

Cast iron .....

Hard-Iron™ (HRC 60) .....



Impeller with hardened edges and insert ring for normal pumping applications



Extra durable option for abrasive and erosion-corrosion applications.



Chopper ring for cutting long fibers or solids.

Choose the hardened cast iron version for normal wastewater applications and the chopper ring version for handling media with extra long fibers or solids.

The Hard-Iron version should be selected for abrasive applications and oxygen-rich media that could cause erosion-corrosion.

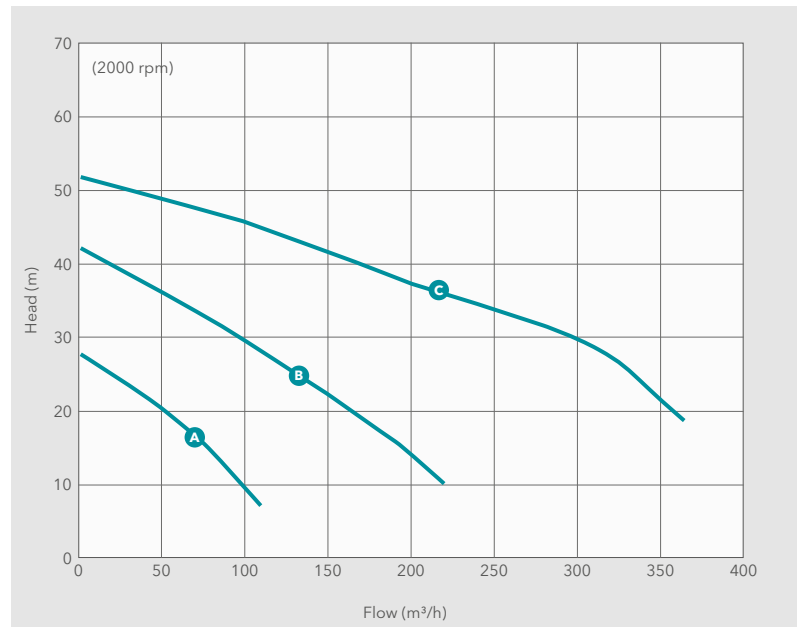
Whatever you choose, you can easily switch modules at any time if operating conditions change thanks to the modular design of the hydraulics.

# Godwin Dri-Prime NC series

Medium volume, medium head, handles media containing fibers and rags



## Performance curves



- NC80
- NC100
- NC150

Composite curves for comparison purposes only. Consult engineering data for exact flow and head capabilities.

## Specifications

		NC80	NC100	NC150
Diesel standard	Suction [mm]	100	100	150
	Discharge [mm]	80	100	100
	Diesel engine	Yanmar, 3TNM76AS	Perkins, 404D-22	Perkins, 1104D-44T
	Fuel capacity [l]	58	140	318
	Operating speed [rpm]	1200 to 2200	1200 to 2200	1200 to 2000
	Consumed power [kW]	3 to 10	6 to 25	15 to 55
	Standard mount	Skidbase	Skidbase	Skidbase
	Dimension L x W x H [mm]	1300x680x1900	1800x1000x1900	2500x1300x1900
Quiet enclosure	Weight with fuel [kg]	945	1,139	2,130
	db(A) at 7 m	63	65	67
	Standard mount	Skidbase	Skidbase	Skidbase
	Dimension L x W x H [mm]	2190x1050x1500	2190x1050x1500	2890x1300x1800
Electric standard	Weight with fuel [kg]	1315	1390	2290
	Rating [kW]	5.5	11	18.5
	Voltage [V/phase]	400/3~	400/3~	400/3~
	Rated current [A]	11	21	34
	Operating speed [rpm]	1450	1450	1450
	Dimension L x W x H [mm]	1200x740x1260	1500x740x1260	1500x900x1260
Weight [kg]	450	590	625	

With reservation for changes. For additional specifications, see product technical documentation.

The NC series at a glance:

- Flow: 0-360 m<sup>3</sup>/h
- Head: 8 to 52 meters
- Self-cleaning hydraulic end

Some areas where NC pumps excel:

- Sewer and plant bypass
- Pump station backup (permanent and temporary)
- Sludge pumping
- Storm water
- Digester cleaning
- Industrial effluent



# Electric and efficient

More and more pump operators, site managers and engineers are selecting electric-powered Dri-Prime pumps.

Designed for long lasting durability, electric drive pumps are ideally suited for both temporary pumping and permanent installations where electric power is readily available.

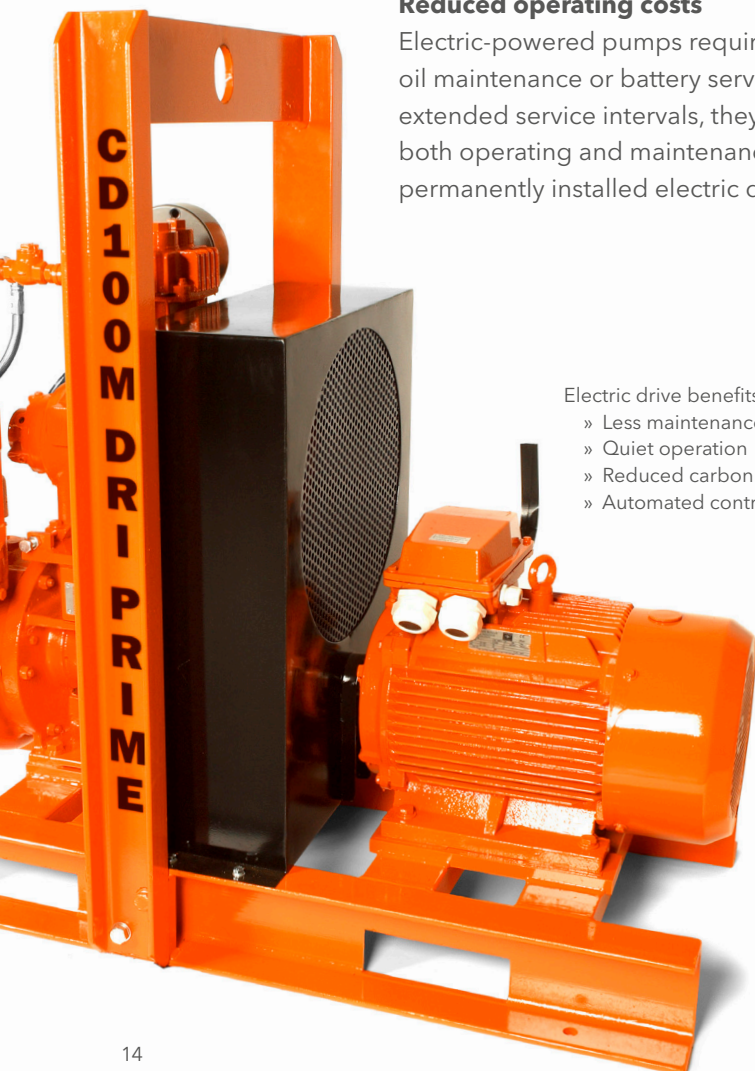
All Godwin CD and HL series Dri-Prime pumps can be supplied with electric motors. The flow and head performance of electric-powered pumps can be matched to meet the performance of all diesel-powered versions.

### Reduced operating costs

Electric-powered pumps require no engine-oil maintenance or battery service. With extended service intervals, they reduce both operating and maintenance costs. A permanently installed electric drive Godwin

#### Electric drive benefits:

- » Less maintenance
- » Quiet operation
- » Reduced carbon footprint
- » Automated controls



Dri-Prime pump is perfect for industrial and municipal applications, providing efficient, long life operation.

### Customize for special applications

Electric-powered pumps can be customized using a wide range of speed settings and impeller trims.

### More control

Automated controls are easily installed and reduce labor costs by automatically starting and stopping the pump. Using a Variable Frequency Drive (VFD) you can control motor speeds to reach the required duty point, and then decelerate pump speeds on shutdown to prolong the lifetime of the pump and motor.

#### Options

- Soft starters
- VFDs - Variable Frequency Drives
- Manual control panels
- Automatic control panels



Permanently installed electric drive Dri-Prime pumps moving effluent from a secondary trickling filter to a chlorination chamber and then discharge.

# Quiet and protected

When you need to operate pumps in residential or densely populated areas, noise levels can be a concern.

Godwin Hush-Pac enclosures are effective. For example, a CD225M open set pump generates 90 dB(A), but just 65 dB (A) at 7 m with an enclosure. That's so quiet, you can hold a conversation standing beside it.

## The quality is in the build

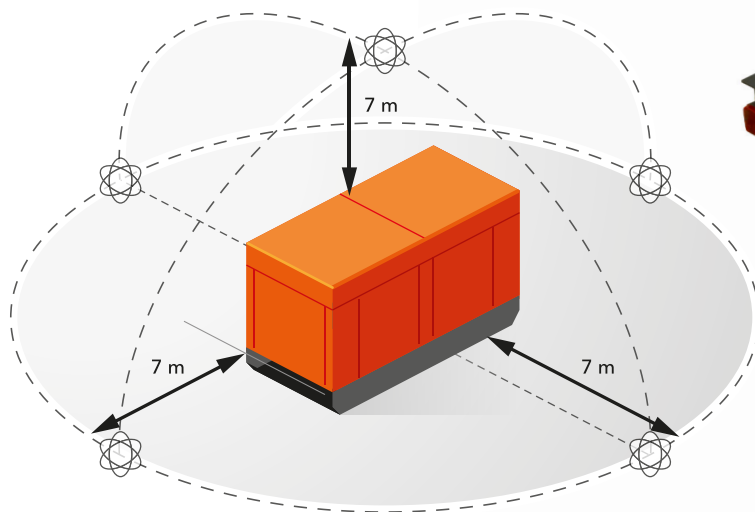
Godwin quiet enclosures consist of sheet metal lined with 25 mm and 50 mm layers of polydamp acoustical sound-attenuating material. To further reduce operating noise, the engine features a critical-grade engine silencer, isolated engine vibration and silenced priming exhaust.

## Protective enclosure

The enclosure provides protection against weather. Lockable doors add security against theft or jobsite vandalism.

## Double-walled fuel tanks

Fuel tanks for pumps fitted with quiet enclosures are double-walled for environmental protection.



Graphic showing sound pressure reading location.



Hush-Pac quiet enclosures are available for most diesel- and electric-powered Dri-Prime and Heidra pumps.

# Heidra – the hydraulic submersible

When the suction lift is greater 8.5 m, Heidra pumps take over where Dri-Prime pumps leave off. Heidra hydraulic submersibles are basically Dri-Prime pumps that have been engineered to work submerged in the liquid they pump. Tough and reliable, Heidra pumps are designed for general pumping of light slurries and municipal sludges.

## Liquid bath mechanical seal = dry-running and reduced maintenance costs

Seals in pumps that often run dry can overheat and fail. Godwin mechanical shaft seals run in a liquid bath, which dissipates heat through the pump casing and allows the pump to run dry. This provides more reliable operation, frees operators from closely monitoring the pumps, while reducing maintenance costs.

## Durable pump-end = long lifetime

Cast iron, the standard build, offers excellent durability. But different applications require greater resistance to abrasion, erosion or corrosion. That's why we offer a variety of other metals such as stainless steel, cast steel, hard iron and high chrome.

## Open impeller = versatility and fewer stoppages

With their open impeller design, Godwin Heidra pumps handle solids of up to 125 mm in diameter, reducing the risk of stoppages. The open impeller also means you can use Godwin pumps in a wide range of applications from water and wastewater, to drilling muds and industrial fluids.

## Double seals = trouble-free operation

The double mechanical face seals - with the upper seal in carbon and lower seal in silicon carbide - are specified for reliable and trouble-free performance.

## Vortex impeller = excellent solids handling

A vortex impeller is available on Heidra 150V and 150VSG models. With its semi-recessed design, a vortex impeller can handle solids of up to 125 mm in diameter.

## Independent bearings = maximum performance

The pump bearings are independent from the hydraulic motor. This means that stress associated with pump loads will not affect the performance of the hydraulic motor.

## Stainless steel options = superior resistance to abrasion and erosion-corrosion

The pump-end is available with wetted parts in 316 or CD4MCu stainless steel for pumping liquids with pH values between 2 and 12. For pumping abrasive liquids, hardened wear plates are available as an option.

## Slurry gate = built-in mixer for heavy sludges

With a built-in slurry gate, the pump can first agitate solids into suspension before pumping them away. This is ideal in applications such as solids-laden sludges found in wastewater treatment plant digesters, environmental clean-ups and oil refinery applications. The remotely-operated slurry gate is available on Heidra 100SG, 150SG, 150MRSG, 150VSG and 200SG.

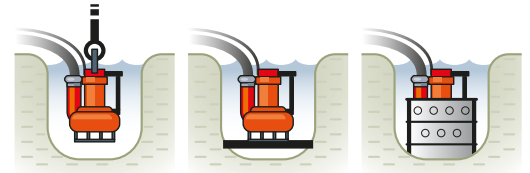






## Temporary installation

Just position it right and start pumping.



**1. Suspended** **2. Supported** **3. Surrounded**  
(Not by hydraulic hose)

### **Overnight fuel tank = reduced labor costs**

The diesel-driven hydraulic powerpacks can run overnight without the need to refuel - a real saving in labor costs.

### **Diesel-powered = remote operation**

Equipped with a diesel engine for stand-alone operation, these pumps will work on any site, no matter how remote. All diesel engines meet the latest emissions regulations.

### **Electric-powered = reduced costs**

All Heidra pumps can be powered by electric motor powerpacks. Electric powerpacks do not need refueling, the motor requires less servicing, and they reduce the carbon footprint of any project. Available with soft starts and VFDs for variable speed control.

### **Variable speed operation = flexibility of use and energy savings**

The pumps can operate at various duty points, enabling you to use the same pump for different tasks. By matching the engine or motor speed to each job results in substantial fuel/energy savings.

### **Balanced lifting = easy onsite installation**

With a single lifting point and forklift pockets, it is easy to move Heidra pumps around sites with standard construction equipment. Simple to install, regardless of the environment, the pumps will be up and running quickly.

### **Skid- or trailer-mounted = high mobility**

The skid-mounted pumps are designed for convenient maneuvering with a forklift, while the trailer-mounted powerpacks are built for road and highway transportation using standard construction vehicles.

### **Quiet enclosure = ideal for any environment**

All pumps are available with a sound attenuated enclosure that reduces operating noise - ideal for use in residential and densely populated areas where operating noise is an issue.

### **Intelligent control panel = automatic operation**

The intelligent control panel enables automatic operation, minimizing the need for manual monitoring. This, together with level control floats, provides increased fuel efficiency, reduced operating costs, plus greater peace of mind.

### **Hydraulic drive = spark-free operation for hazardous environments**

The hydraulic powerpacks can be positioned up to 40 m away from the submersible pumps. This means that Heidra pumps can be used in oil and gas production, petrochemical, and nuclear plant applications where spark-free tools are required.

# Heidra submersible pumps

High volume, vortex, high head and slurry gate versions

The Heidra series at a glance:

- Flow: 80 to 1,368 m<sup>3</sup>/h
- Solids handling: 125 mm
- Head: 25 to 140 meters



## Specifications

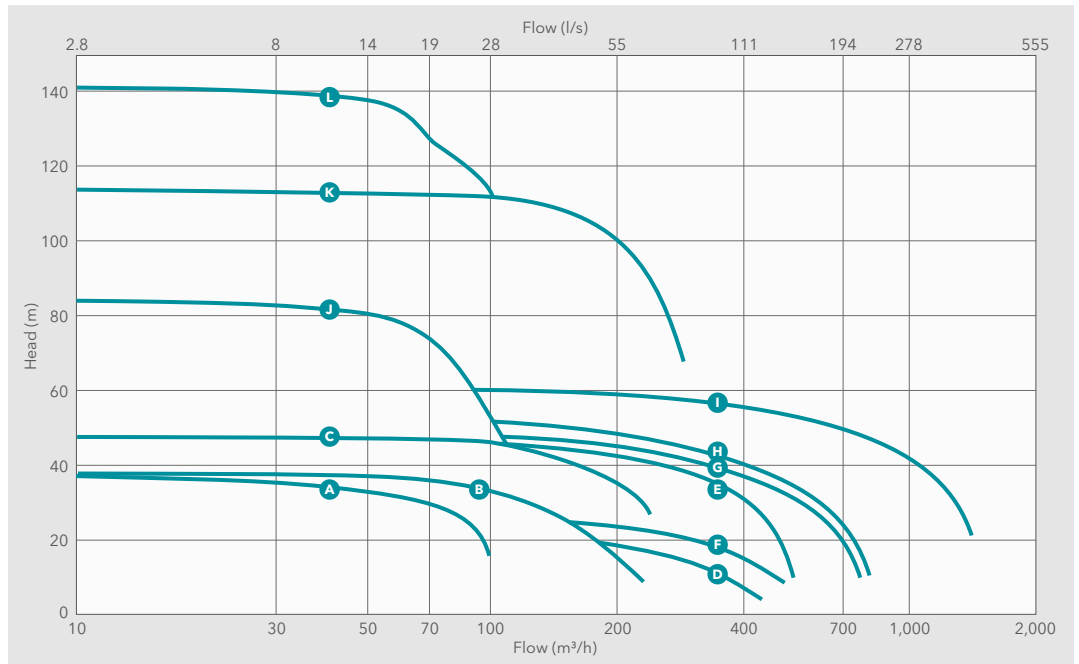
		Heidra 80	Heidra 100TD	Heidra 103	Heidra 150	Heidra 150MR	Heidra 150V	Heidra 200
Pumpend	Discharge [Size]	3" BSP	4" BSP	4" BSP	6" BSP	6" BSP	6" BSP	200
	Solids handling [mm]	40	45	75	65	65	125	75
	Hydraulic motor	Gear	Gear	Gear	Gear	Gear	Gear	Piston
	Drive pressure [bar]	250	250	250	250	250	250	250
	Operating speed [rpm]	1600 to 2200	1600 to 2200	1600 to 2200	1600 to 2200	1600 to 2200	1500 to 2200	1600 to 2200
	Consumed power [kW]	1 to 5.5	4 to 20	20 to 25	15 to 25	30 to 65	30 to 65	35 to 95
	Dimension L×W×H [mm]	400×354×558	485×420×581	500×514×647	680×520×570	680×520×570	577×514×816	755×721×1250
Weight [kg]	70	75	130	152	142	161	354	
Diesel powerpack	Power pack model	GHPU10	GHPU10	GHPU30	GHPU15	GHPU30	GHPU30	GHPU50
	Diesel engine*	Kubota Z482	Perkins 403D-15	Perkins 404D-22T	Perkins 404D-22	Perkins 1104D-44T	Perkins 1104D-44T	Perkins 1104D-E44TA
	Fuel capacity [l]	72	158	170	170	390	390	390
	Standard mount	Skid	Skid	Skid	Skid	Skid	Skid	Skid
	Dimension L×W×H [mm]	1300×680×1900	1300×680×1900	1800×1000×1900	1800×520×570	2500×1300×1900	2500×1300×1900	2500×1300×1900
	Weight with fuel [kg]	810	945	1136	1052	2250	2250	2250
Quiet enclosure	dB(A) at 7 m	54	64	65	64	65	65	68
	Standard mount	Skid	Skid	Skid	Skid	Skid	Skid	Skid
	Dimension L×W×H [mm]	1300×680×1900	2330×1205×2111	2190×1050×1500	2190×1050×1800	2890×1300×1800	2890×1300×1800	2890×1300×1800
	Weight with fuel [kg]	900	1050	1300	1200	2500	2300	2400
Electric powerpack	Rating [kW]	7,5	22	45	22	75	75	110
	Voltage [V/phase]	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~
	Rated current [A]	21	41	80	41	131	131	191
	Operating speed [rpm]	1450	1450	1450	1450	1450	1450	1450
	Dimension L×W×H [mm]	1245×564×1025	1500×900×1100	2000×650×1050	1500×900×1100	2450×1050×1750	2450×1050×1750	2600×1110×1800
	Weight [kg]	580	700	780	700	2100	2100	2650

\* Engines from John Deere, Cummins and other manufacturers are available on request.

## Performance curves

- A** Heidra 80
- B** Heidra 100TD /100SG\*\*
- C** Heidra 103
- D** Heidra 150 /150SG\*\*
- E** Heidra 150MR /150MRS\*\*
- F** Heidra 150V /150VSG\*\*
- G** Heidra 200 /SG\*\*
- H** Heidra 250
- I** Heidra 300
- J** Heidra 80HH
- K** Heidra 150HH
- L** Heidra 110HH

\*\* Performance curves for slurry gate (SG) versions are the same as standard Heidra pumps.



Composite curves for comparison purposes only. Consult engineering data for exact flow and head capabilities.

		SLURRY GATE					HIGH HEAD			
	Heidra 250	Heidra 300	Heidra 100SG	Heidra 150SG	Heidra 150MRS	Heidra 150VSG	Heidra 200SG	Heidra 80HH	Heidra 150HH	Heidra 110HH
	250	300	100	150	150	150	200	75	150	80
	75	95	45	65	65	125	75	25	35	20
	Piston	Variable Piston	Gear	Gear	Gear	Gear	Gear	Gear	Variable Piston	Piston
	250	310	250	250	250	250	250	250	250	250
D	1600 to 2200	1200 to 1800	1600 to 2200	1600 to 2200	1600 to 2200	1500 to 2400	1600 to 2200	1400 to 2000	1600 to 2200	1600 to 2000
	35 to 95	60 to 190	4 to 20	15 to 105	14 to 65	15 to 105	20 to 95	10 to 60	20 to 133	40 to 120
	755×721×1250	1401×1052×1830	480×580×700	700×650×800	700×650×800	577×514×816	755×721×1250	451×506×715	664×770×1275	730×680×1290
	362	945	145	170	172	161	354	160	190	430
	GHPU50	GHPU90	GHPU10	GHPU15	GHPU30	GHPU15	GHPU50	GHPU30	GHPU50	GHPU50
A	Perkins 1106D-E66TA	Caterpillar C9	Perkins 403D-15	Perkins 404D-22	Perkins 1104D-44T	Perkins 1104D-44T	Perkins 1104D-E44TA	Perkins 1104D-44T	Perkins 1106D-E66TA	Perkins 1106D-E66TA
	850	685	158	170	390	390	390	390	850	850
	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid
x	2950×1300×1900	3700×1700×2200	1300×680×1900	1800×520×570	2500×1300×1900	2500×1300×1900	2500×1300×1900	2500×1300×1900	2950×1300×1900	2950×1300×1900
	2598	5325	1050	1052	2250	2250	2250	2250	2598	2598
	68	70	64	64	65	65	68	65	68	68
	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid	Skid
x	3350×1300×1887	4580×2065×2545	1940×1050×1500	2190×1050×1800	2890×1300×1800	2890×1300×1800	2890×1300×1800	2890×1300×1800	3350×1300×1887	3350×1300×1887
	3350	6920	1180	1200	2500	2500	2400	2500	3350	3350
	110	200	22	22	75	75	110	75	110	110
	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~	400/3~
	191	360	41	41	131	131	191	131	191	191
	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
x	2600×1110×1800	3500×16500×2000	1500×900×1100	1500×900×1100	2450×1050×1750	2450×1050×1750	2600×1110×1800	2450×1050×1750	2600×1110×1800	2600×1110×1800
	2650	5100	700	700	2100	2100	2650	2100	2650	2650

With reservation for changes. For additional specifications, see product technical documentation.

# Godwin Vac-Prime series

Low to medium heads, medium volume, small and lightweight

### It's smaller and lighter - and it's a Godwin through and through

Until now, you could only use Godwin pumps for medium to high heads. But with Vac-Prime, you can now get Godwin reliability for lower head jobs too.

### Punches above its weight

Even though a Vac-Prime is small and light, it's made to the same exacting tolerances as the larger members of the family. So, not only is a Vac-Prime reliable, but it also punches above its weight, providing best-in-class heads, plus excellent fuel economy.

### Reliable mechanical priming

The vacuum priming unit is mechanically operated. This provides a much higher level of reliability than systems that rely on electronic sensors and probes.

The Vac-Prime series at a glance:

- Head: 11-25 meters
- Flow: 100-374 m<sup>3</sup>/h
- Solids handling: 45-75 mm

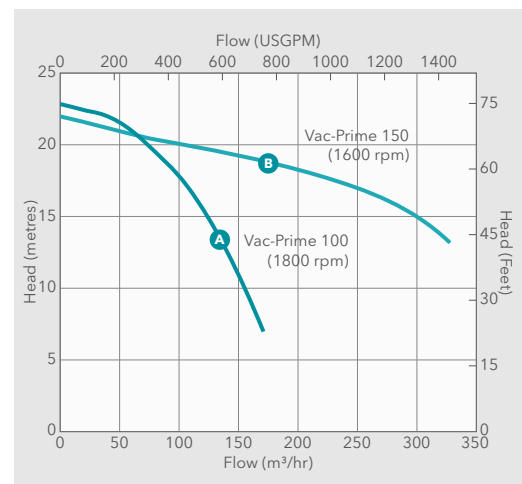


## Specifications

	Vac-Prime 100	Vac-Prime 150
Suction connection	4" BS10 Table D	6" BS10 Table D
Delivery connection	4" BS10 Table D	6" BS10 Table D
Max capacity	185 m <sup>3</sup> /hr	375 m <sup>3</sup> /hr
Max Head	25 m	25 m
Solids handling	45 mm	75 mm
Impeller diameter	220 mm	260 mm
Max operating temp	80 °C	80 °C
Normal Operating Speed	1800 rpm	1600 rpm
Rated Power	12 kW	18 kW
Engine	2 cylinder Air Cooled	3 cylinder Air Cooled
Fuel Tank Capacity	75 litres	75 litres
Fuel Consumption	3 l/hr	4.5 l/hr
Weight (dry)	750 - 1000 kg	750 - 1000 kg
Dimension L x W x H	1700 x 850 x 1200 mm	1700 x 850 x 1200 mm
Vacuum Pump	50 m <sup>3</sup> /hr	50 m <sup>3</sup> /hr

With reservation for changes. For additional specifications, see product technical documentation.

## Performance



Composite curves for comparison purposes only. Consult engineering data for exact flow and head capabilities.

# Faster installation and smoother operation

Simplify installation and everyday operations with our extensive range of accessories.

Suction hoses



Discharge hoses



Suction hoses with fitted strainers

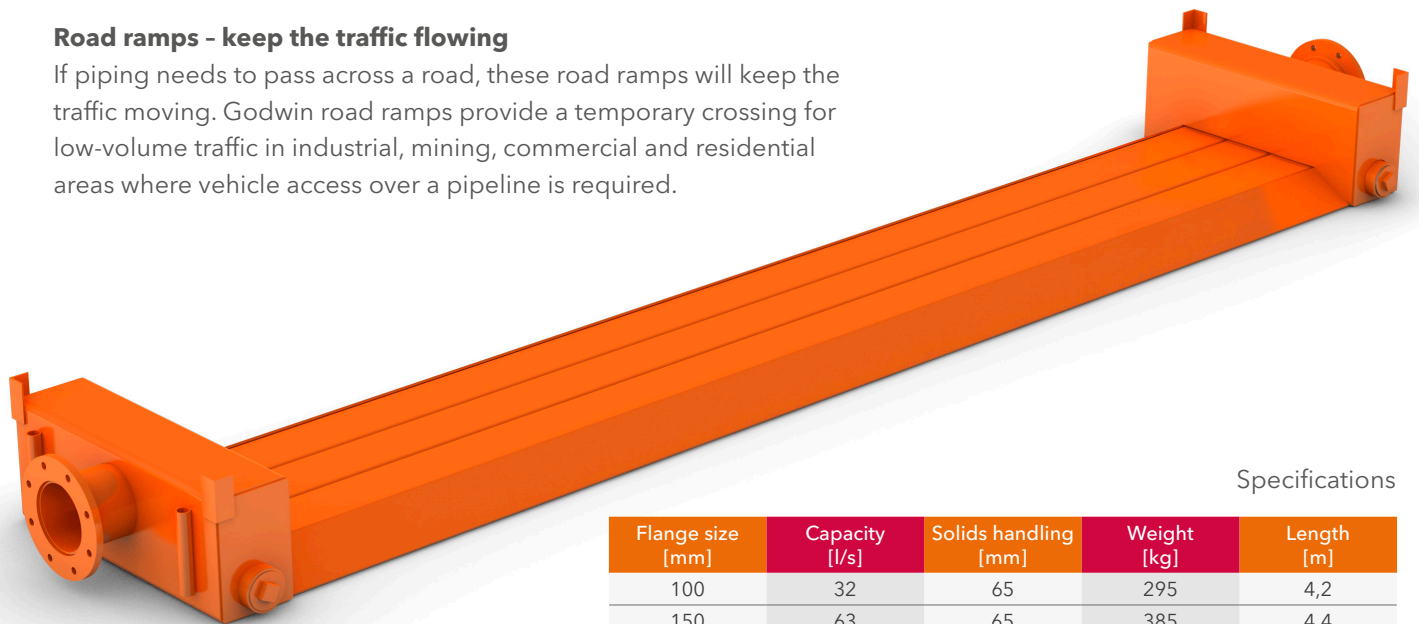


Quick release pipes and adapters



## Road ramps - keep the traffic flowing

If piping needs to pass across a road, these road ramps will keep the traffic moving. Godwin road ramps provide a temporary crossing for low-volume traffic in industrial, mining, commercial and residential areas where vehicle access over a pipeline is required.



Specifications

Flange size [mm]	Capacity [l/s]	Solids handling [mm]	Weight [kg]	Length [m]
100	32	65	295	4,2
150	63	65	385	4,4
200	126	65	860	4,5
300	252	65	1045	4,6
450	441	90	2265	4,9
600	758	90	3250	5,6

(Maximum load capacity of 10,000 kg per axle. Maximum crossing speed of 8 km/h.)

# More intelligence - less operator supervision

Intelligent controllers minimize the need for onsite supervision while providing operators with valuable data to monitor how the pumps are performing.

## PrimeGuard™

PrimeGuard is a fully programmable microprocessor control system. Its many features include service alerts and SCADA integration. With PrimeGuard your Godwin Dri-Prime pump can start and stop automatically with no operator intervention required. This is made possible by registering input from level, flow or pressure transducers or floats.

- Automatic start/stop without operator intervention
- Remote start/stop capabilities
- Maintains oil and filter schedule, alerting operator when service is required
- Stores history of all warning alarms
- Digital controls
- Password protected security levels
- 8 programmable relays (sensors)
- 66 selectable features, incl. pump running, pump failure, etc
- Communication ports for SCADA integration and alarm agents
- Warm-up and cool-down cycles



PrimeGuard is available as an option on all CD and HL series Dri-Prime pumps with diesel engine ratings greater than 140 kW.



Powerview

## Powerview

Powerview is our standard digital control panel

- Digital display shows engine speed, oil pressure, fuel rate, warnings and operating hours providing easy access to all operating data
- Automatic operation mode with start/stop triggered from floats eliminates operator assistance and reduces labor costs
- Throttle control allows operator to manually control pump speed according to flow
- Zintec steel casing and weather-resistant electrical connections for reliable performance

## Control options for electric-driven Dri-Prime and Heibra pumps

- Soft starters
- VFD - Variable Frequency Drive
- Manual control panels
- Automatic control panels

# Making the most reliable pumps even more reliable

When you work with Xylem TotalCare services, you get secure, optimal operations that come only with broad engineering expertise, giving you more time to focus on your core business.



**Xylem TotalCare** is a comprehensive, integrated portfolio of services designed to ensure that your pumping equipment keeps running at its best. Our team of knowledgeable and highly skilled technicians are experts in drainage and wastewater applications. We take pride in our ability to help customers overcome challenges and optimize operations by providing the right solution every time.

Our service network spans 150 countries and chances are we have a workshop close to your operations that can support you with application engineering, maintenance, pump repair, spare parts, turnkey project management, rental and more. We look forward to hearing from you.



Find out more about TotalCare services at [xylem.com/totalcare](http://xylem.com/totalcare)



**Design & Consultancy**



**Monitoring & Supervision**



**Rental & Onsite Services**



**Installation & Commissioning**



**Inspection & Auditing**



**Asset Refurbishments**



**Maintenance Contracts**



**Plant Operation & Maintenance**



**Training & Technical Support**



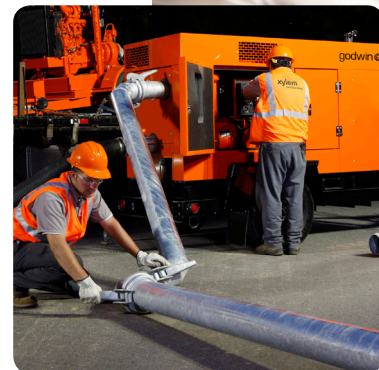
**Repair & Maintenance**



**Parts & Logistics**



**Financial Solutions**



All services may not be available in all countries. We are constantly adding services so please check availability with your sales representative.

# Xylem ['zīləm]

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

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. 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, backed by a legacy of innovation.

For more information on how Xylem can help you, go to [xyleminc.com](http://xyleminc.com)



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[www.godwinpumps.com](http://www.godwinpumps.com)