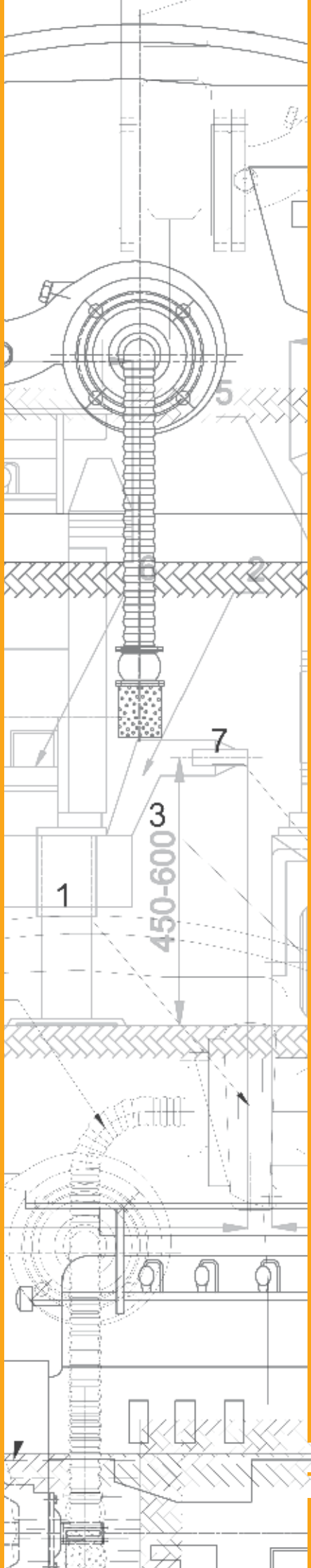
MZT PUMPI

DPA – DIESEL PUMP AGGREGATES

PUMP YOUR WAY TO SUCCESS

Catalog 2008



MZT Pumpi a.d is one of the leading manufacturers of industrial pumps in the region of South-East Europe. With its extensive experience of more than 60 years, justified with existence of broad product range, it continuously strives to satisfy the utmost needs of the customer.

The key elements to survive in this globalized market are flexibility towards market changes and ability to innovate-both in product designs as well as business processes. By following the worldwide development in the pump industry, our staff constantly faces with the growing challenge to keep abreast of the numerous innovations in pump designs and this is justified by having a separate R&D department.

The basic objective of MZT Pumpi is expanding the business partnerships and building the brand name of our products worldwide. All of our employees live up to our motto: ”Pump your way to success”.

CONTENT

GENERAL DATA

Technical data:

Capacity: up to 180 (l/s)
Head: up to 105 (m)

Pump type key:

Example: DPA 1500
DPA - Diesel pump aggregate
1500 - Nominal flow in l/min

Design:

Diesel pump aggregate DPA is new product on market regarding its simple construction, capability of reaching high pressures, small sizes minimum weight, easy for moving and also easy maintenance. Aggregates have a wide usage:
in agriculture for watering (specially with artifical rain) industry, construction, energetic, as service drive in pump stations, anti-fire brigades and etc.
Single stage centrifugal pump is coupled with diesel motor (are given in a table). Coupling is direct to the housing of flywheel or to the engine, and the shaft is coupled to the flywheel through the electric coupling.

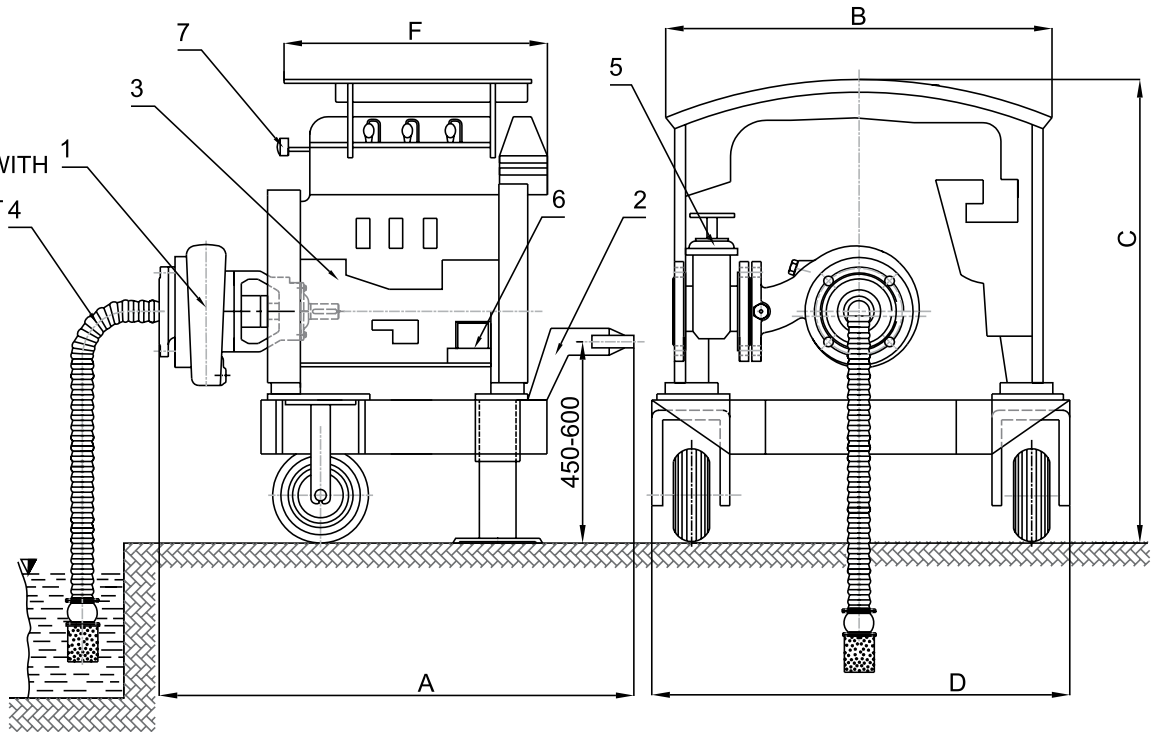
Such assembly enables easy maintenance. Those aggregates with good design and small proportions are put on easy moving trolley with two or four wheels and with adjustable pole, regarding the height, for connection of the motor vehicle or tractor. Trolley is equipped with signal lights and hand brake.

Diesel motors produced from standard tractor motors, guarantees easy maintenance in each mechanical shop. Aggregates could be also equipped with: Suction ribbed rubber hose, suction cage, on the pressed side the slide valve or non-return valve, with ejector device for self suction at the aggregate starting, and other additional equipment according to buyer's wish.

During the working aggregate are fixed with three supports (trestle). Aggregates are equipped with installation of 12 V and splash for night working. For the short load capacity the aggregates reached for approximately 20% higher hydraulic characteristic (Q, H), than it is at current load capacity. Suction height is 4-6 m.

GENERAL DATA – DESIGN

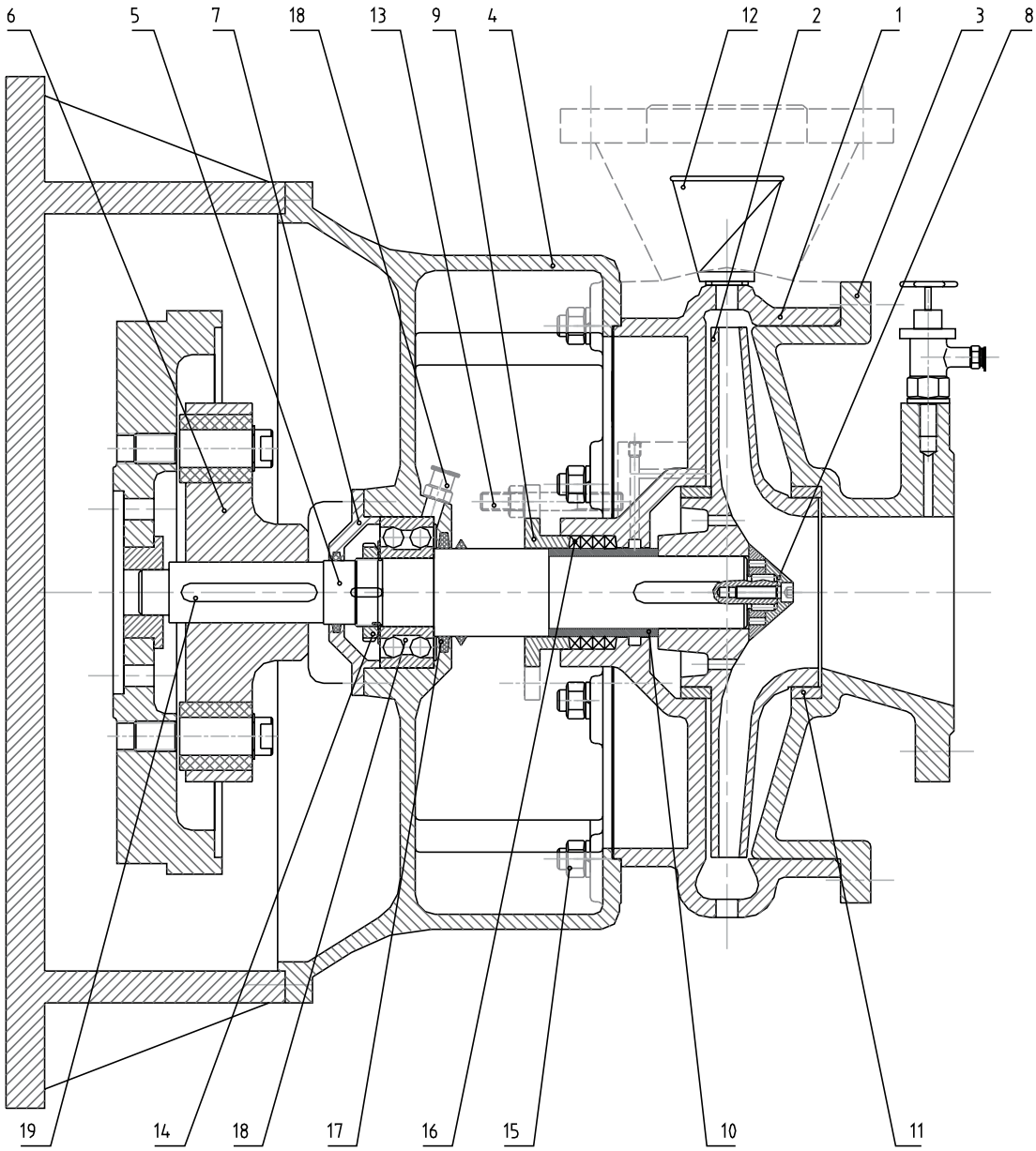
1 - PUMP
2 - TRUCK
3 - DIESEL ENGINE
4 - SUCTION PIPE WITH A SUCTION SELL
5 - CHECK VALVE
6 - ACCUMULATOR
7 - LIGHT



Aggregate type	Pump type	Q max. [l/s]	H max. [m]	motor		A	B	C	D	F	G [kg]
				[rpm]	HP						
DPA – 600	8CP20b	8-16	43-37	3000	10						120
DPA-1500	10CP35	22-42	60-31	2000	45	2020	900	1500	1460	1230	780
DPA–2000	10CP35	28-52	95-47	2250	50	2020	900	1500	1460	1230	800
DPA-3000	10CP35	30-55	105-63	2250	75	2300	900	1500	1460	1500	840
DPA-4500	CP 79	45-100	56-32	1900	80	2300	900	1500	1460	1470	850
DPA-7000	20CP31	105 -150	42-30	1700	75	2360	900	1500	1460	1570	870
DPA-8000	20CP31	110 -165	45-32	1800	120	2490	1070	1760	1460	1750	960

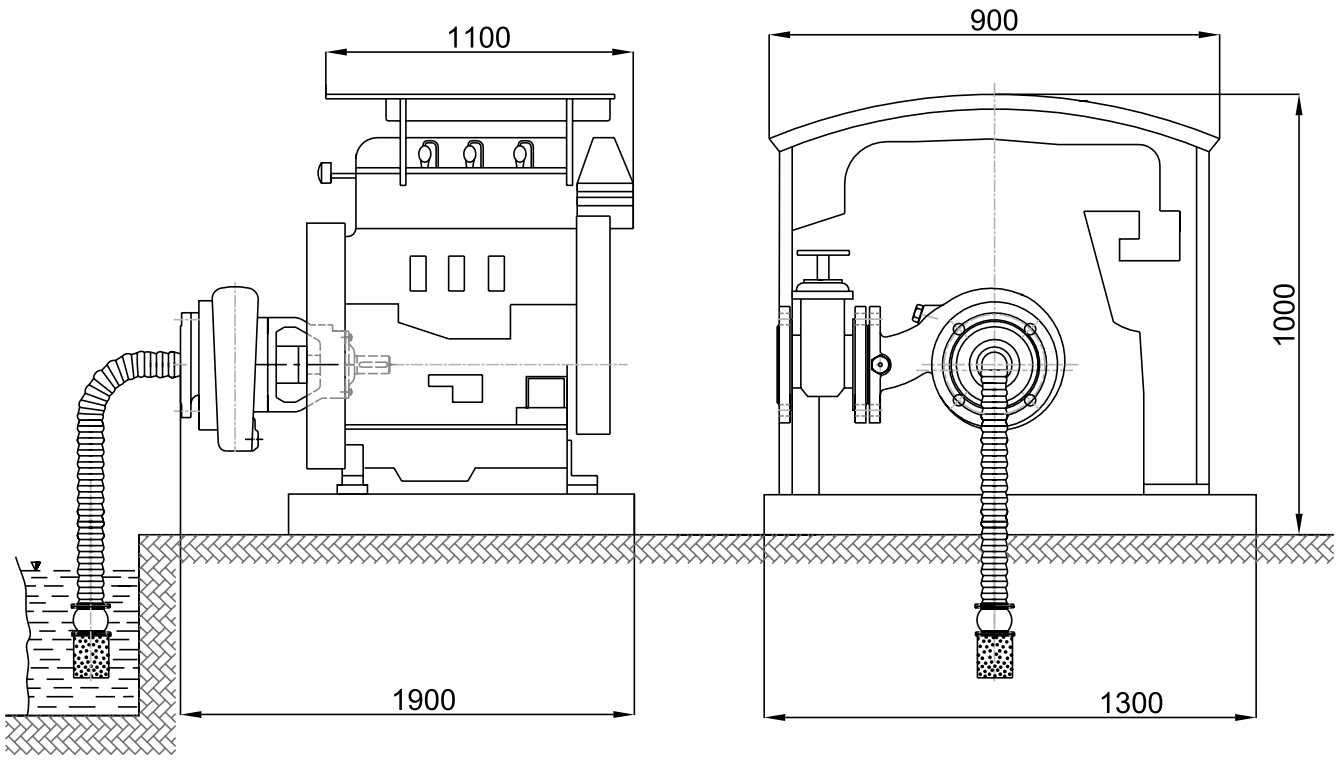
	DPA – 600	DPA-1500	DPA–2000	DPA-3000	DPA-4500	DPA-7000	DPA-8000
Ds	80	125	125	125	150	200	200
Dd	65	100	100	100	125	150	150

TEHNICAL DATA - Sectional drawing



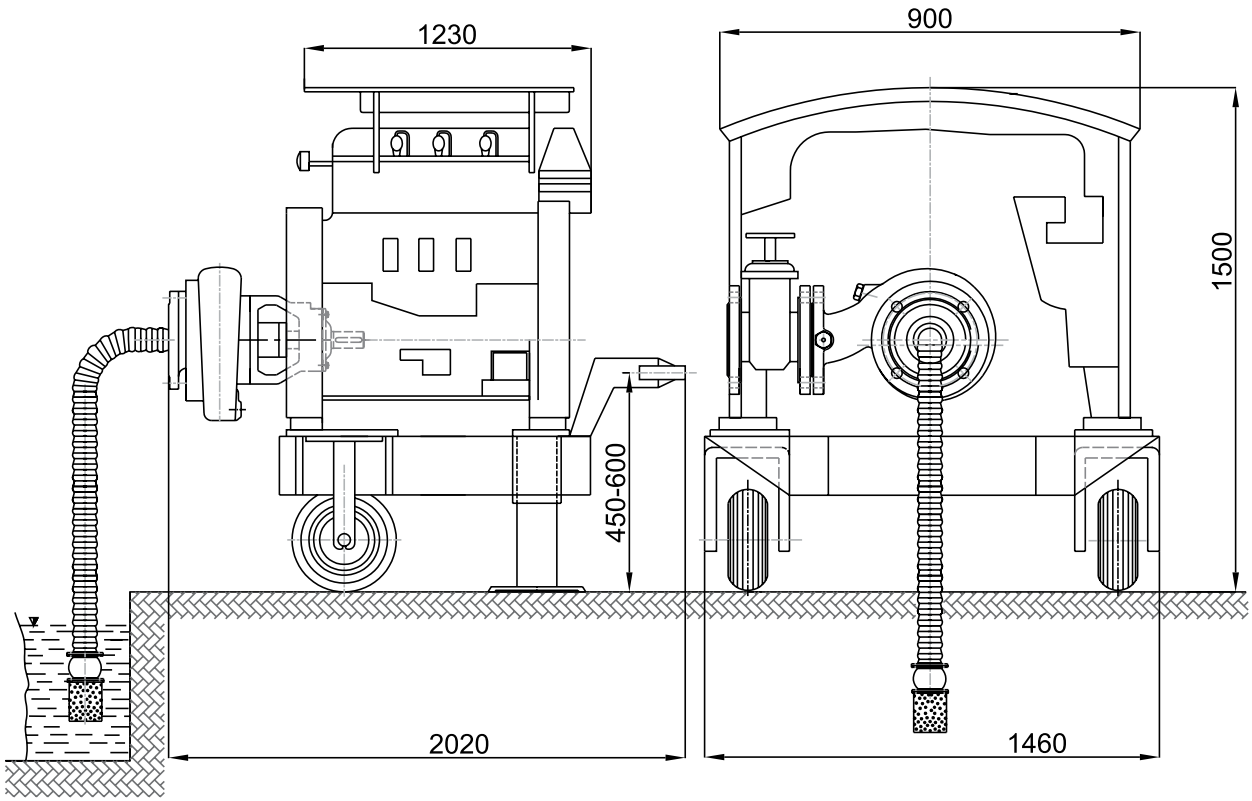
Pos.	Description	Pos.	Description
1.	Pump casing	**11.**	Wear ring
2.	Impeller	**12.**	Funnel
3.	Suction cover	**13.**	Stud bolds
4.	Connection element	**14.**	Lock nut
5.	Shaft	**15.**	Stud bolts
6.	Coupling	**16.**	Soft packing
7.	Bearing cover	**17.**	Felt ring
8.	Special screw	**18.**	Bearing
9.	Gland	**19.**	Key
10.	Shaft sleeve	**20.**	Grease cup

TEHNICAL DATA – Main dimensions of DPA 600



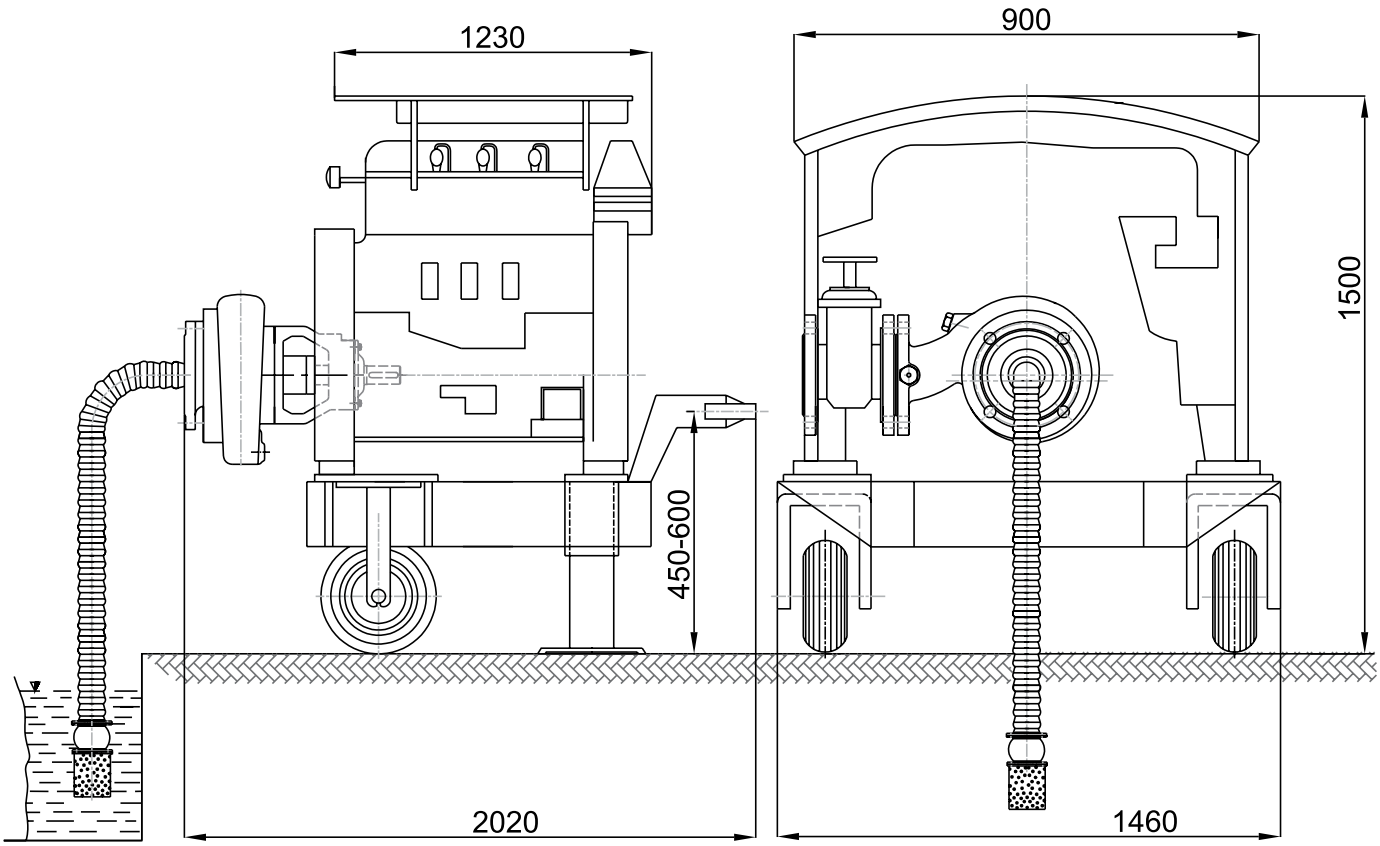
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
8 CP 20b	8-16	43-37	LDA 510	3000	10	80	65	120

TEHNICAL DATA – Main dimensions of DPA 1500



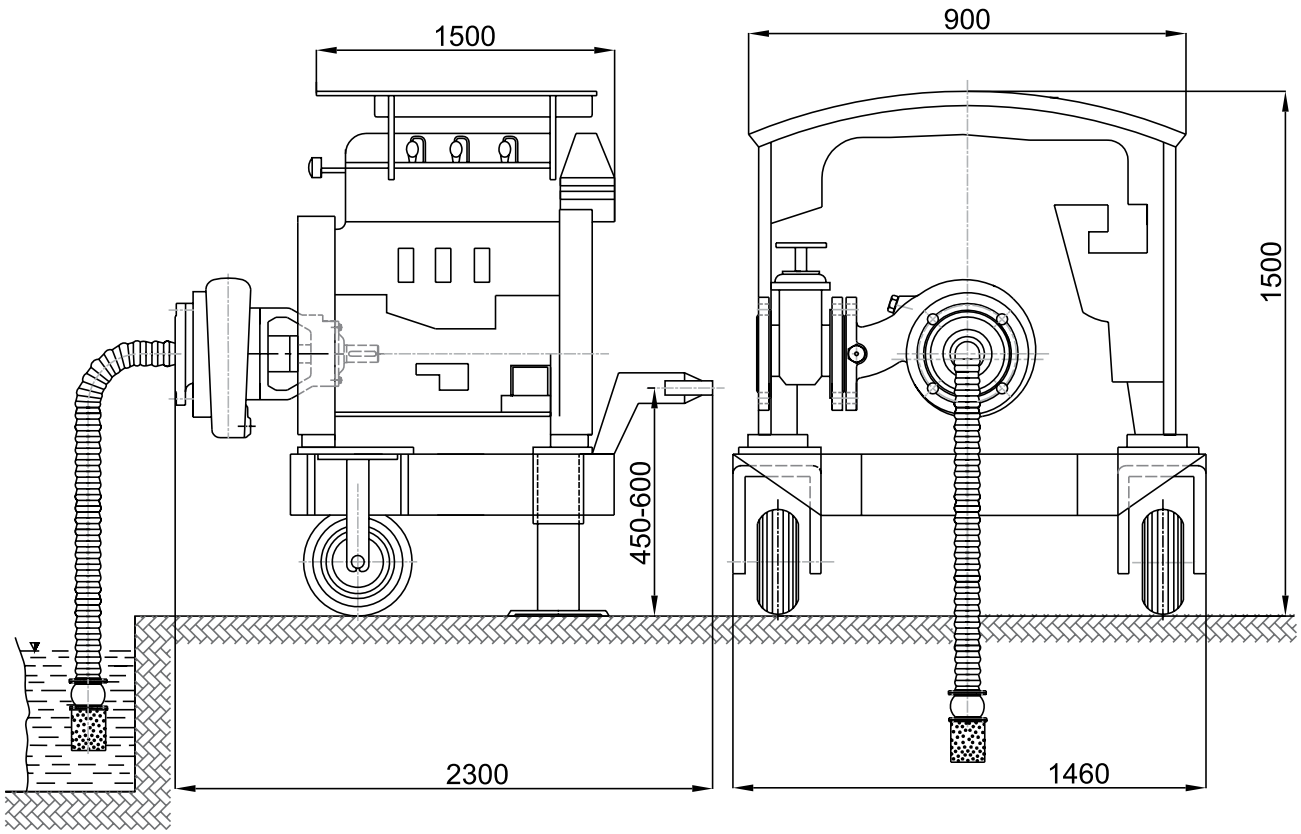
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
10 CP 35	22-42	60-31	M 34L	2000	45	125	100	780

TEHNICAL DATA – Main dimensions of 2000



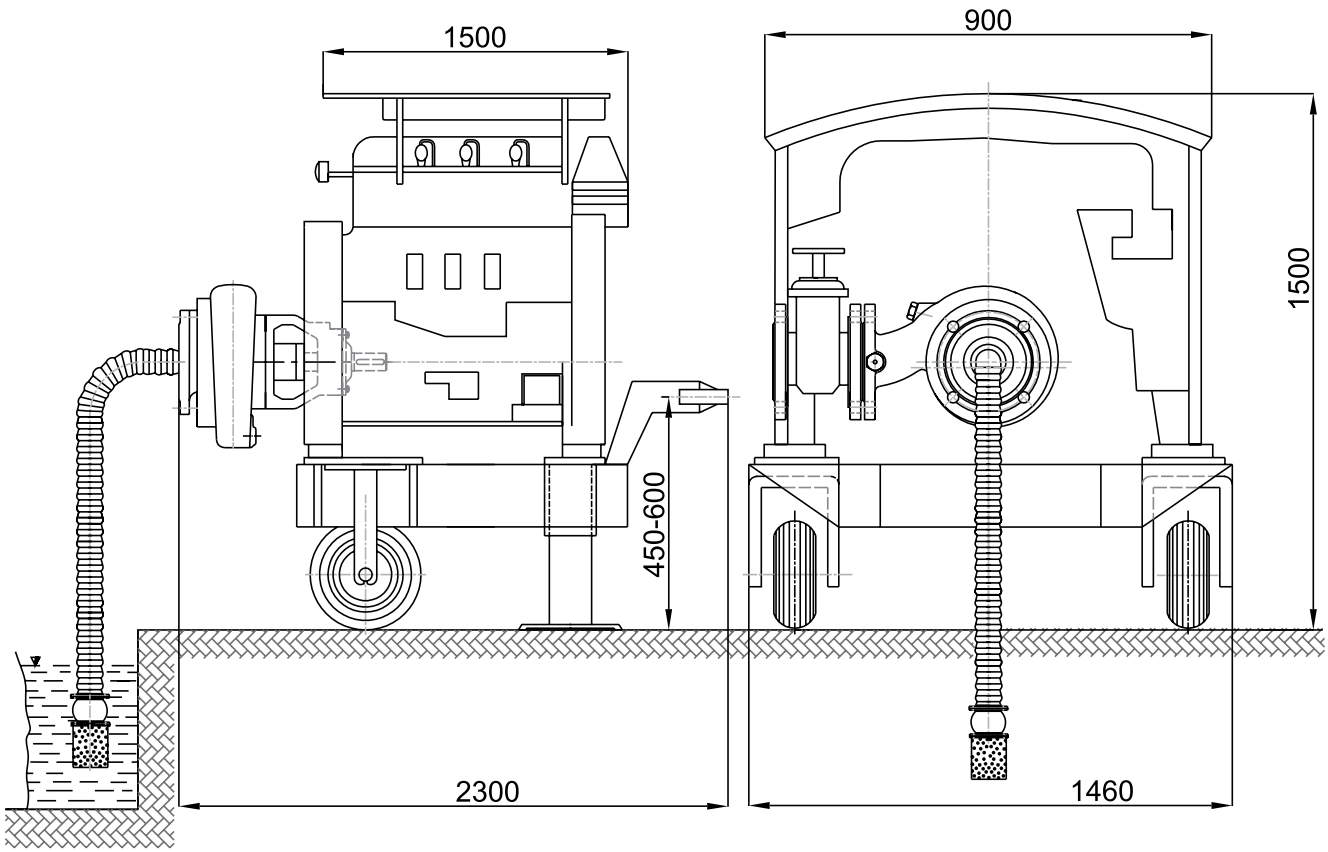
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
10 CP 35	28-52	95-47	S 44 L F4 L912	2250	50	125	100	800

TEHNICAL DATA – Main dimensions of 3000



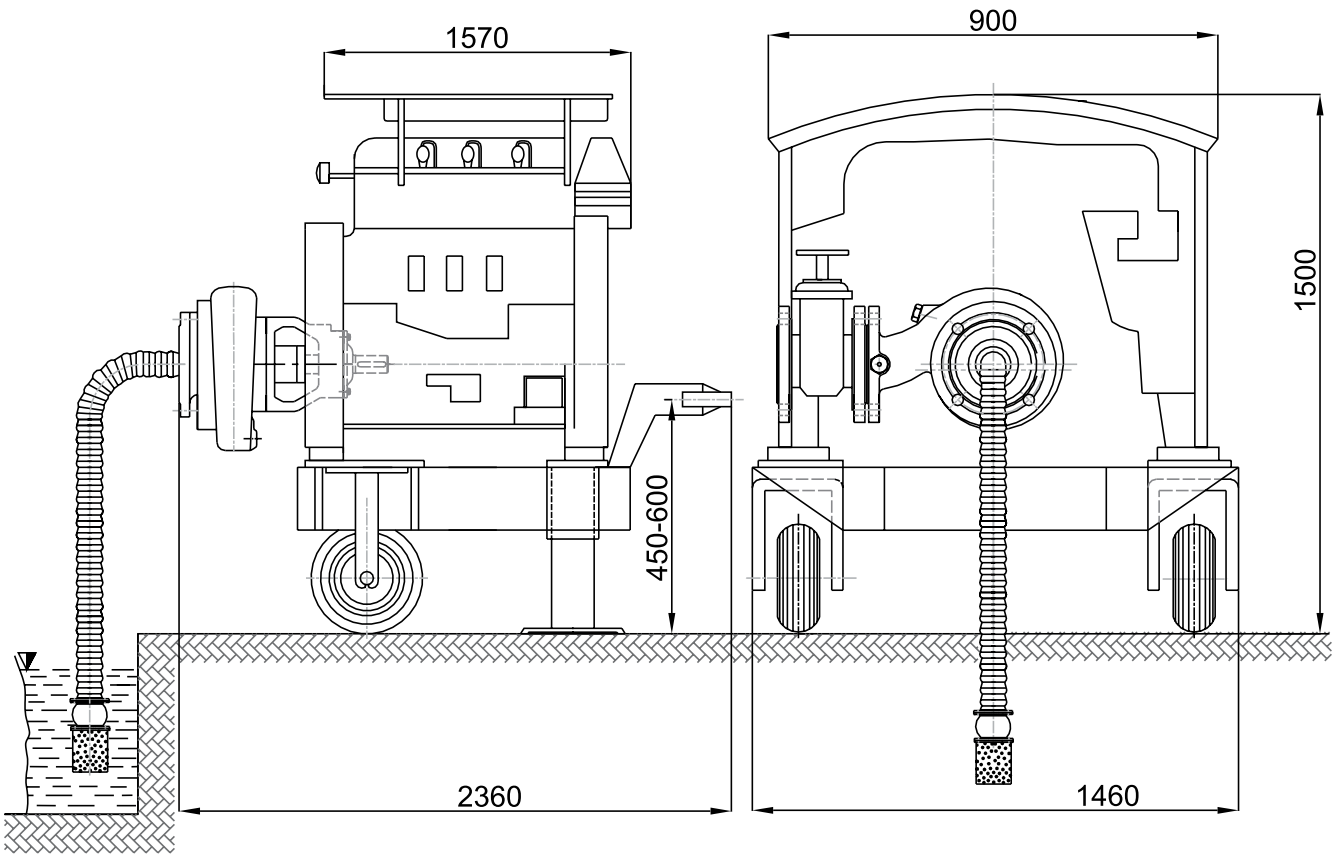
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
10 CP 35	30-55	105-63	S 46/I F6 L912	2250	75	125	100	840

TEHNICAL DATA – Main dimensions of 4500



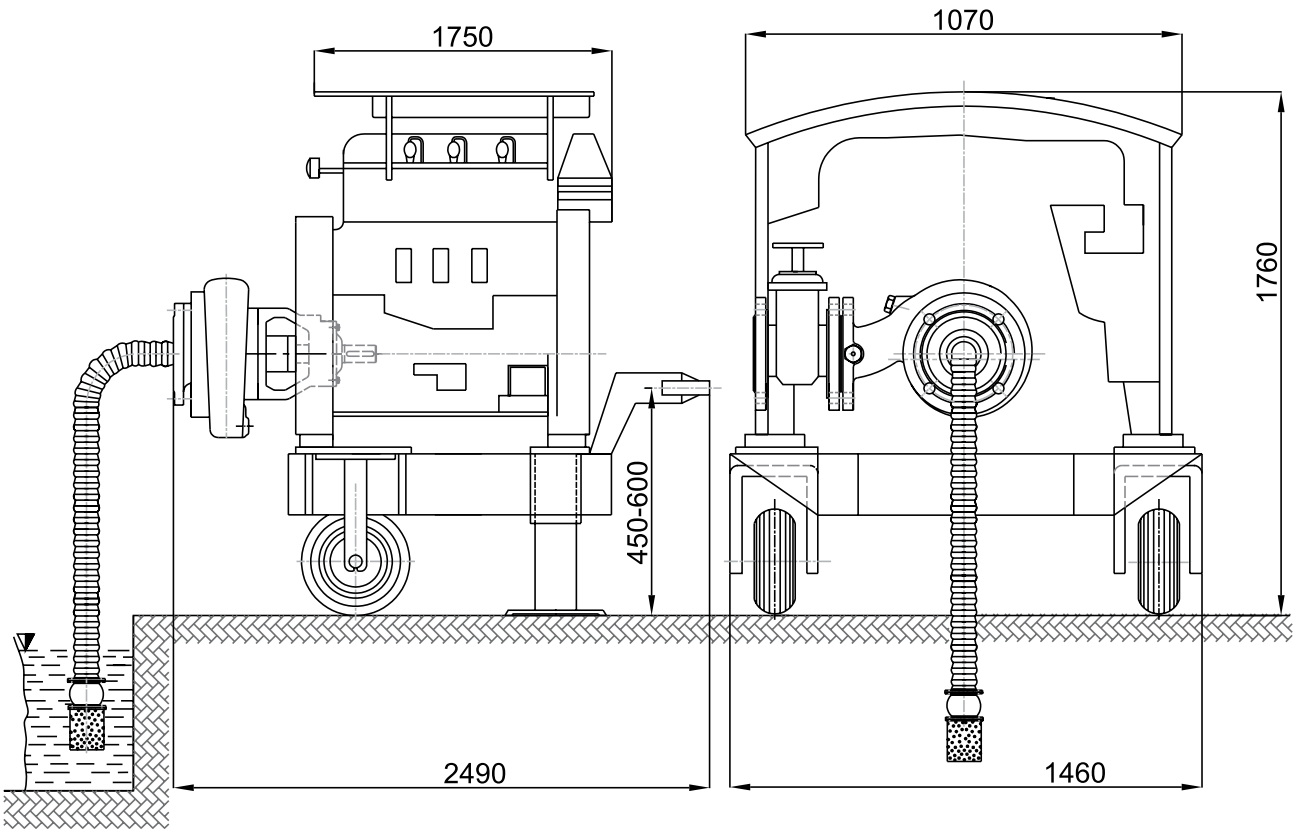
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
CP 79	45-100	56-32	S 46/1 F6 L912	1900	80	150	125	850

TEHNICAL DATA – Main dimensions of 7000



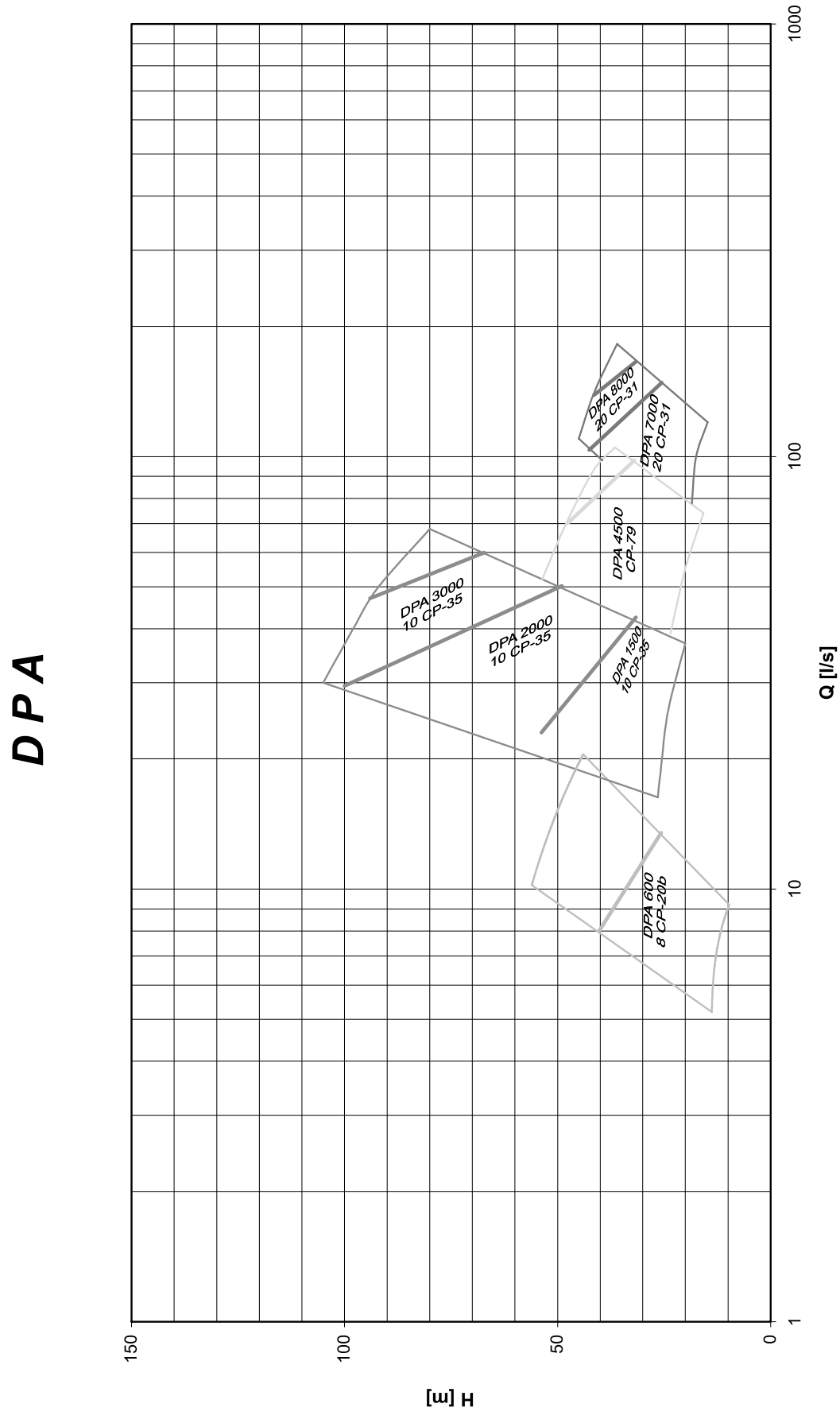
Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
20 CP 31	105-150	42-30	S 46/I F6 L912	1700	75	200	150	870

TEHNICAL DATA – Main dimensions of 8000



Pump type	$Q_{max.}$	$H_{max.}$	Drive	rpm	HP	Suction	Discharge	G [kg]
20 CP 31	110-165	45-32	F315A	1800	120	200	150	960

Range of performance curves

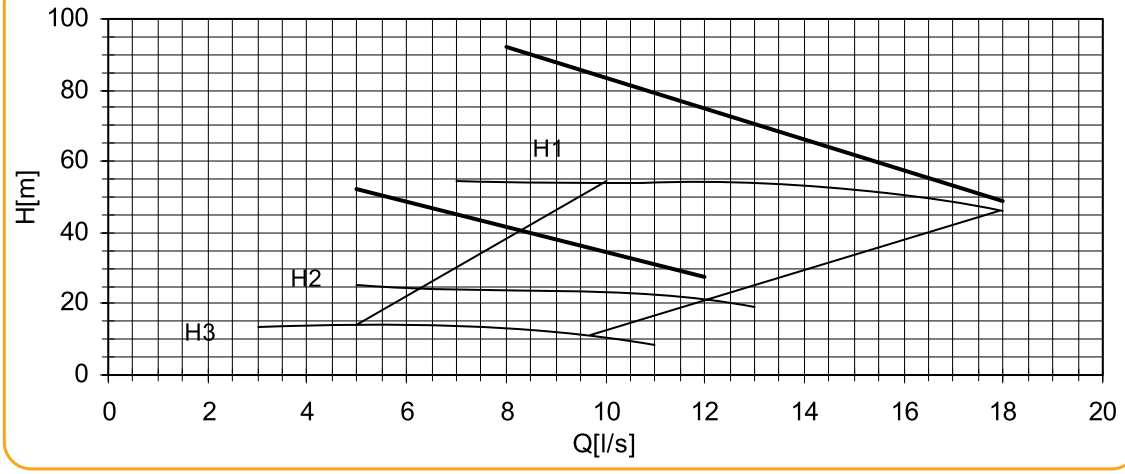


Pump performance curves

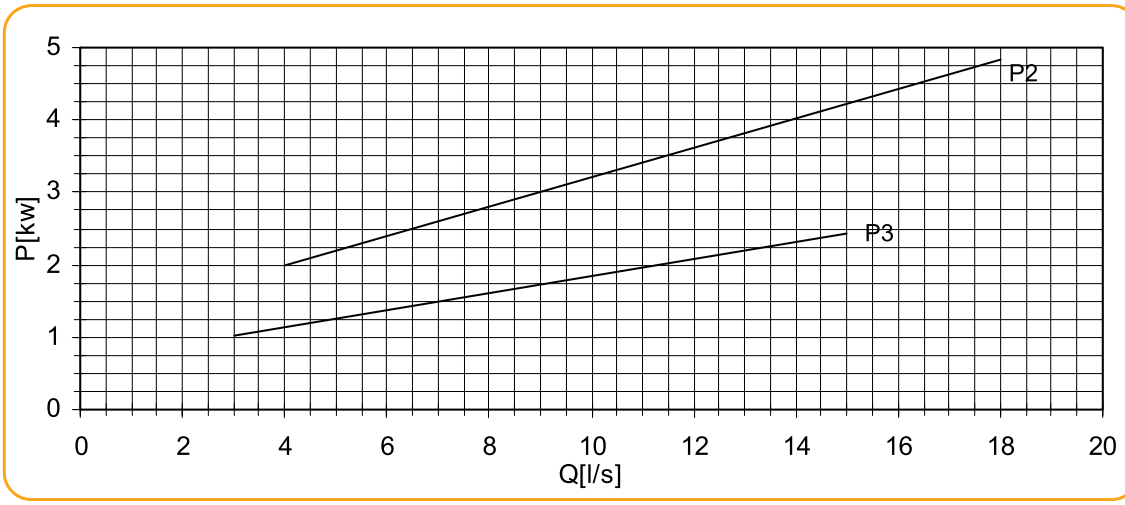
DPA 600
Pump type 8CP20

H1 at n=2900[min-1]
H2 at n=2000[min-1]
H3 at n=1450[min-1]

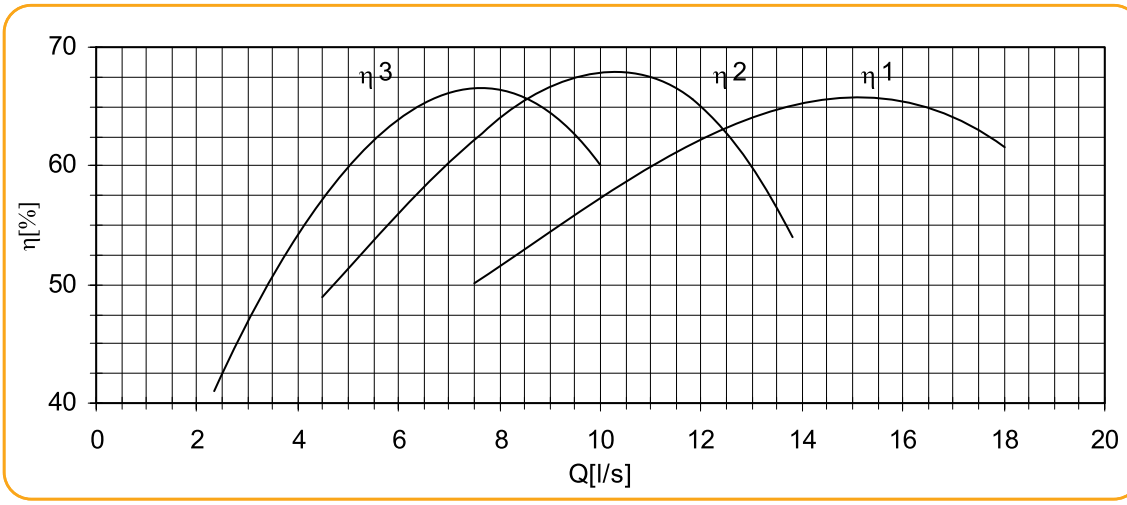
Total Differential Head



Power Input



Efficiency



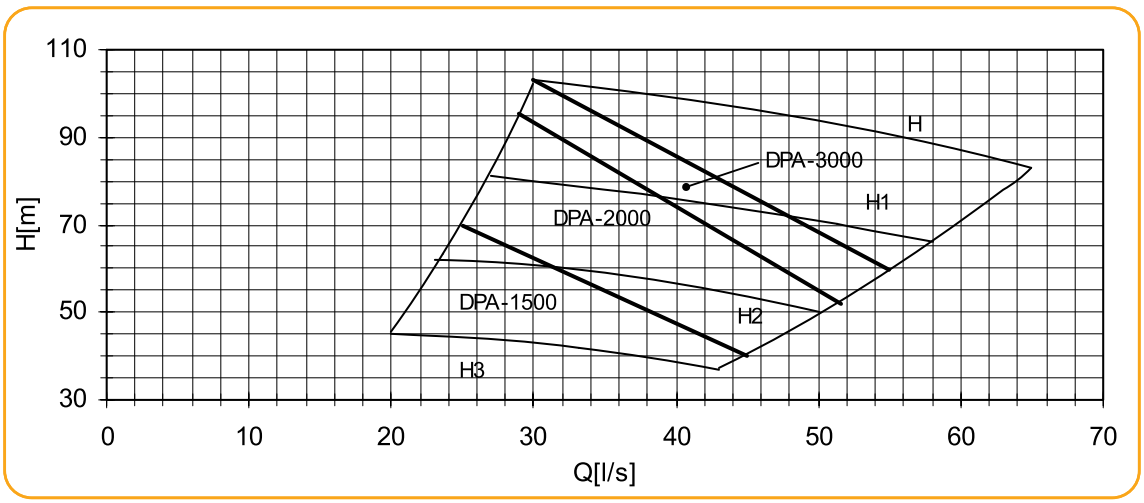
Performance curves are valid for clear water t=20 °C, ρ=1000 kg/m³,. NPSH value is obtained in laboratory and for reason of safety shall be increased at least 0.5 m for application. Methods and tolerances of presented performance curves are in accordance with ISO 9906

Pump performance curves

DPA 1500,2000,3000
Pump type 10CP35

H at n=2250[min-1]; D=350[mm]
H1 at n=2000[min-1]; D=350[mm]
H2 at n=1750[mn-1]; D=350[mm]
H3 at n=1500[min-1]; D=350[mm]

Total Differential Head



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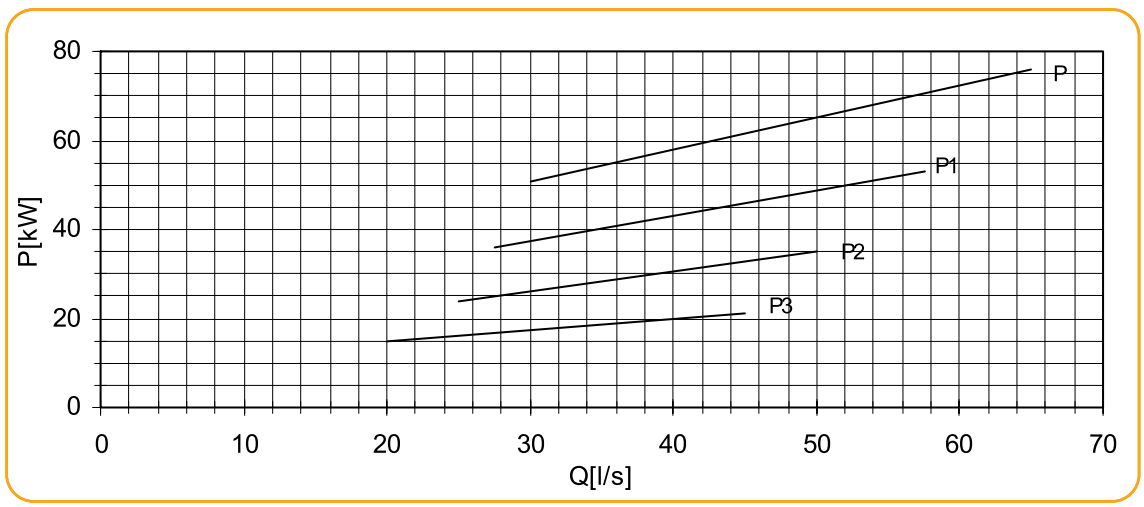

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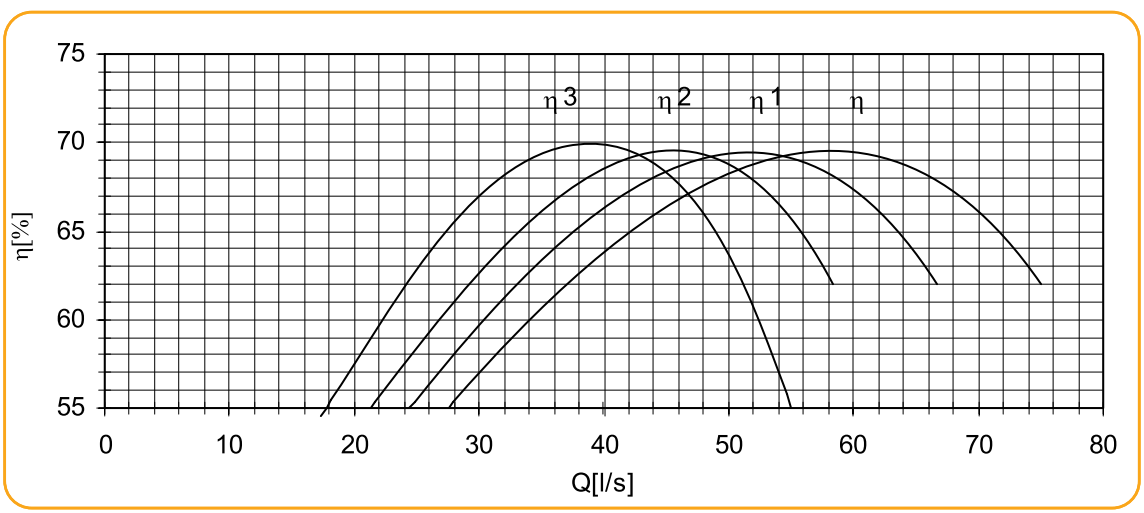
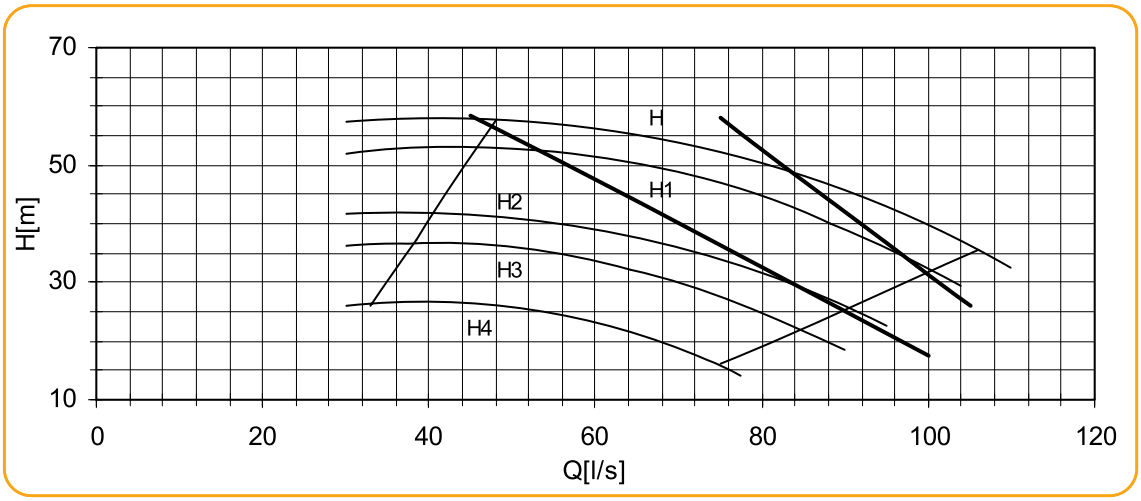


Pump performance curves

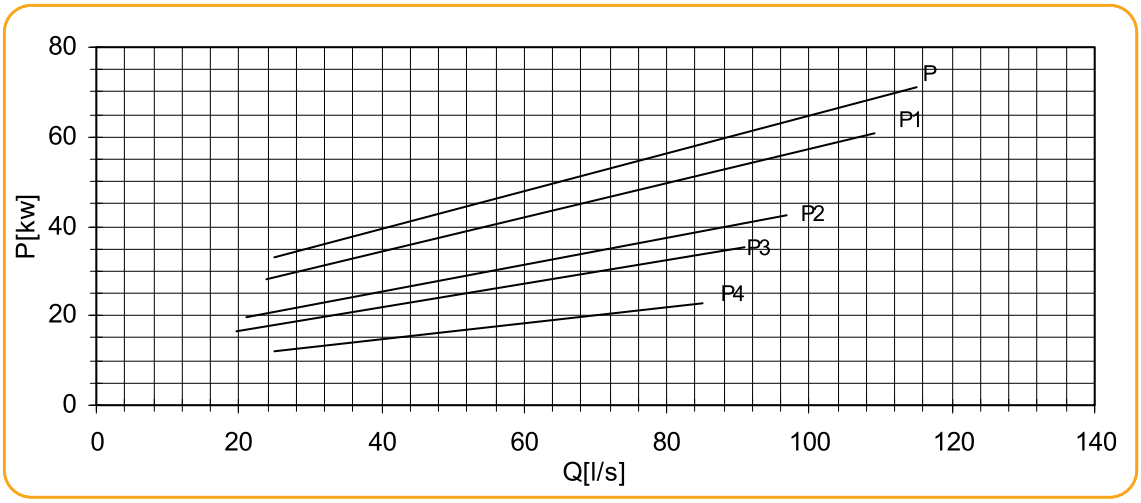
DPA 4500
Pump type CP79

H at n=1900[min-1]; D=320[mm]
H1 at n=1800[min-1]; D=320[mm]
H2 at n=1600[min-1]; D=320[mm]
H3 at n=1500[min-1]; D=320[mm]
H4 at n=1500[min-1]; D=260[mm]

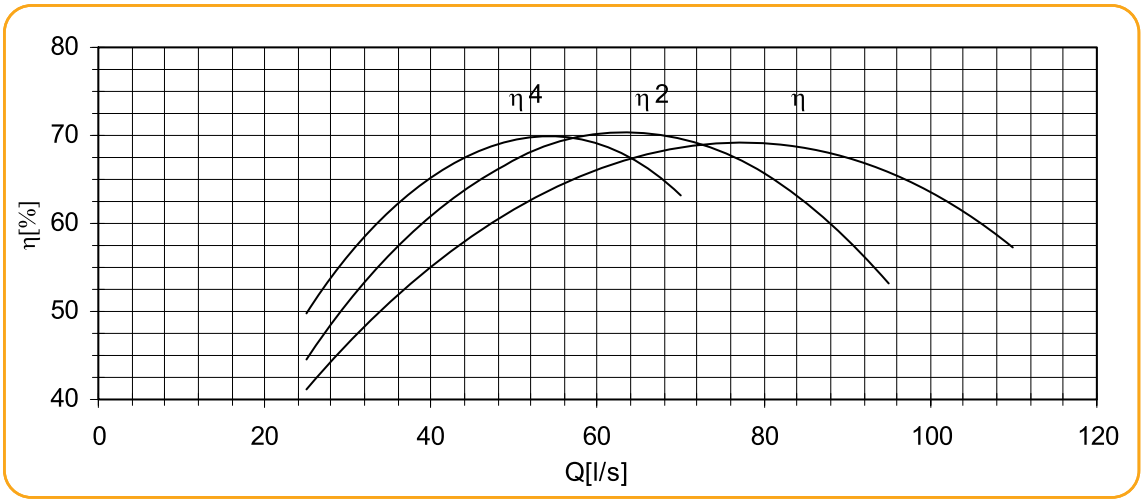
Total Differential Head



Power Input



Efficiency



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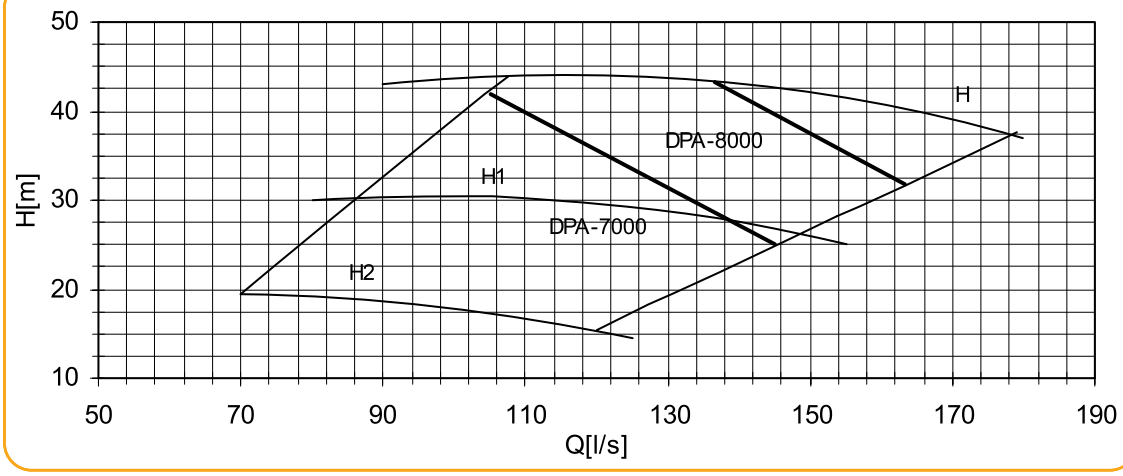
Pump performance curves

DPA 7000,8000
Pump type 20CP31

H at n=1750[min-1]; D=315[mm]
H1 at n=1450[min-1]; D=315[mm]
H2 at n=1450[min-1]; D=250[mm]

Total Differential Head



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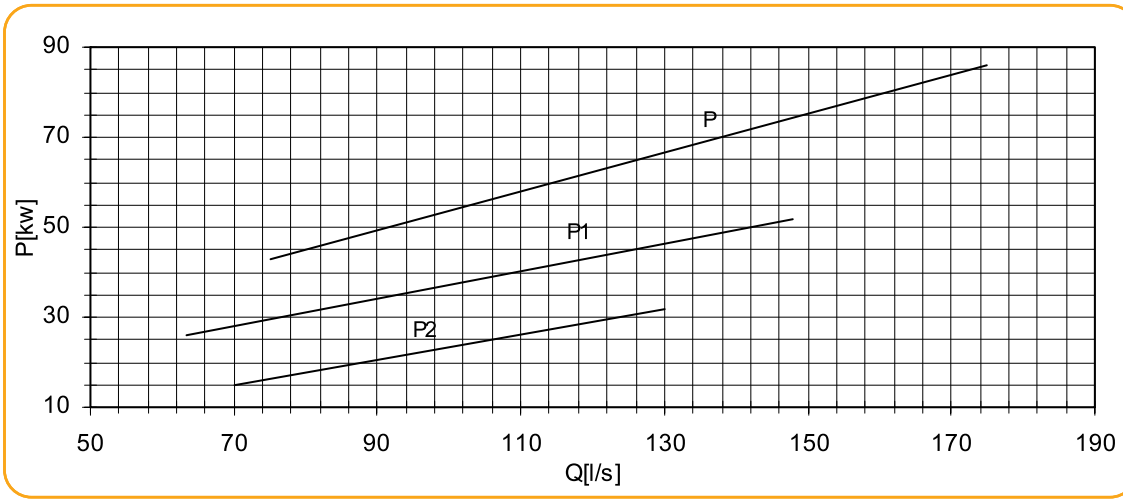

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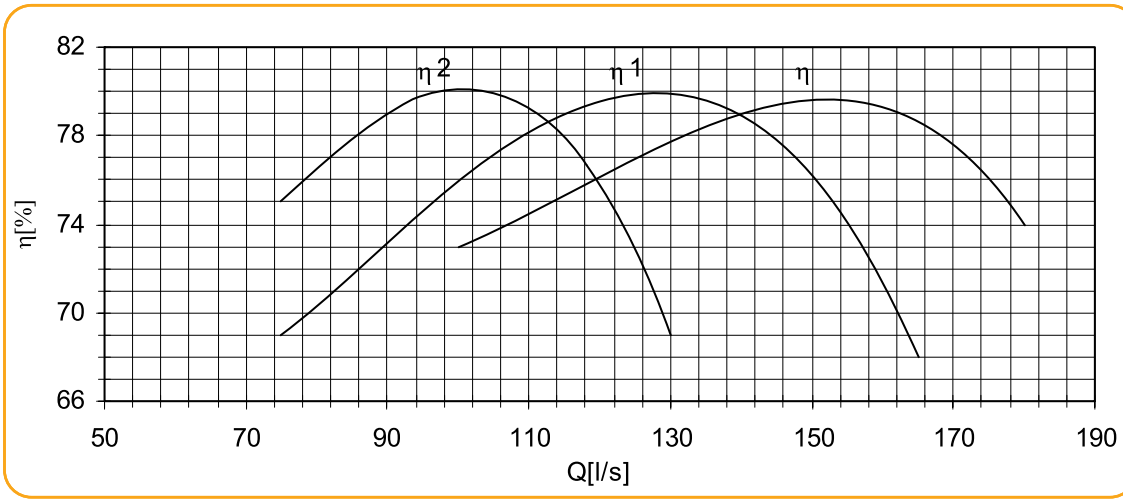

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Company: _____

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Date: _____

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