

# Hidrostal European Rental

EN

Rental pumps, pumping systems, heber 2000



## Hidrostal European Rental Network Everything from a single source

Hidrostal has been in the rental business for many years. Our rental fleet consists of a variety of Hidrostal quality pumps of different sizes and configurations, as submersible and submersible pumps or also as diesel or electrically driven, self-priming SuperBetsy.

We have suitable hoses, PE and steel pipes for bridging even longer distances and for taking in smallest to largest quantities of water. Our range is supplemented by useful accessories such as control cabinets, pipe crossings and statically certified stands for the design of road crossings. You can rely on the know-how and many years of experience of our project engineers, technicians and fitters. Together with our customers we find a suitable solution for every type of dewatering. This can be classical pumping systems but also highly energy-efficient siphon systems with our heber 2000 system.

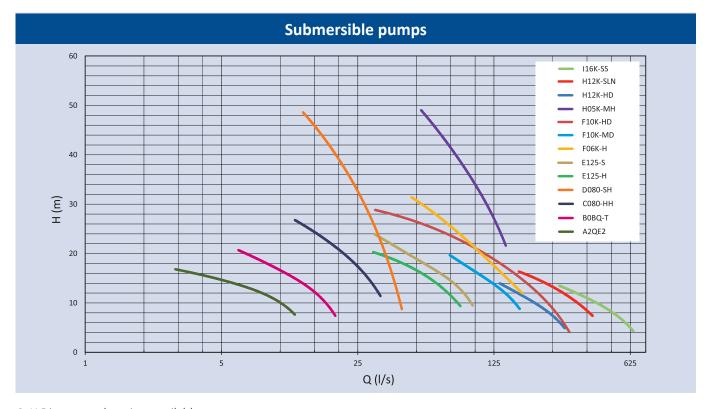


# Rental pumps and temporary pumping stations

Floodable pumps in wet and dry installation with electric motor, connection cable, standing foot, printed sheet

Туре	Connection [mm]	<b>Qmax</b> [l/s]	<b>Qmax</b> [m³/h]	<b>Hmax</b> [mWs]	Ball passsage [mm]	Nominal power [kW]	<b>Dimension</b> [kg]
A2Q-E	DN 50	12	43*	17	Ø 50**	1,5	32
BOBQ-T	DN 65	18	65	23	Ø 50	3,0	55
C080-HH	DN 80	37	135	32	Ø 60	7,0	110
D080-SH	DN 80	42	150	51	Ø 50	13,2	190
E125-H	DN 150	90	325	23	Ø 100	13,5	240
E125-S	DN 150	100	360	25	Ø 100	18,5	260
F06K-H	DN 150	155	560	34	Ø 115	37,0	470
F10K-HD	DN 250	278	1000	23	Ø 120	37,0	590
H12K-SS	DN 300	400	1440	17	Ø 150	48,0	800
I16K-SS	DN 400	850	3060	34	Ø 180	110,0	2690

To complement our pumps and switchgear, we have a large selection of piping in dimensions up to DN 1,600 available for you. Our rental park has a wide range of quick coupling pipes, steel pipes with DIN flange as well as flexible hoses for various applications. In addition, we have appropriate fittings and transition pieces, bends, pipe crossings and pipe bridges. For pump control we offer switchgears from 7 kW up to control containers with frequency converters  $4 \times 90$  kW, as well as separate site power distributors, extension cables, GSM alarm indicators and flow meters. Smaller pumps can be supplied by us ready to plug in (400V CEE).

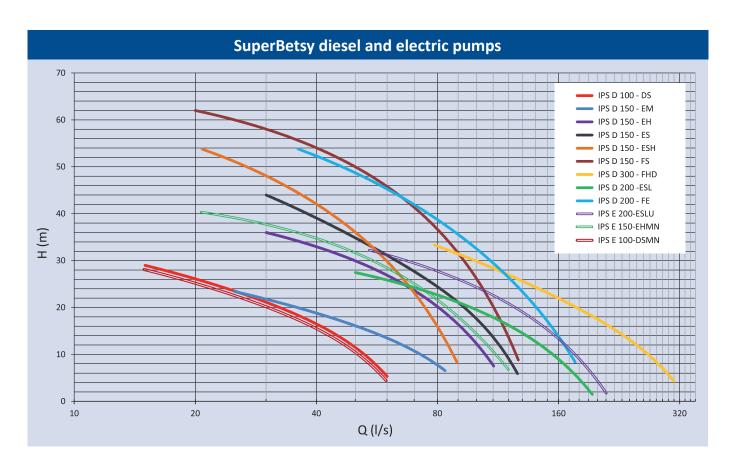


#### SuperBetsy - Diesel engine pumps, dry self-priming in soundproof housing

Туре	Connection [mm]	<b>Qmax</b> [l/s]	<b>Qmax</b> [m³/h]	<b>Hmax</b> [m]	Ball passage [mm]	<b>Power</b> [kW]	<b>Dimensions</b> [kg]
100-DS	DN 100 (4")	60	216	29,0	Ø 100	18,4	1650
150-EM	DN 150 (6")	84	302	23,0	Ø 100	18,4	1800
150-EH	DN 150 (6")	111	400	36,0	Ø 100	43,7	1900
150-ES	DN 150 (6")	125	450	44,0	Ø 90	43,7	1900
150-ESH	DN 150 (6")	90	324	54,0	Ø 75	43,7	1900
150-FS	DN 150 (6")	127	457	62,0	Ø 75	55,4	2050
200-ESL	DN 200 (8")	193	695	28,0	Ø 100	43,7	2050
200-FE	DN 200 (8")	176	634	54,0	Ø 115	55,4	2150
300-FHD	DN 300 (12")	310	1116	33,0	Ø 120	55,4	2810

#### SuperBetsy - Electric motor pumps, dry self-priming in soundproof housing

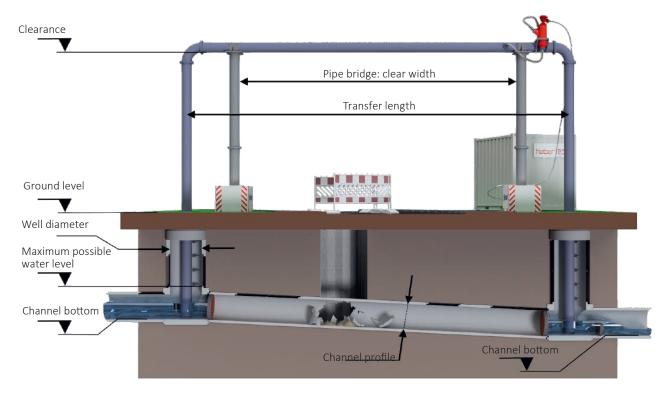
Туре	Connection [mm]	<b>Qmax</b> [l/s]	<b>Qmax</b> [m³/h]	<b>Hmax</b> [m]	Ball passage [mm]	<b>Power</b> [kW]	<b>Dimensions</b> [kg]
IPS E 100-DSMN	DN 100 (4")	60	216	29,0	Ø 100	15,0	1140
IPS E 150-EHMN	DN 150 (6")	133	481	40,5	Ø 100	30,0	1425
IPS E 200-ESLU	DN 200 (8")	211	760	32,0	Ø 100	30,0	1660



With our many years of know-how, we can also take care of complicated assemblies for you - quickly and professionally at fair conditions. Our technicians will be happy to advise you on site and provide you with a tailor-made offer according to your needs. **Please contact us!** 

### Water transfer with the heber 2000

#### The intelligent concept



The heber 2000 consists of the siphon operating device and a siphon line, which is always sized according to the expected maximum inflow (e.g. rainfall)

During commissioning, the air in the siphon line is evacuated and the siphon line is filled with water. After this, the siphon operating unit uses a patented device to ensure that the siphon line remains filled at all times and that interfering air and gases are immediately drawn out of the siphon line. A self-cleaning process adjustable to the special operating conditions keeps the evacuation free of blockages.

In contrast to other systems, on-site operation or interventions to ensure the function are not necessary due to the patented mode of operation.

Due to the inflow of water, the water level in the inlet rises and the siphon starts to deliver. Without the need for an external control device, the flow rate increases as the water level difference rises. If no water flows in, the medium "stands still" in the siphon line until the siphon starts up again automatically as a result of renewed inflow and its raising of the water level.

#### References

- Rosegg, Kärnten (AT) weir renovation
  2 × 250 m DN 1000
  residual water bypass Drau 5000 l / s
- Lorsch, Hessen (D) new construction of pumping station east
  70 m DN 1400
  rainwater discharge 4000 l / s



The heber 2000 uses the natural slope and its water level difference as an energy source and therefore does not require any external drive energy. External energy is only used for commissioning and maintaining operational readiness. Even in the event of a power failure, the system continues to pump for a longer period of time. This principle is therefore a particularly economical and reliable method of transferring large quantities of fluid.

#### **Monitoring**

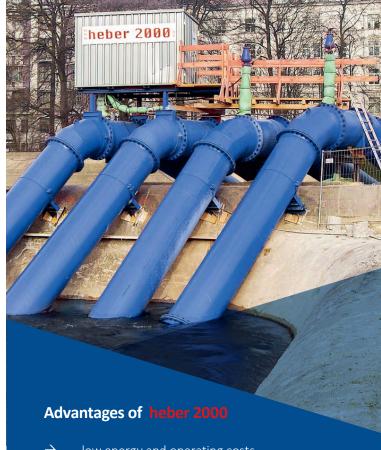
The function of the heber 2000 is continuously monitored by Hidrostal. Any overshooting or undershooting of tightly set limit values is reported as a critical event to the project or site management via GSM network,

while the siphon line is still filled and functional. The following are reported as alarms, for example: Mains voltage failure, device malfunction, inadmissible motor current, excessive air ingress into the siphon line, exceeding of the accumulation target, condensate formation, etc.

The heber 2000 remote monitoring system allows us to control all important operating parameters at any time via special apps.

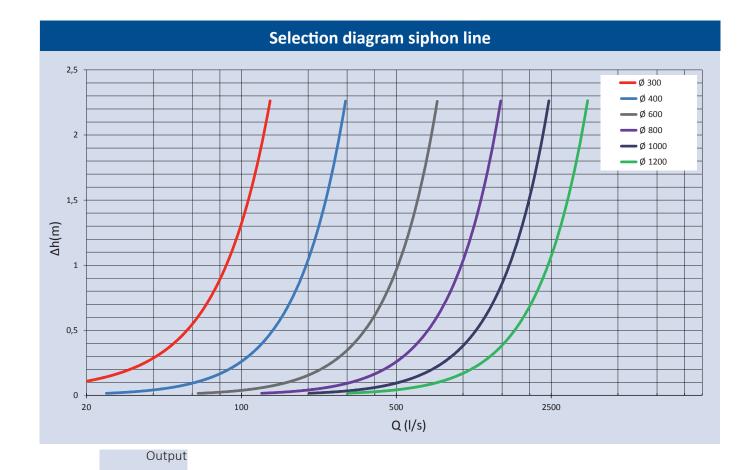
#### **Selection Criteria**

- $\rightarrow$ **Areas of application:** water / wastewater transfer in canal construction, rereouting of canals and streams
- $\rightarrow$ **Device selection:** standard operating units for pipes up to DN 1400, inline compact units for pipes up to DN 500, special operating devices for EX zones
- Selection criteria: max. rainfall volume
- **Flow rates:** As required, continuously self-regulating
- $\rightarrow$ line sizes: DN 200 to DN 2200, larger on request
- Scope of services: consulting, planning assistance, di mensioning, calculation, delivery, professional installati on, operation and monitoring of the siphon systems on a rental basis, flow and level measurement possible



- low energy and operating costs
- $\rightarrow$ operational reserve even in the event of a power failure
- high reliability, non-clogging
- $\rightarrow$ self-regulating flow rate
- $\rightarrow$ 15,000 l / s and more at low Energy and technology expenditure
- usually, no widening of excavation pits for temporary canal structures





This diagram allows a rough preselection of the siphon line diameter at approx. 100 m transfer distance. The curves represent the water level differences ( $\Delta H$ ) for the designated pipe diameters.

For your projects we maintain a stock of pipes DN 100 to DN 1600, which are also available as pipes for rent for detour of all kinds.





## Configure your pump fast and precise under hidrostal.com/pumpselector.php

## **Hidrostal Pumps**

Due to their excellent pumping characteristics, Hidrostal pumps are used in numerous sectors and industries. They pump a wide variety of liquids and substances gently and with low pulsation. Our specialists select the most suitable material combinations and individually adapt each pump individually to the conditions on site. With this approach, we ensure that Hidrostal pumps prove themselves even in difficult applications and thus achieve the best results in terms of efficiency, energy efficiency and low life cycle costs.

- → non-clogging pumping
- → high suction capacity
- → gentle delivery due to low shear forces
- → high efficiency
- → stable characteristic
- → high service life
- → low pulsation
- → continuous, speed-proportional pumping
- → high pressure stability











