

A close-up photograph of a yellow industrial pump. The word "DESMI" is printed in bold black letters on the upper part of the pump's housing. Below the housing, there are several vertical, ribbed cooling fins. A blue circular graphic with a white outline is overlaid on the right side of the image, partially obscuring the pump's details. The background is blurred, showing more yellow machinery.

**DESMI**

MARINE & OFFSHORE PUMP SOLUTIONS

PROVEN TECHNOLOGY

**DESMI**

# DESMI Centrifugal Pumps (Vertical Pumps)

DESMI centrifugal pumps are used as cooling, ballast, fire, and bilge pumps for fresh as well as seawater. The pumps are available with capacities up to 4000 m<sup>3</sup>/h/141258 ft<sup>3</sup> and delivery heads up to 220 mWC.

Our product range is based on the modular principle which gives interchangeability of the most commonly used items and consequently a quick and safe supply of spare parts.

## DSL

Vertical In-line Double Suction Centrifugal Pump DSL	
50 Hz:	60 Hz:
Pressure range: 2-30 mLC - 6-100 ft	Pressure range: 4-45 mLC - 12-150 ft
Capacity range: 300-3500 m <sup>3</sup> /h 1300-15000 US gpm	Capacity range: 350-4400 m <sup>3</sup> /h 1500-19000 US gpm
Temperature range: With standard mech. shaft seal max. 80°C - 176°F. With special mech. shaft seal max. 120°C - 248°F.	
Applications: Ballast and cooling water pumping are among the many tasks that the DSL pumps solve to perfection. But also district heating and power plants together with many other industries will profit from using DSL pumps. Pump materials available in bronze and cast iron.	

## NSL

Vertical In-line Centrifugal Pump NSL	
50 Hz:	60 Hz:
Capacity range: 10-1500 m <sup>3</sup> /h - 50-6600 US gpm	Capacity range: 10-1800 m <sup>3</sup> /h - 50-7900 US gpm
Pressure range: 5-150 mLC - 15-500 ft	Pressure range: 5-220 mLC - 15-720 ft
Temperature range: With standard mech. shaft seal max. 80°C - 176°F With special mech. shaft seal max. 140°C - 284°F	
Applications: Various marine applications such as seawater cooling systems, LT-cooling systems, HT-cooling systems, ballast water pumps and fire pumps. Pump materials available in bronze, cast iron and duplex stainless steel.	

## ESL

Vertical In-line Centrifugal Pump ESL	
50 Hz:	60 Hz:
Capacity range: 2-135m <sup>3</sup> /h 9 - 600 US gallon/minute	Capacity range: 2-160m <sup>3</sup> /h 9 - 660 US gallon/minute
Pressure range: 2-45 mLC 6,5 - 150 ft	Pressure range: 3-65 mLC s 10 - 210 ft
Liquid temperature range: With standard mech. shaft seal max. 80°C - 176°F. With special mech. shaft seal max. 140°C - 284°F.	
Applications: Various water applications such as hot water circulation, fresh water circulation, refrigeration, HVAC, hydrophore pump, cooling water. Pump materials available in bronze and cast iron.	

DESMI pumps are also installed in many naval vessels where special requirements as to materials, shock resistance etc. apply.

Single pumps or complete packages, DESMI's staff will always find the correct solution. Our world-wide network of subsidiaries and distributors ensures prompt spare parts supply and first-class after-sales-service.

### DSL Benefits:

- Suction design provides a perfect flow
- High efficiency and low NPSH values



DSL



NSL

### NSL Benefits :

- High efficiency
- Low NPSH values
- Easy installation/service
- Various materials

### ESL Benefits :

- High efficiency
- Low NPSH values
- Compact design
- Easy installation
- Low maintenance costs



ESL



Priming Pump

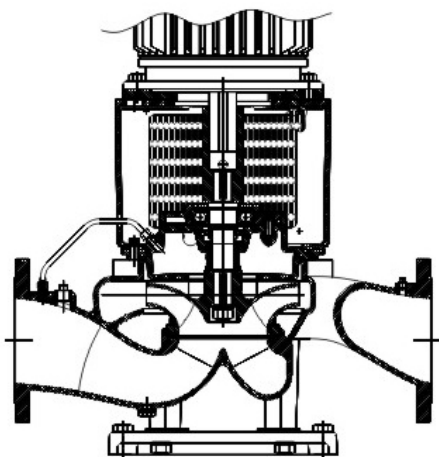


Priming Ejector

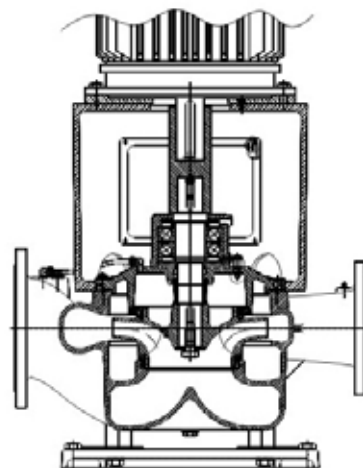
The DESMI priming ejector / pump is designed for mounting on non-selfpriming centrifugal pumps making the pump unit self-priming.

## Design Details

Pumps With  $\varnothing$  215 And  $\varnothing$  265 Impeller  
Suction and discharge flange dimensions are identical. The line through inlet and outlet is flush with the centre line of the shaft. The pumps are mounted with one impeller wear ring.

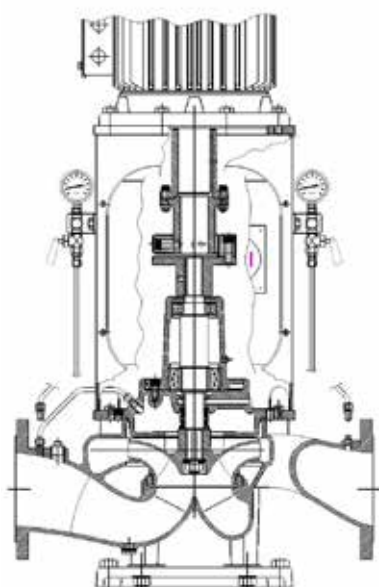


Pumps With  $\varnothing$  330,  $\varnothing$  415 and  $\varnothing$  525 Impeller  
Dimension of the suction flange is one size larger than that of the discharge flange. The line through inlet and outlet is tangential offset in relation to the centre line of the shaft. The pumps have two impeller wear rings.

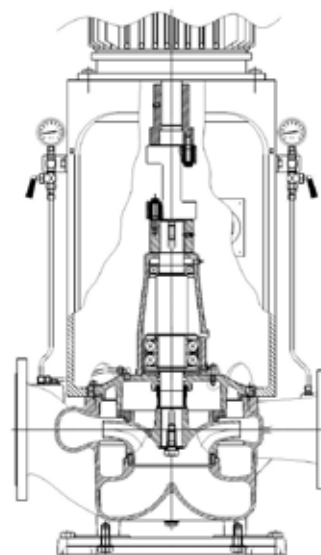


## Monobloc With Bearing

The pump is for major capacities and heavy loads, especially recommended where the advantage of the spacer coupling is of no importance and where a small overall height is required.



The pump is equipped with a separate rear cover with a ball bearing and a separate motor bracket. Dismantling of the rotating pump parts is possible without removing the pump casing from the piping.



## Spacer

The pump is for high capacities, heavy loads, and high pump speeds. As a special feature the pump is equipped with a spacer coupling which is a combined distance and flexible coupling. This makes it possible to remove the complete bearing housing with shaft, bearings, shaft seal, and impeller without dismantling or loosening the motor or piping.

For high capacities and the resulting larger and heavier electric motors we recommend this pump version because of the easy dismantling of the rotating pump parts in connection with inspection and repair. This special feature is often a requirement within the marine industry where installations must be easy to service.

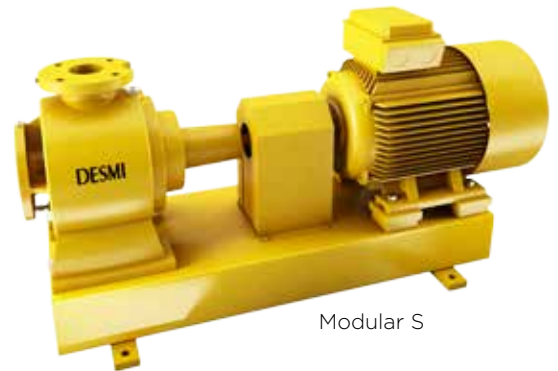
# DESMI Centrifugal Pumps (Horizontal Pumps)

A DESMI speciality is horizontal, self-priming pumps where suction is based on the diffuser principle and

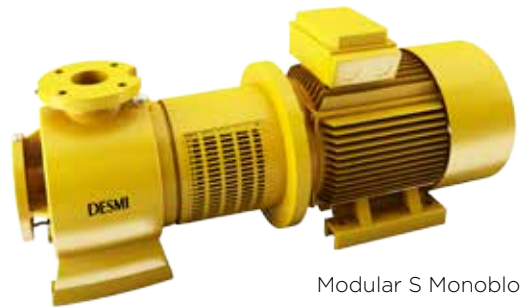
the pump itself is able to evacuate the suction line at suction lifts up to 8.5 m/278 ft.

## Modular S

Self-priming Horizontal Centrifugal Pump Modular S
Capacity range: 1-350 m <sup>3</sup> /h - 5-1500 US gpm at 50 Hz 2-400 m <sup>3</sup> /h - 10-1760 US gpm at 60 Hz
Pressure range: 1-100 mLC - 3-330 ft at 50 Hz 2-150 mLC - 6-490 ft at 60 Hz
Temperature range: With standard mech. shaft seal max. 80°C - 176°F, with special mech. shaft seal max. 120°C - 248°F.
Applications: Bilge pumps, ballast pumps, fire pump, cooling-water pumps, deck-wash pumps and general service pumps.



Modular S



Modular S Monobloc



SA (Monobloc)

## SA

Horizontal Self-priming Centrifugal Pump SA / SAEN
Capacity range: Up to 540 m <sup>3</sup> /h - 2.400 US gpm at 50 Hz Up to 650 m <sup>3</sup> /h - 2.900 US gpm at 60 Hz
Pressure range: 2-75 mLC - 6-245 ft at 50 Hz 2-110 mLC - 10-360 ft at 60 Hz
Temperature range: With standard mech. shaft seal max. 80°C, with special mech. shaft seal max. 120°C.
Applications: Bilge pumps, ballast pumps, fire pumps, cooling water pumps, deck-wash pumps, fuel pumps, wellpoint pumps, irrigation pumps, circulation pumps.

## NSLV and NSLH

The DESMI NSLV pumps are constructed for vertical mount (with suction flange downwards) and the NSLH pump for horizontal mounting.

The pumps are particularly suitable for the pumping of water in connection with cooling systems, cooling of diesel engines, as bilge pumps, ballast pumps, fire pumps, brine pumps, pumps for irrigation, fish farms, water works, district heating, salvage corps, army and navy, etc.

The DESMI NSLV and NSLH pumps meet the special marine and industrial market requirements for:

- High efficiency
  - Low NPSH values
  - Easy installation/service
  - Various materials
- and further, an attractive price.



NSLH



NSLV



# DESMI Submerged Lubrication Oil Pump

The DESLUBE series is a submerged deep-well pump designed for main engine lube oil supply for large two-stroke engines.

The design is based on our long-time experience of manufacturing deep-well pumps as well as the design features from our in-line centrifugal series.

The discharge socket is bolted to the dome flange and thus carries the pump without further suspension to the tank.

The DESLUBE pump should be used where good reliability and flexibility are required.

The DESLUBE pump from DESMI puts the advantage of a centrifugal pump into the main engine lube oil supply pump.

If the lube oil pressure is dropping, a DESLUBE pump will increase the flow to reduce the risk of severe damage and eventually break down of the main engine.

Benefits:

- Low NPSH
- Low noise
- Low vibration
- Low maintenance costs
- High reliability
- High flexibility



## DESLUBE

DESLUBE

DESLUBE - Deep well pump

Capacity range:  
Up to 80 - 1000 m<sup>3</sup>/h  
350 - 4400 US gpm at 50 Hz

Pressure range:  
30 - 200 mLC - 100-330 ft at 60Hz

Applications:  
The DESLUBE series is a submerged deep well pump designed for main engine lubrication oil supply for especially large two-stroke engines.

## Easy Maintenance with Spare Parts Kits

DESMI provides spare parts kits for easy end simple maintenance of your pumps. In order to simplify overhauling of your pumps DESMI offers a variety of spare part kits for the following DESMI pumps:

- Modular S
- SA
- NSL
- DSL
- ESL
- PVLN

**Spare Part Kits include:**

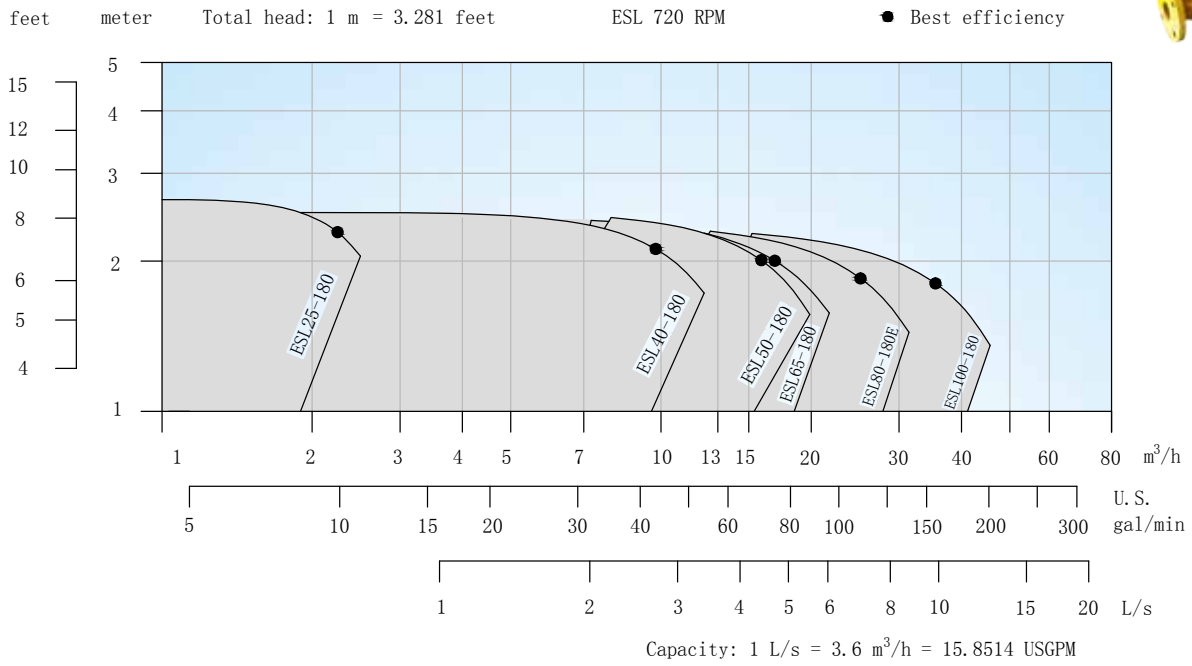
- Bearings
- Mechanical shaft seal
- O-rings
- Gaskets
- Washer & nuts
- Overhaul manual



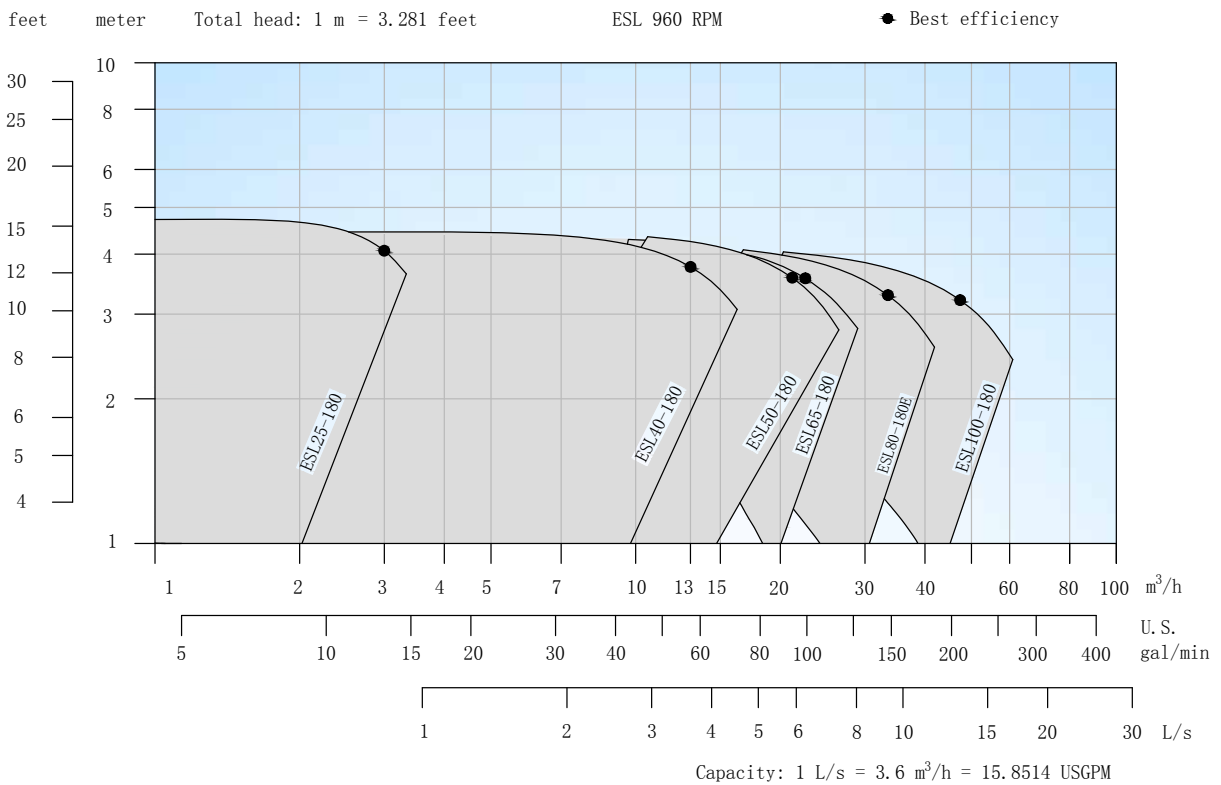
NSL



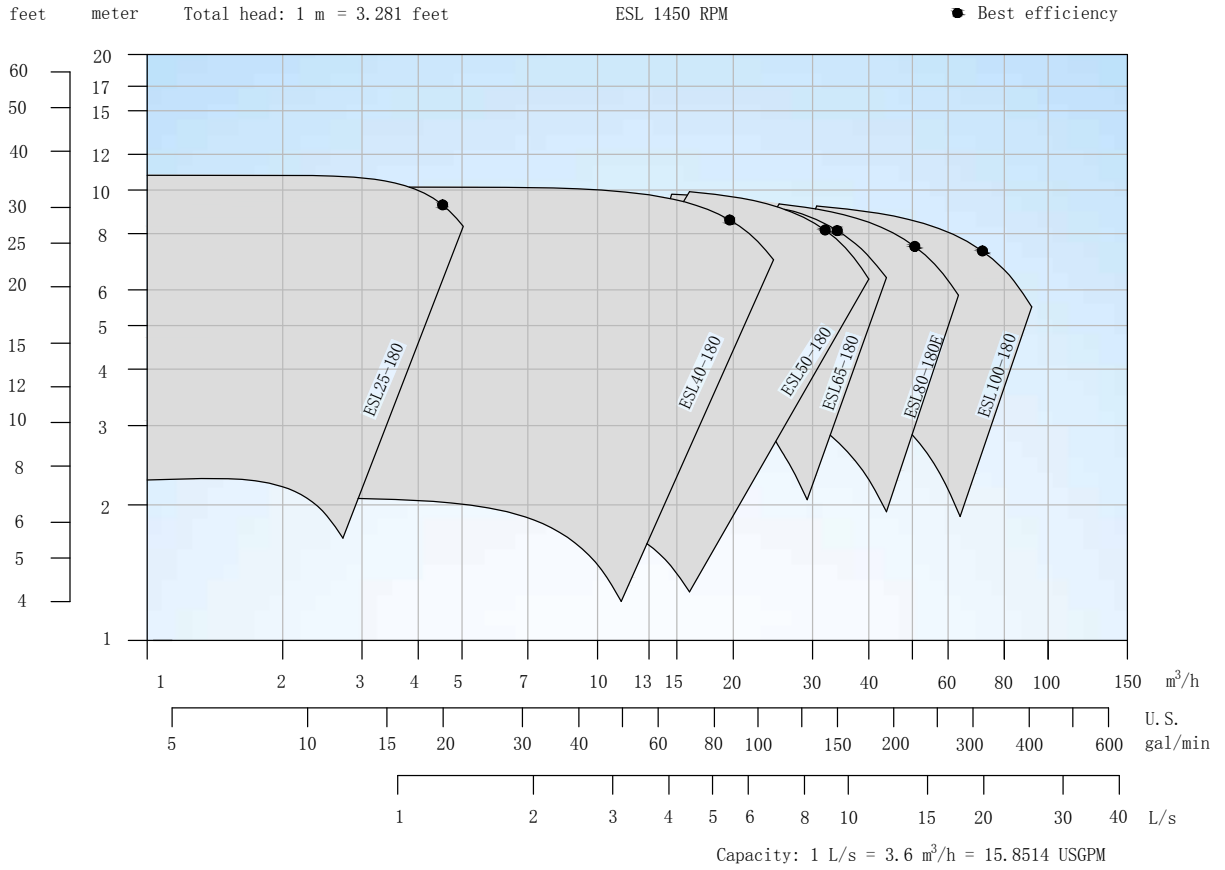
## ESL Centrifugal Pump, 720 rpm, 50 HZ



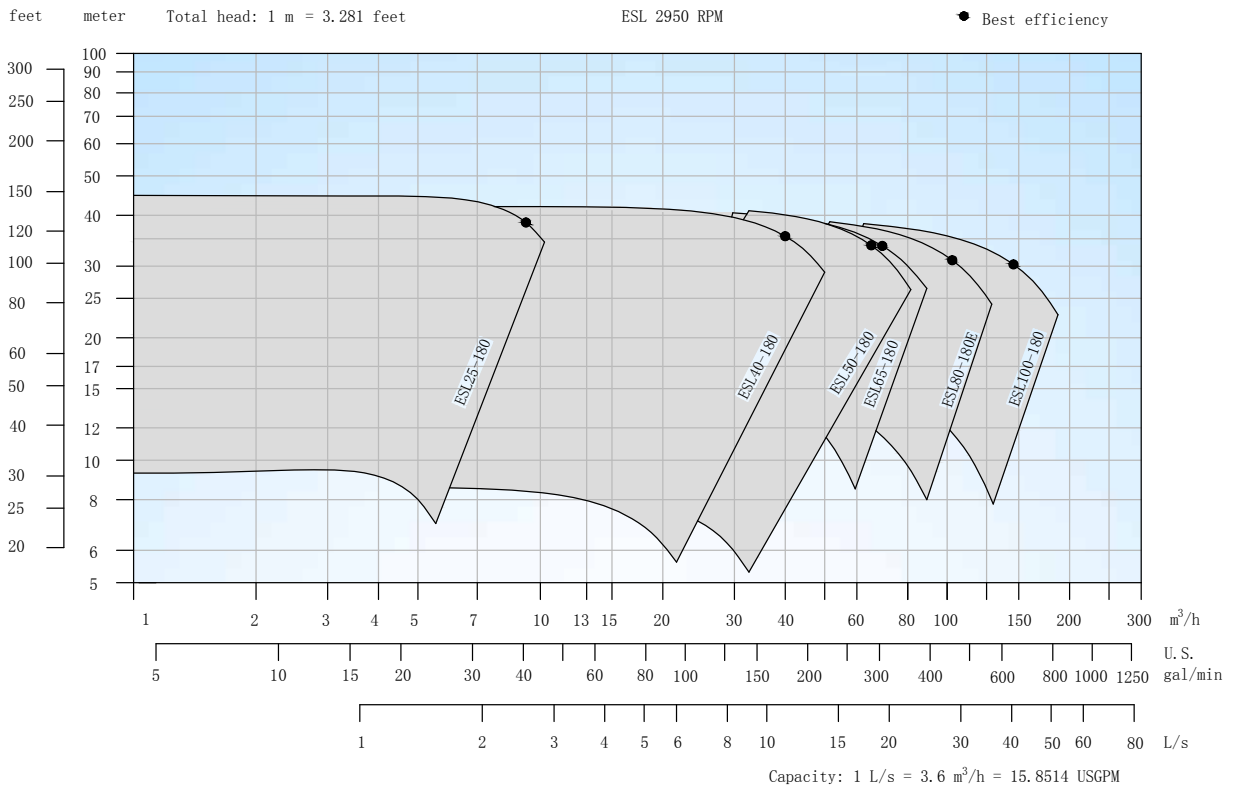
## ESL Centrifugal Pump, 960 rpm, 50 HZ



## ESL Centrifugal Pump, 1450 rpm, 50 HZ

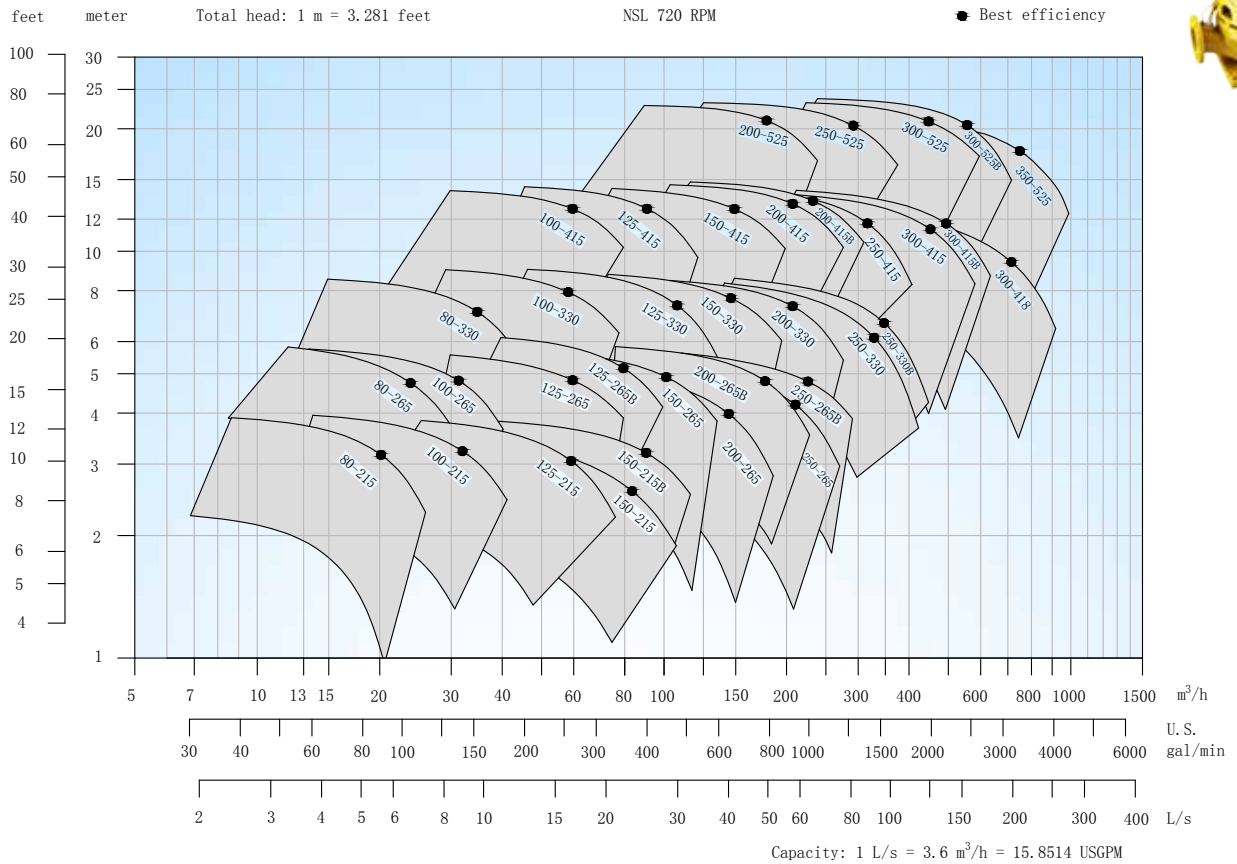


## ESL Centrifugal Pump, 2950 rpm, 50 HZ

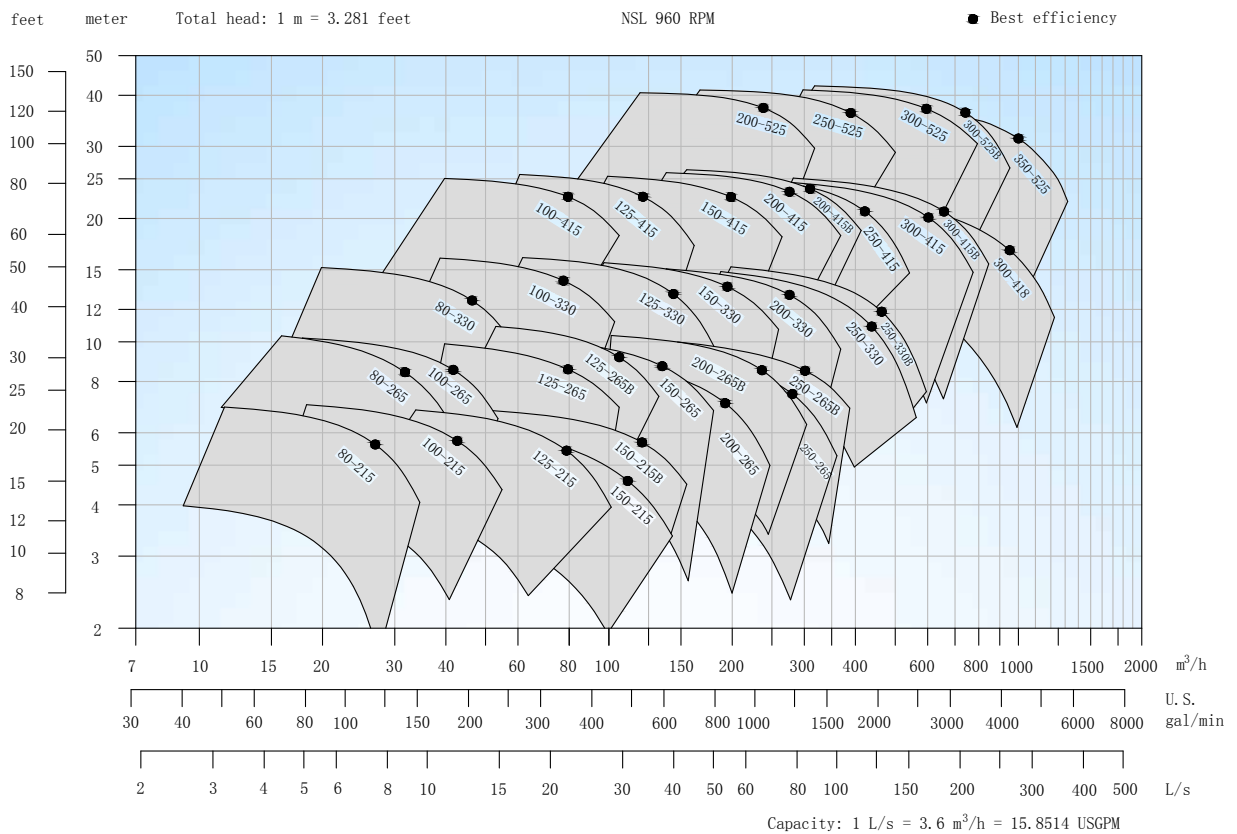




NSL Centrifugal Pump, 720 rpm, **50 HZ**

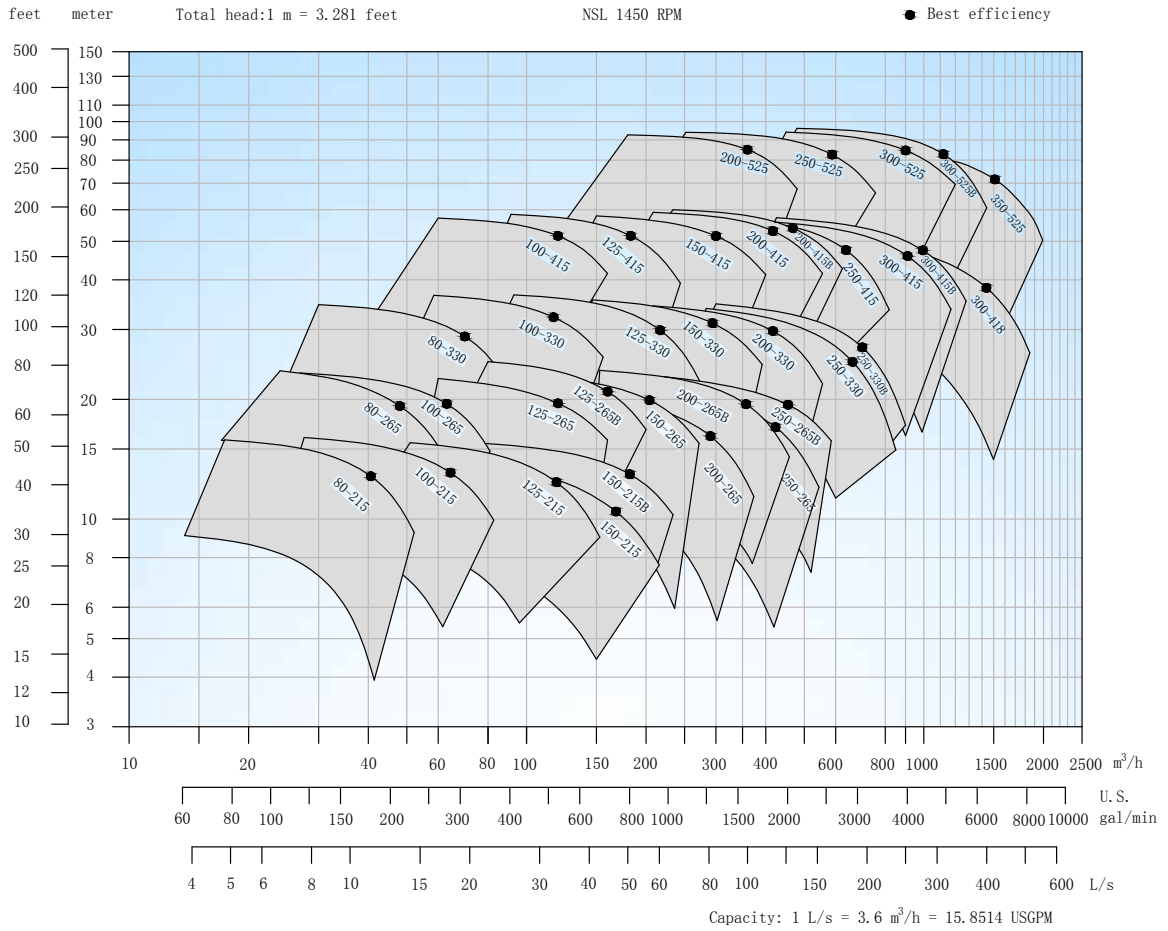


NSL Centrifugal Pump, 960 rpm, **50 HZ**

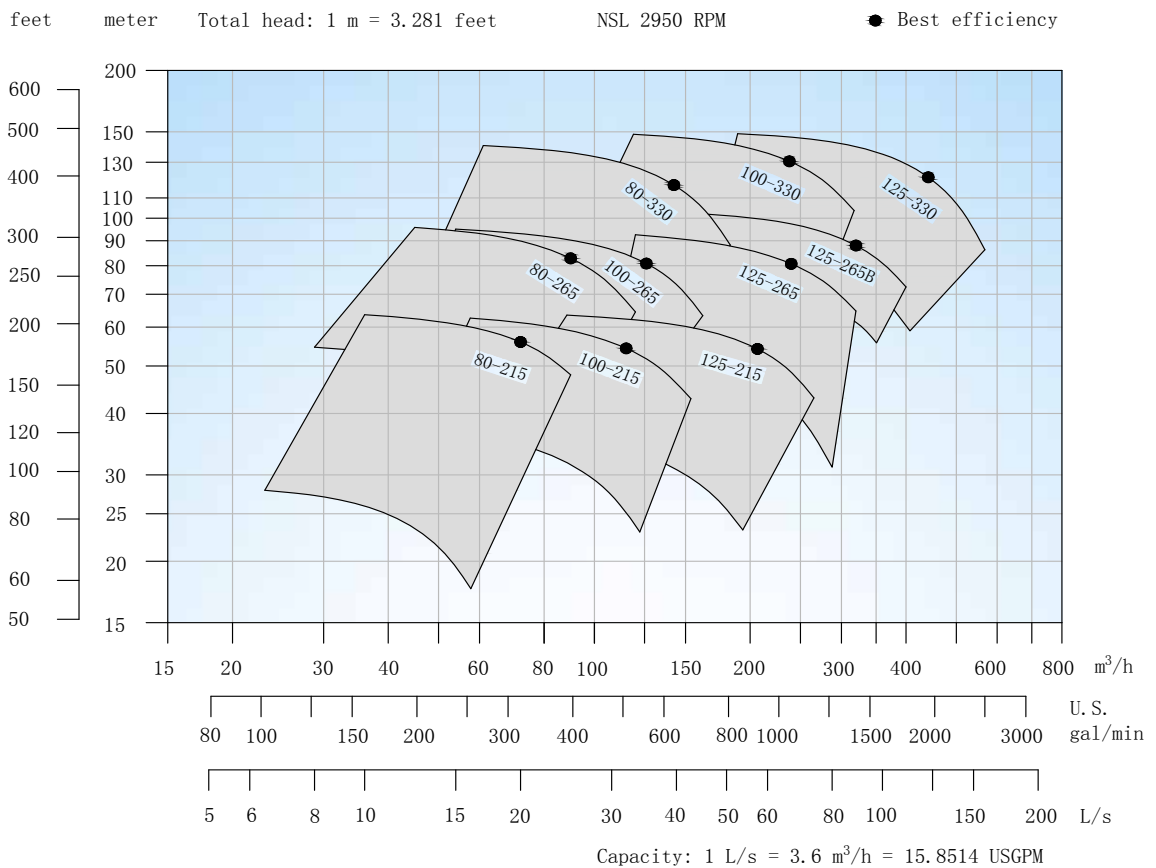




NSL Centrifugal Pump, 1450 rpm, **50 HZ**

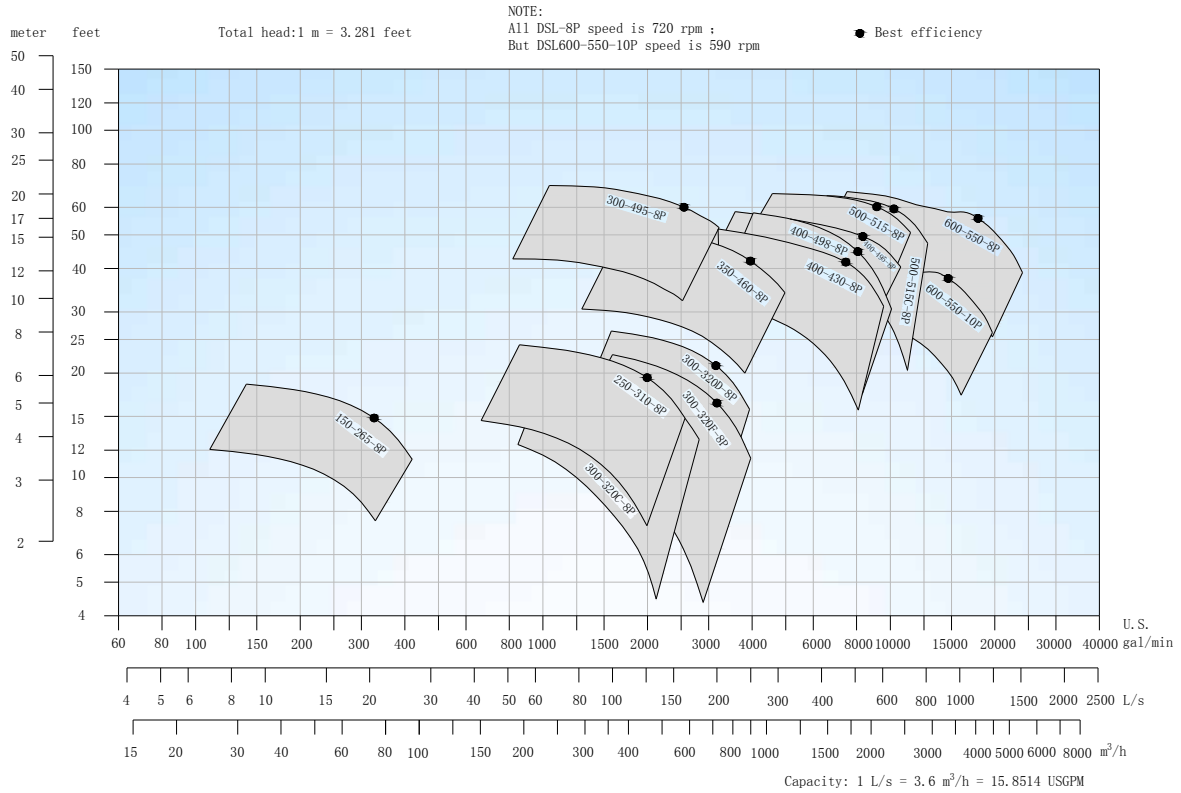


NSL Centrifugal Pump, 2950 rpm, **50 HZ**

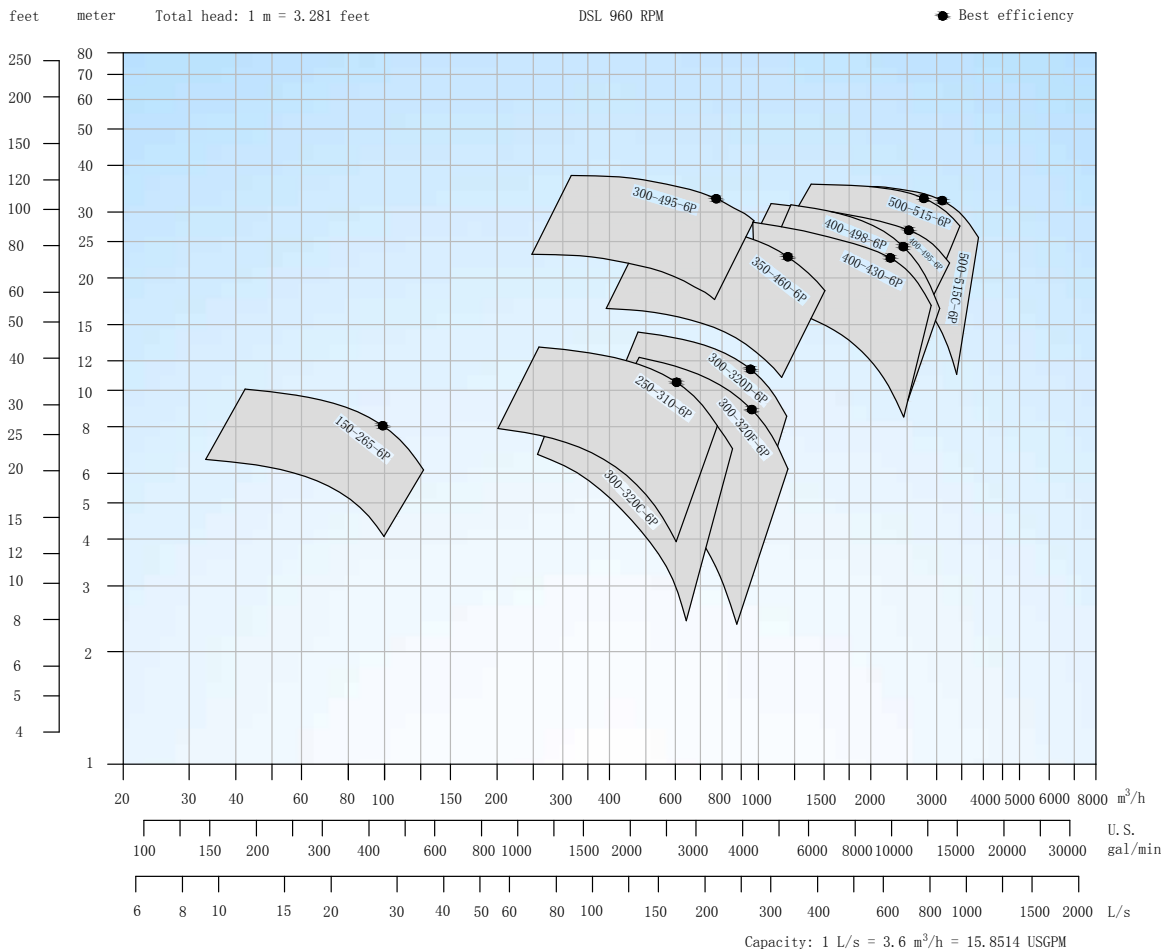




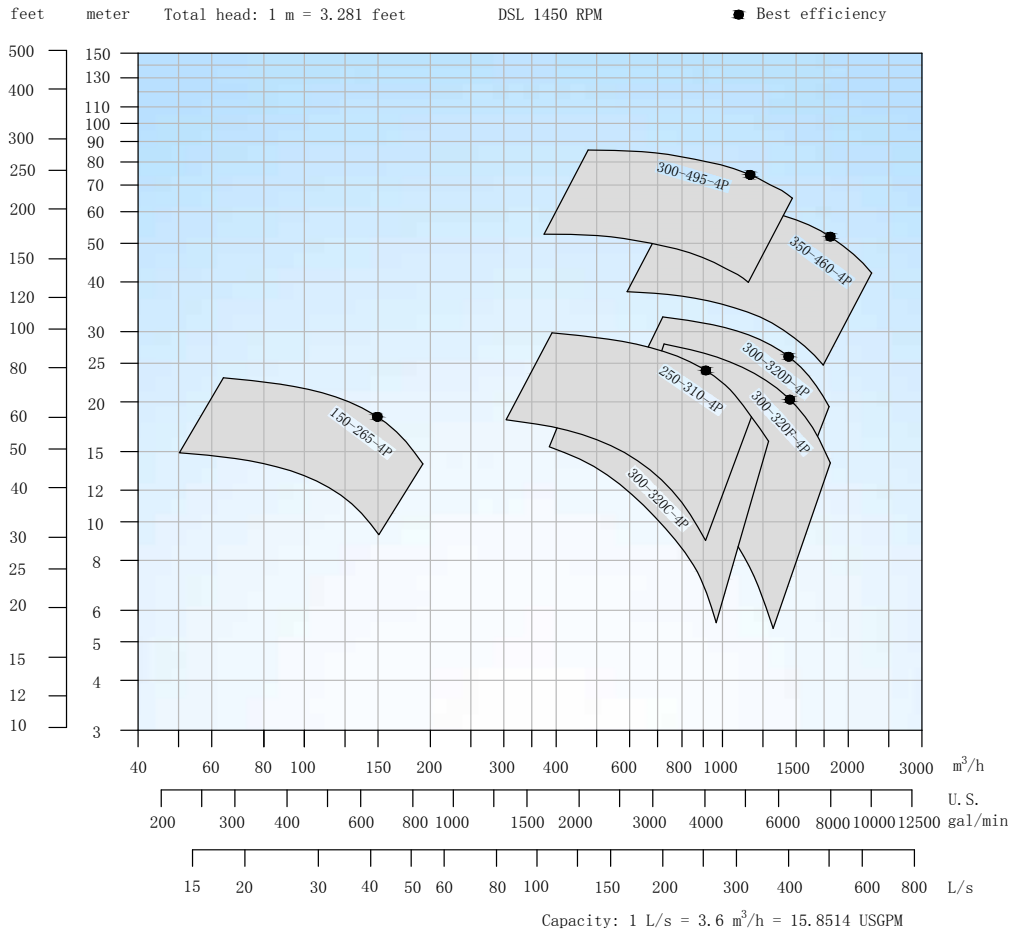
## DSL Centrifugal Pump, 720 rpm, 50 Hz



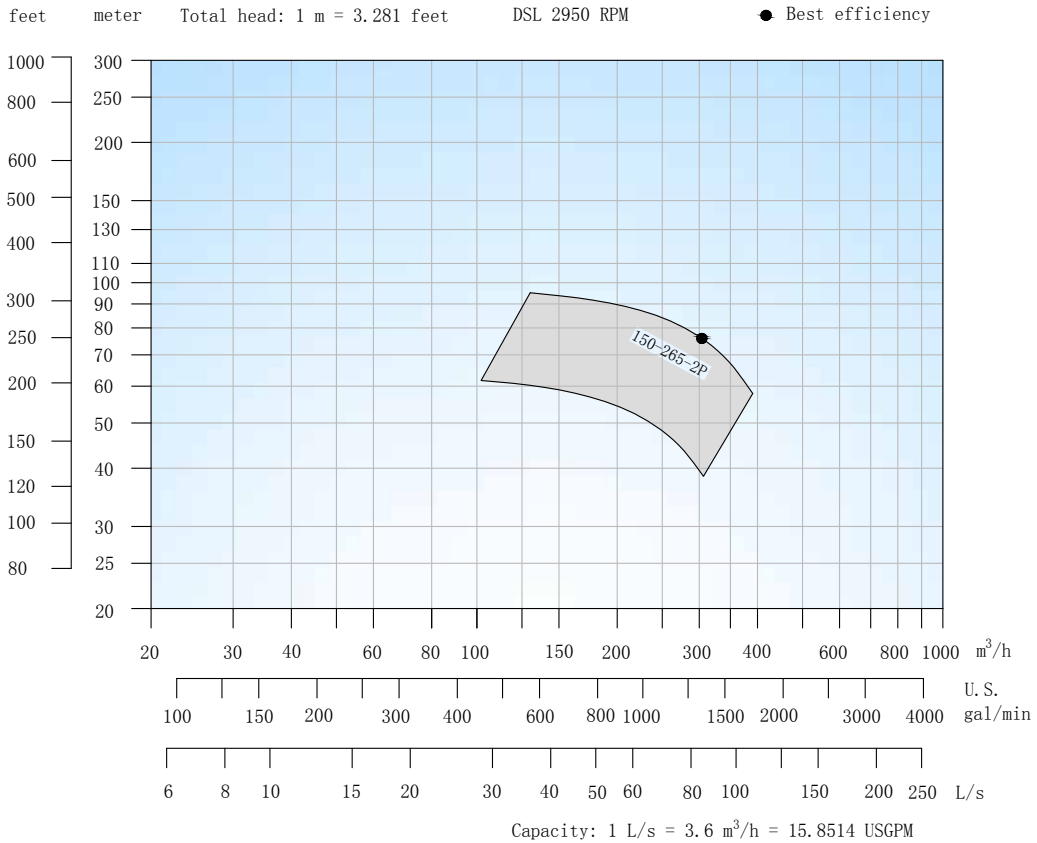
## DSL Centrifugal Pump, 960 rpm, 50 Hz



## DSL Centrifugal Pump, 1450 rpm, 50 HZ

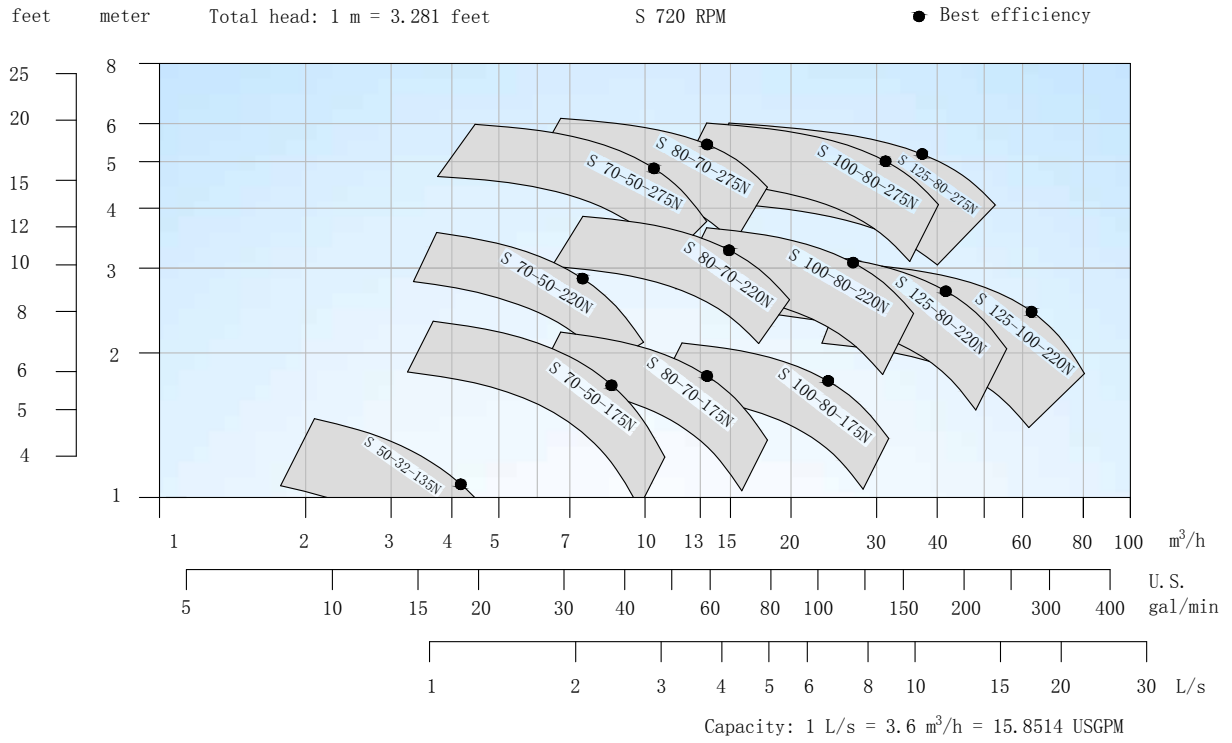


## DSL Centrifugal Pump, 2950 rpm, 50 HZ

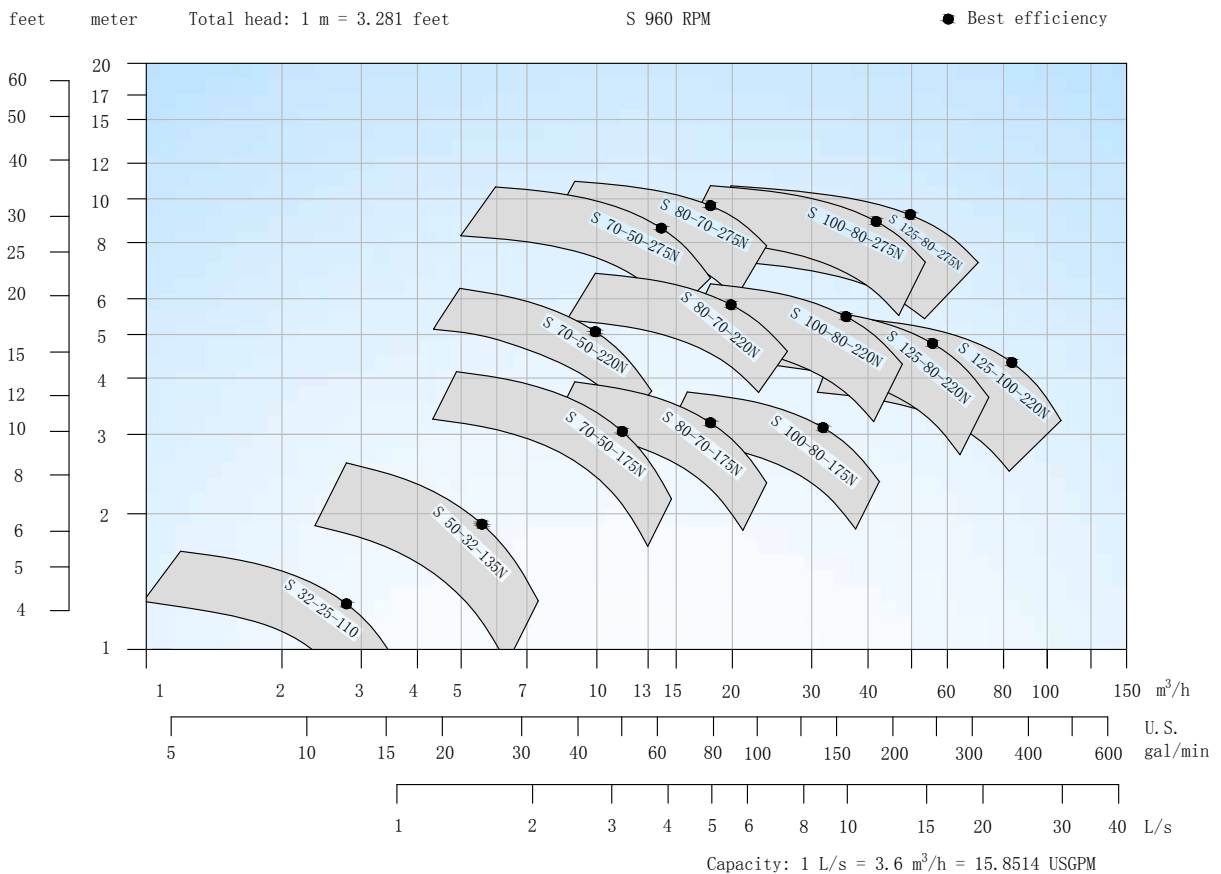




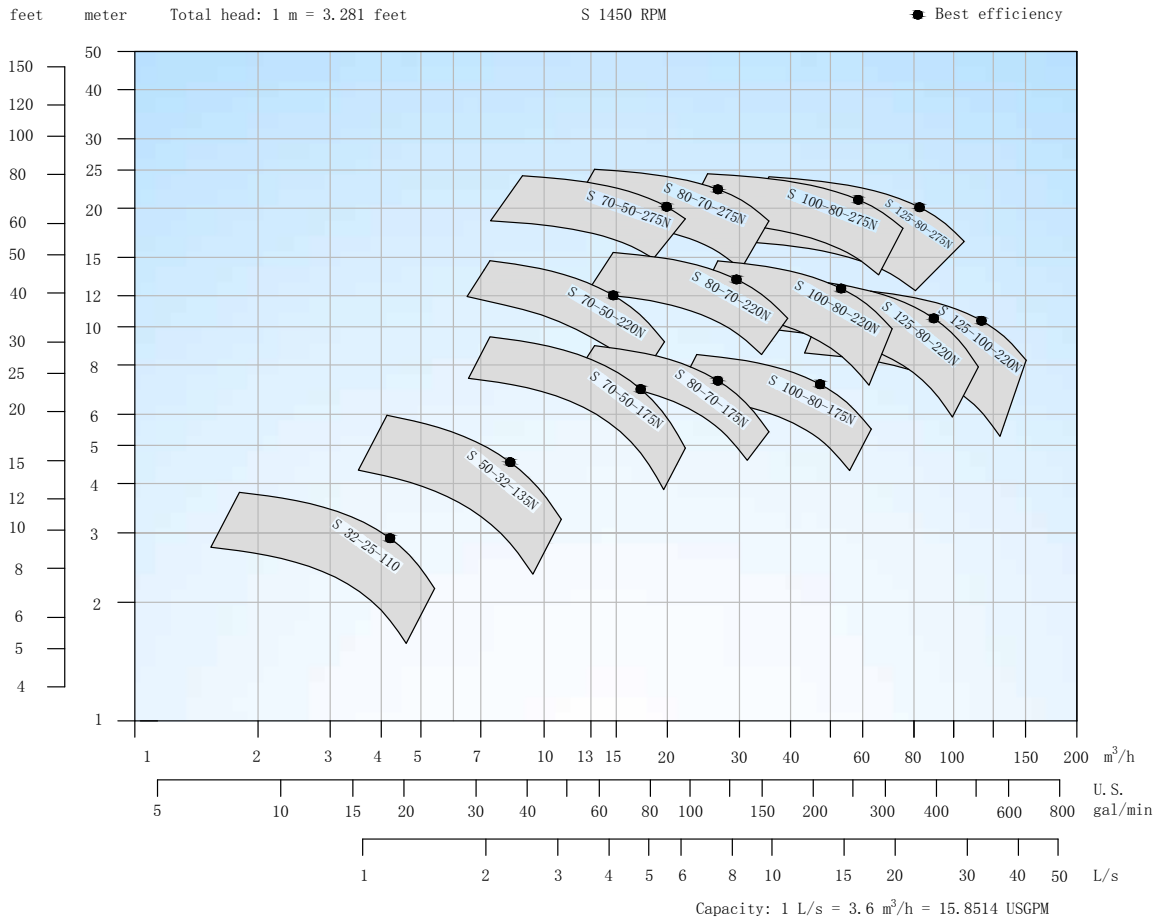
S Centrifugal Pump, 720 rpm, **50 HZ**



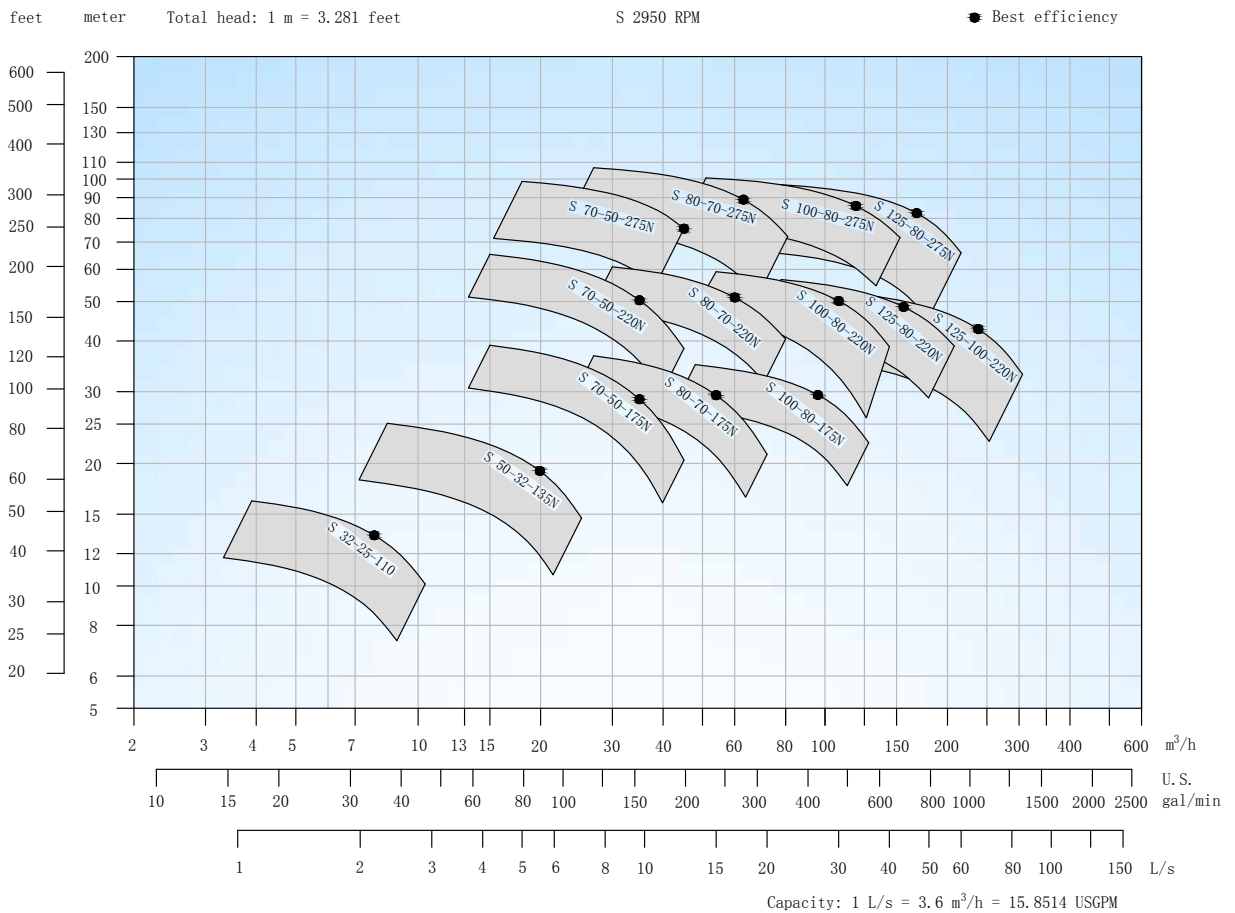
S Centrifugal Pump, 960 rpm, **50 HZ**



S Centrifugal Pump, 1450 rpm, **50 Hz**



S Centrifugal Pump, 2950 rpm, **50 Hz**

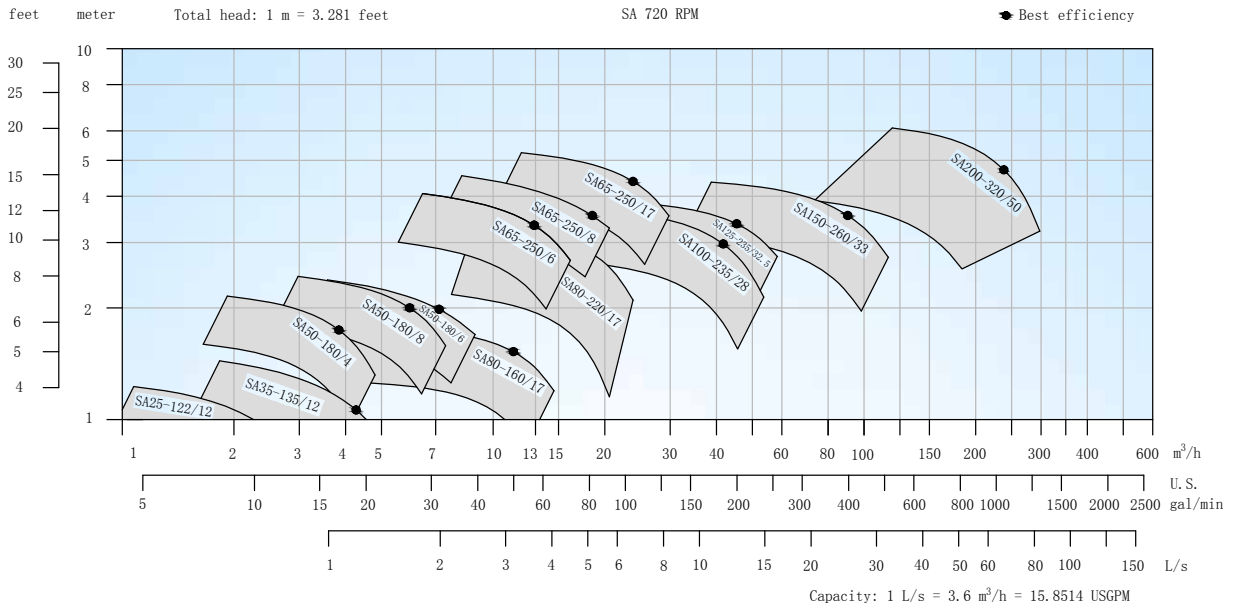




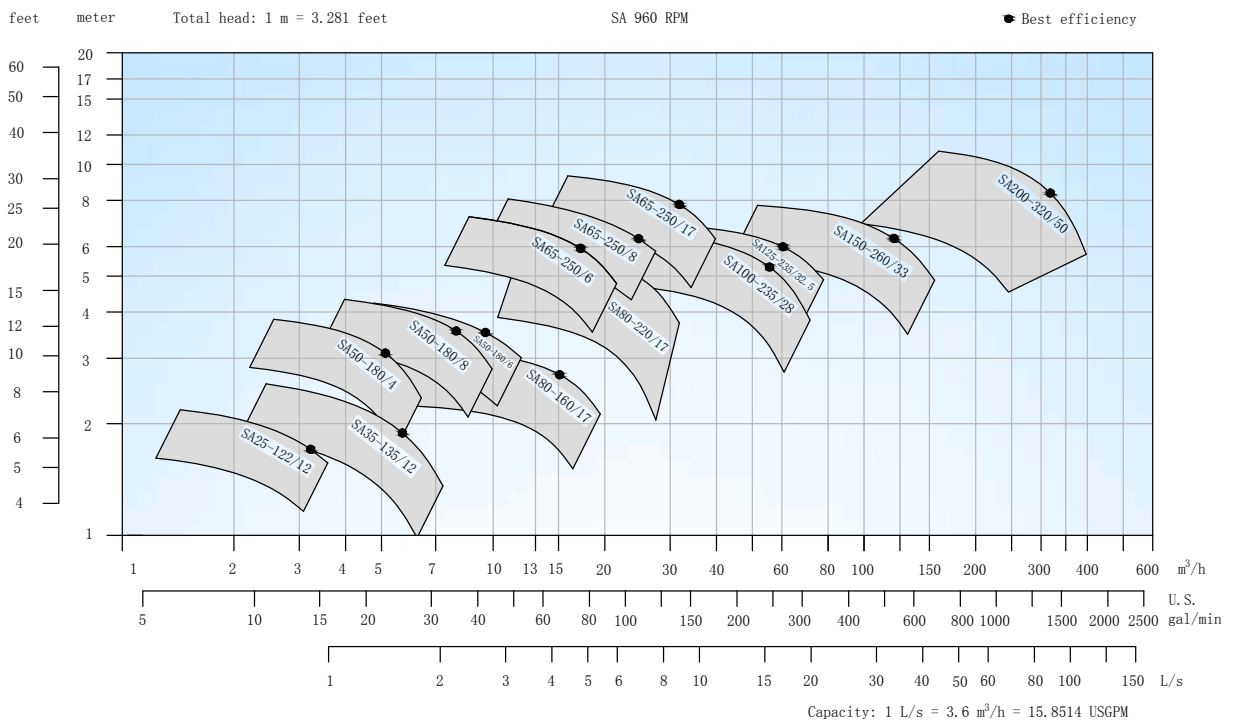
# DESMI Centrifugal Pumps - SA



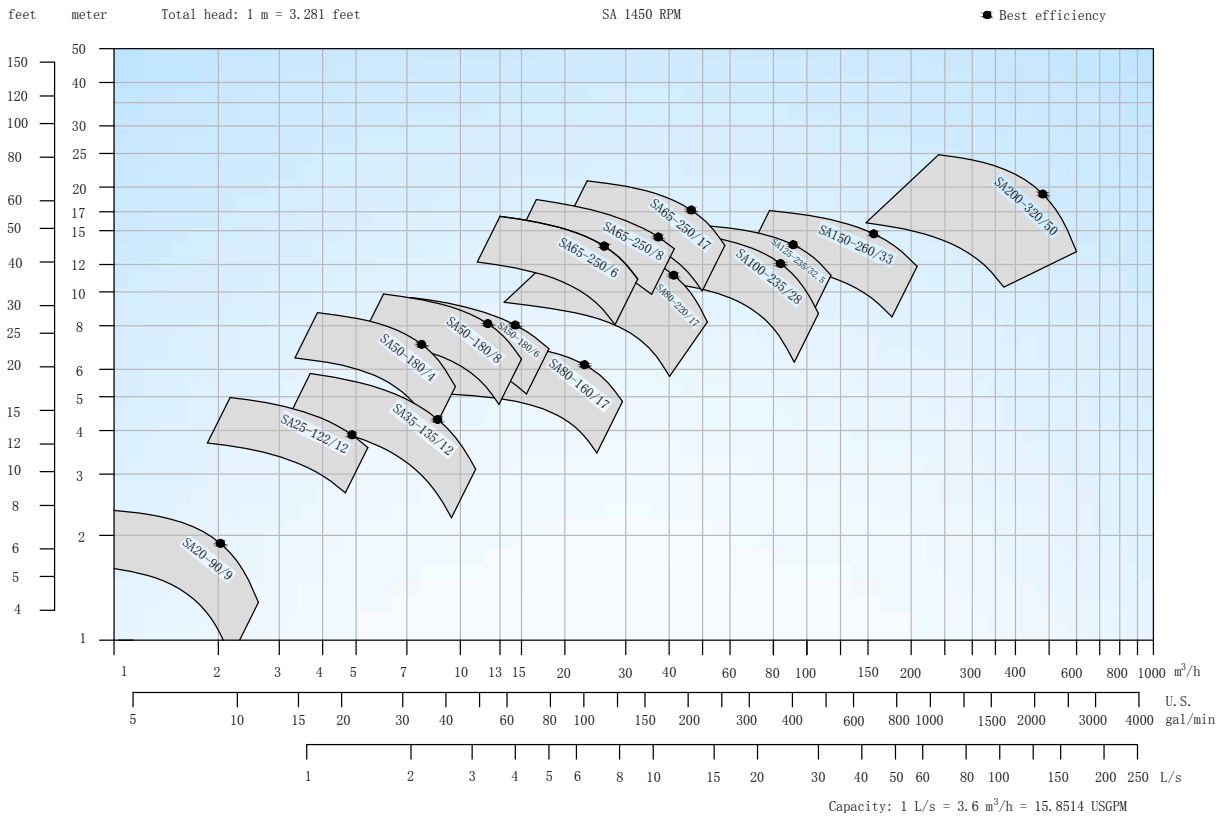
SA Centrifugal Pump, 720 rpm, **50 HZ**



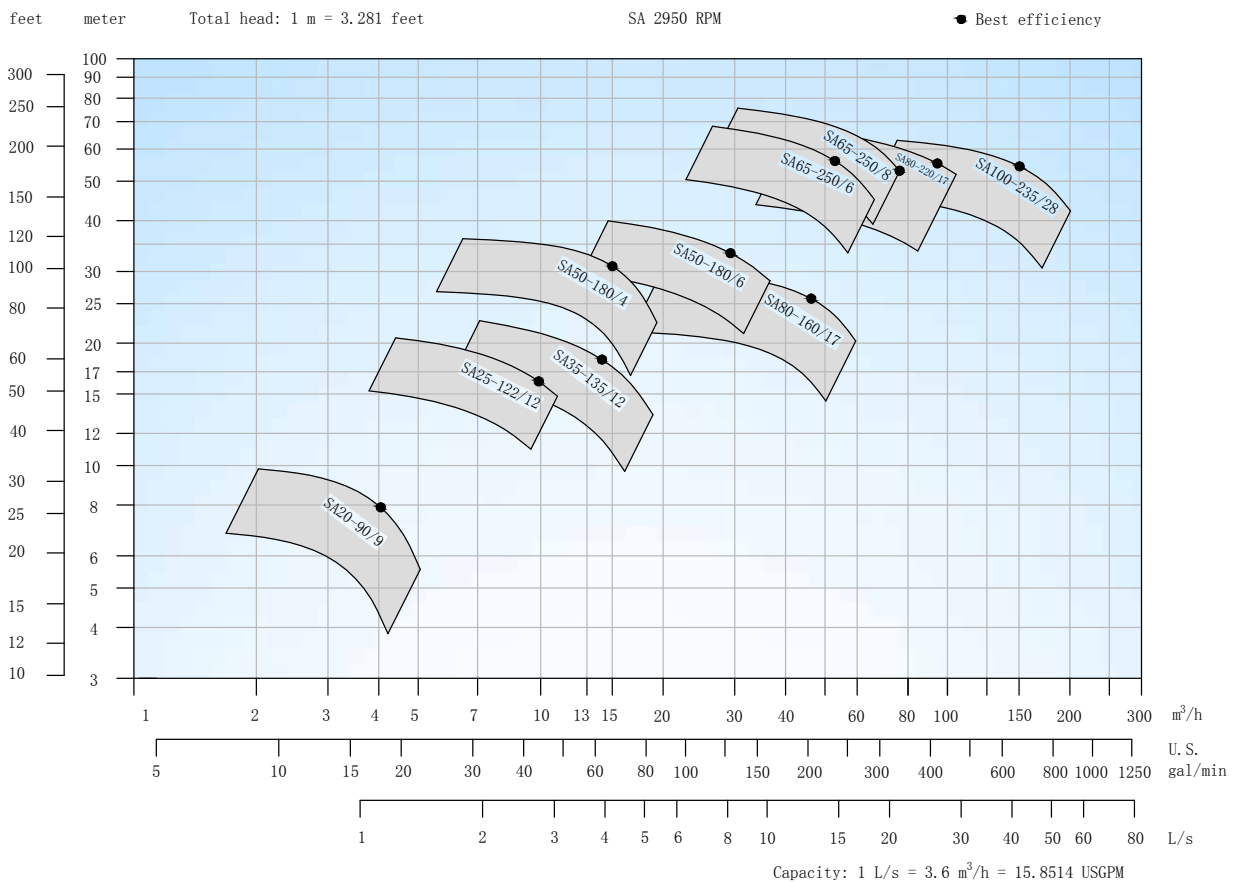
SA Centrifugal Pump, 960 rpm, **50 HZ**



## SA Centrifugal Pump, 1450 rpm, 50 Hz



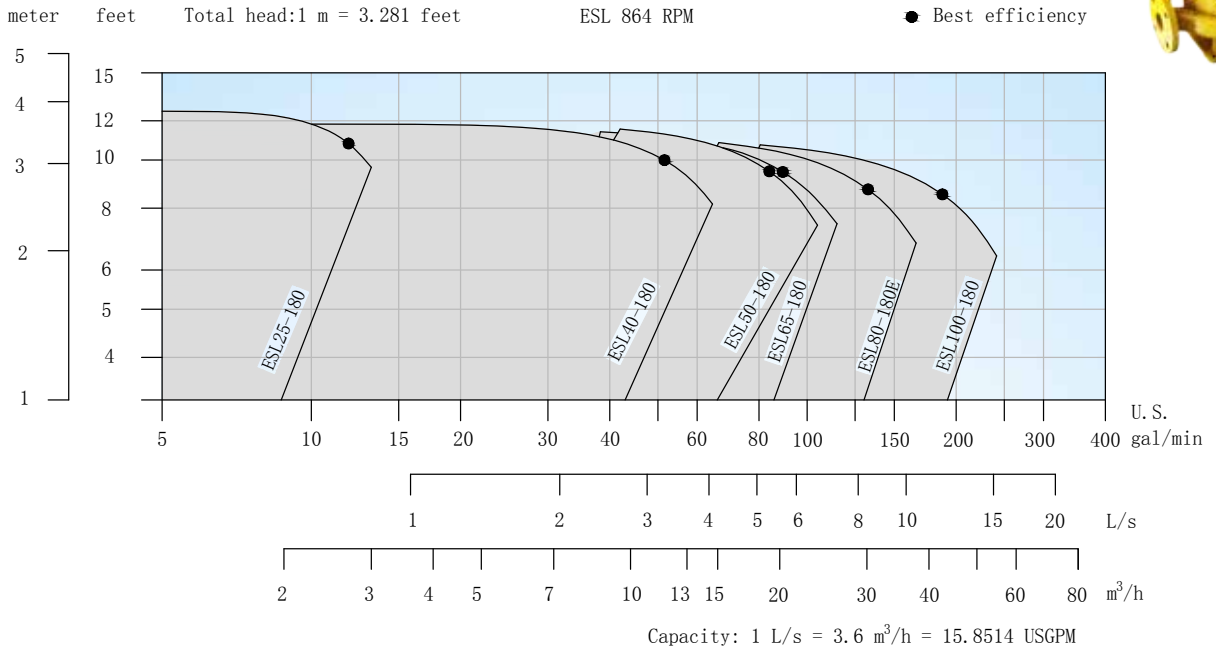
## SA Centrifugal Pump, 2950 rpm, 50 Hz



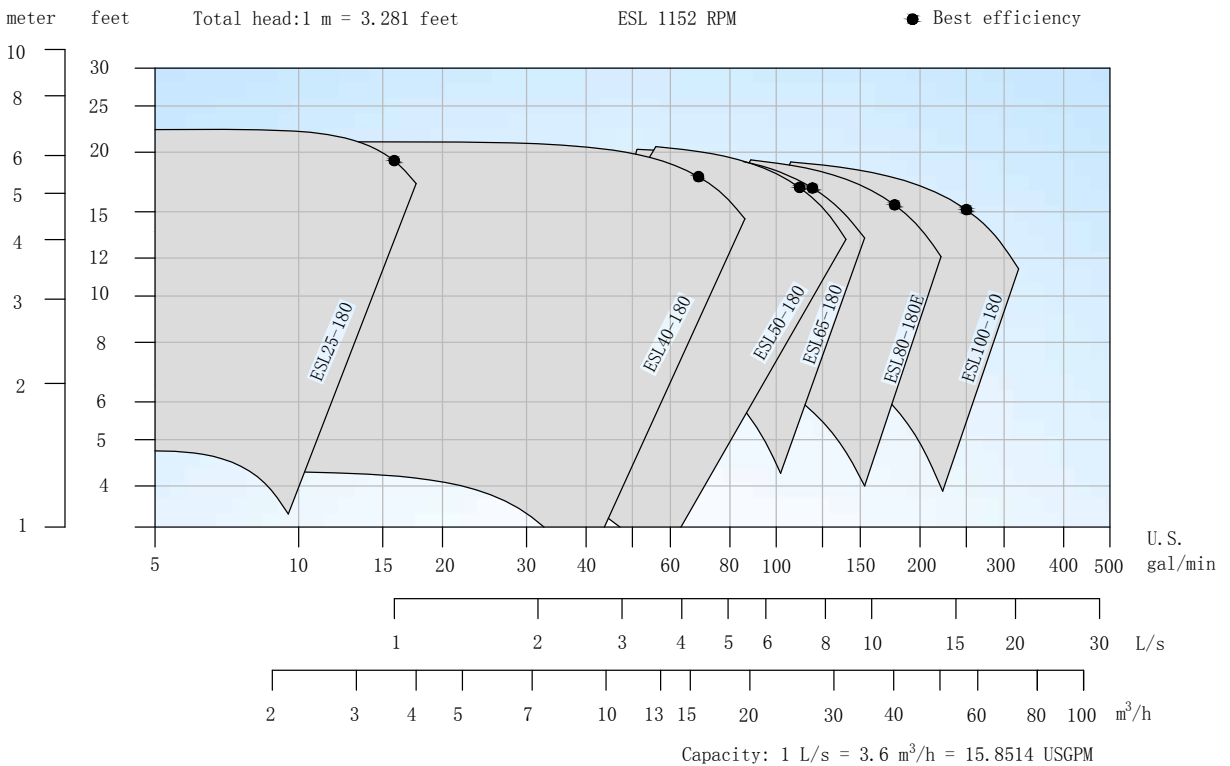
# DESMI Centrifugal Pumps - ESL



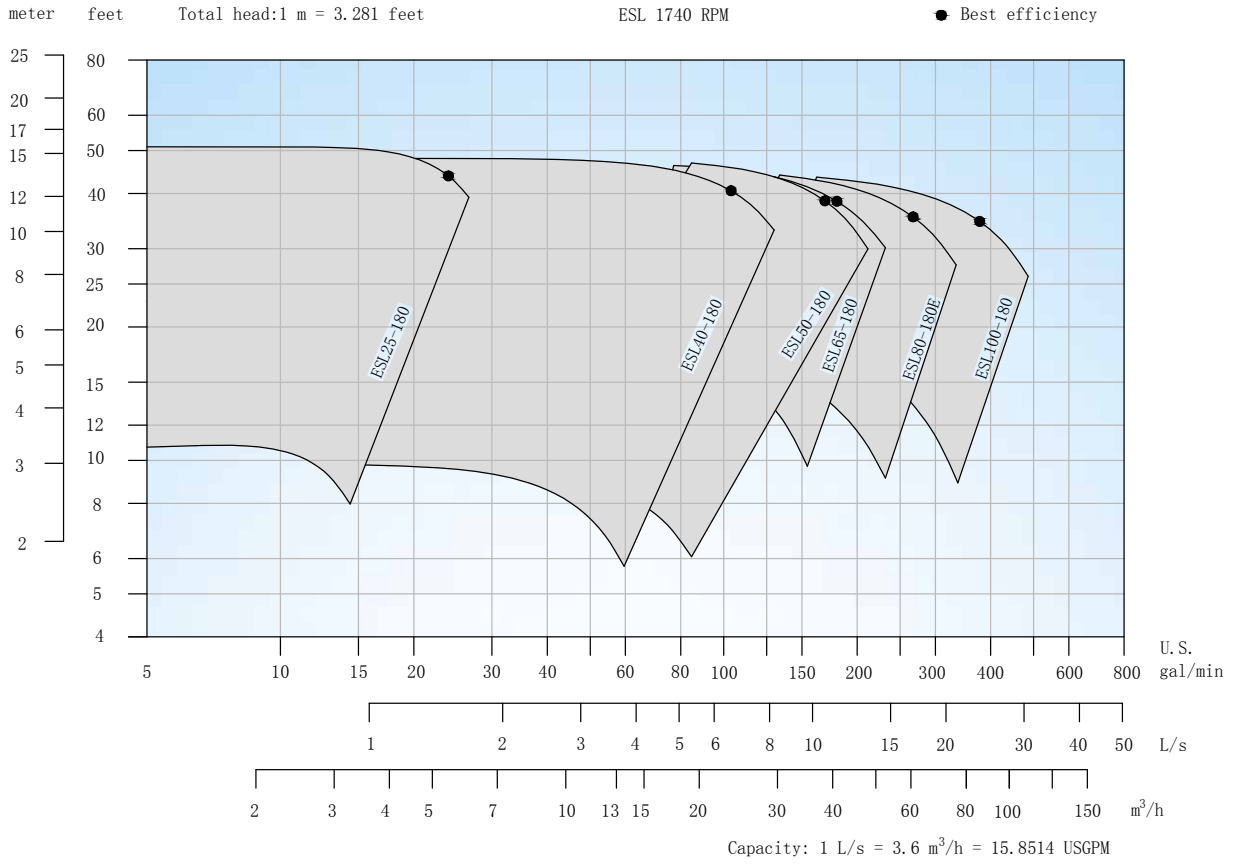
ESL Centrifugal Pump, 864 rpm, **60 HZ**



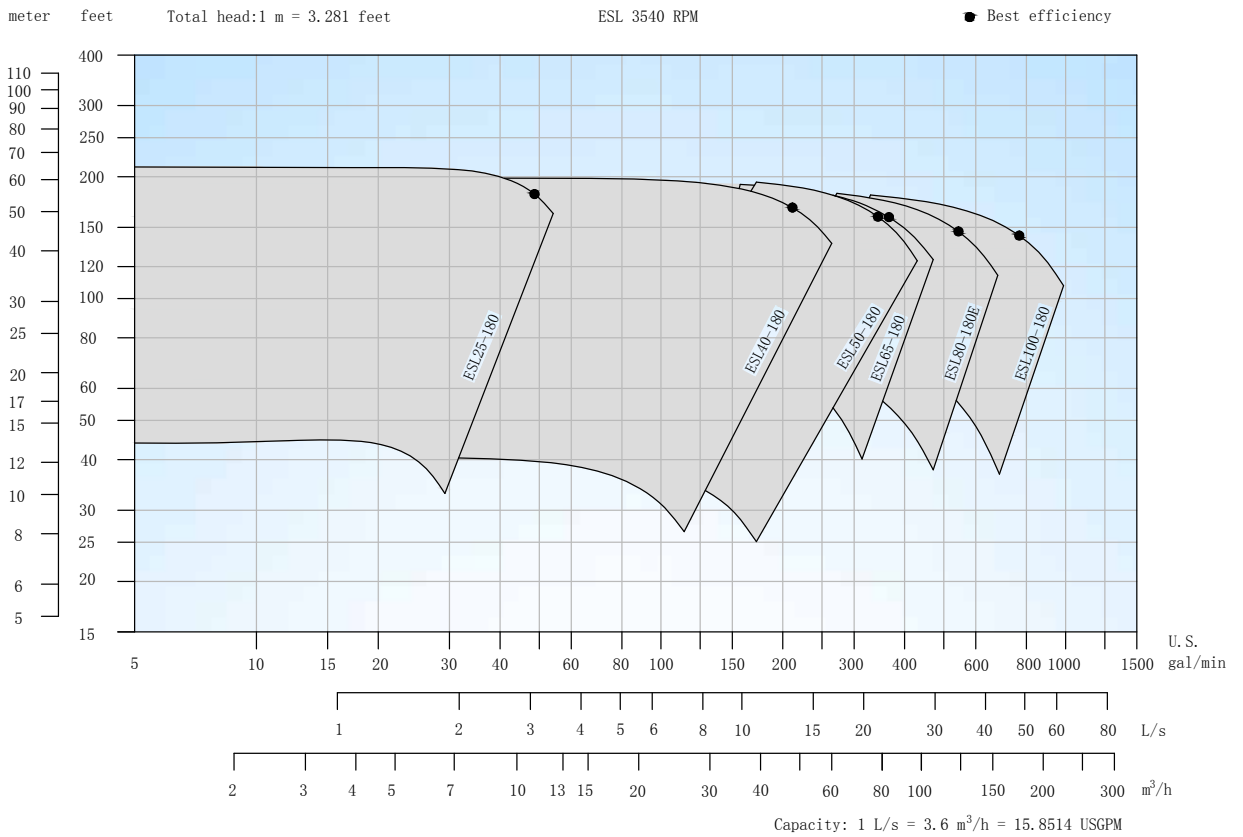
ESL Centrifugal Pump, 1152 rpm, **60 HZ**



## ESL Centrifugal Pump, 1740 rpm, 60 HZ

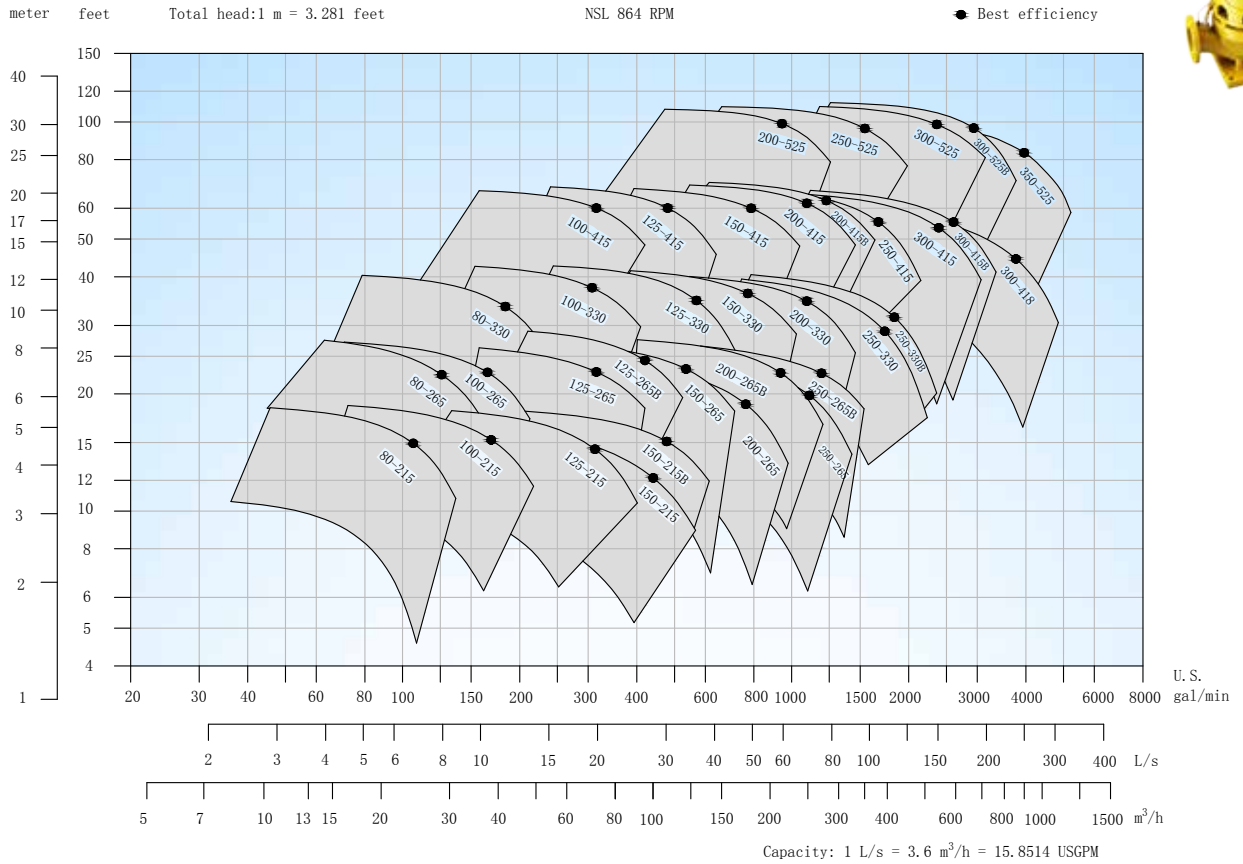


## ESL Centrifugal Pump, 3450 rpm, 60 HZ

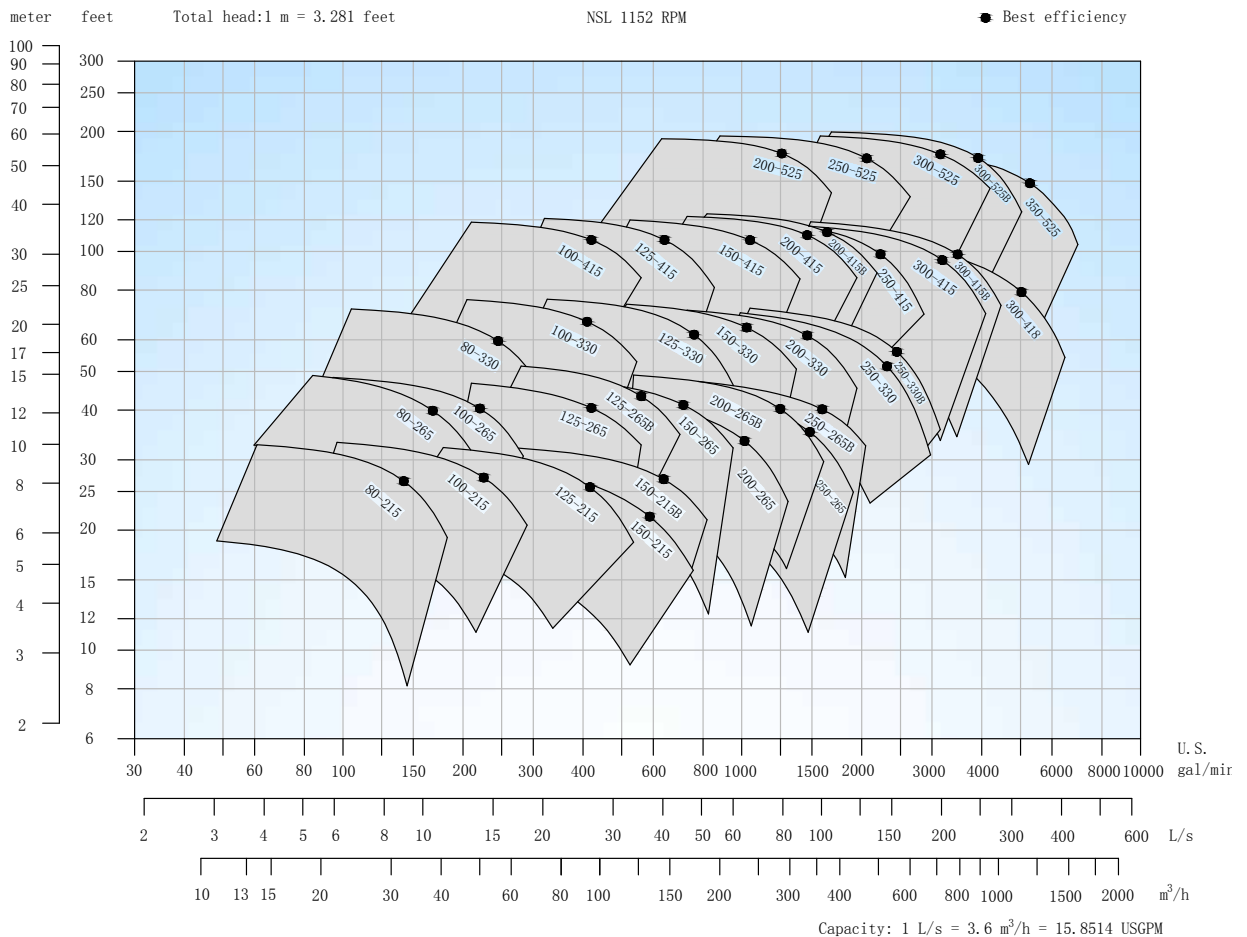




NSL Centrifugal Pump, 864 rpm, **60 HZ**

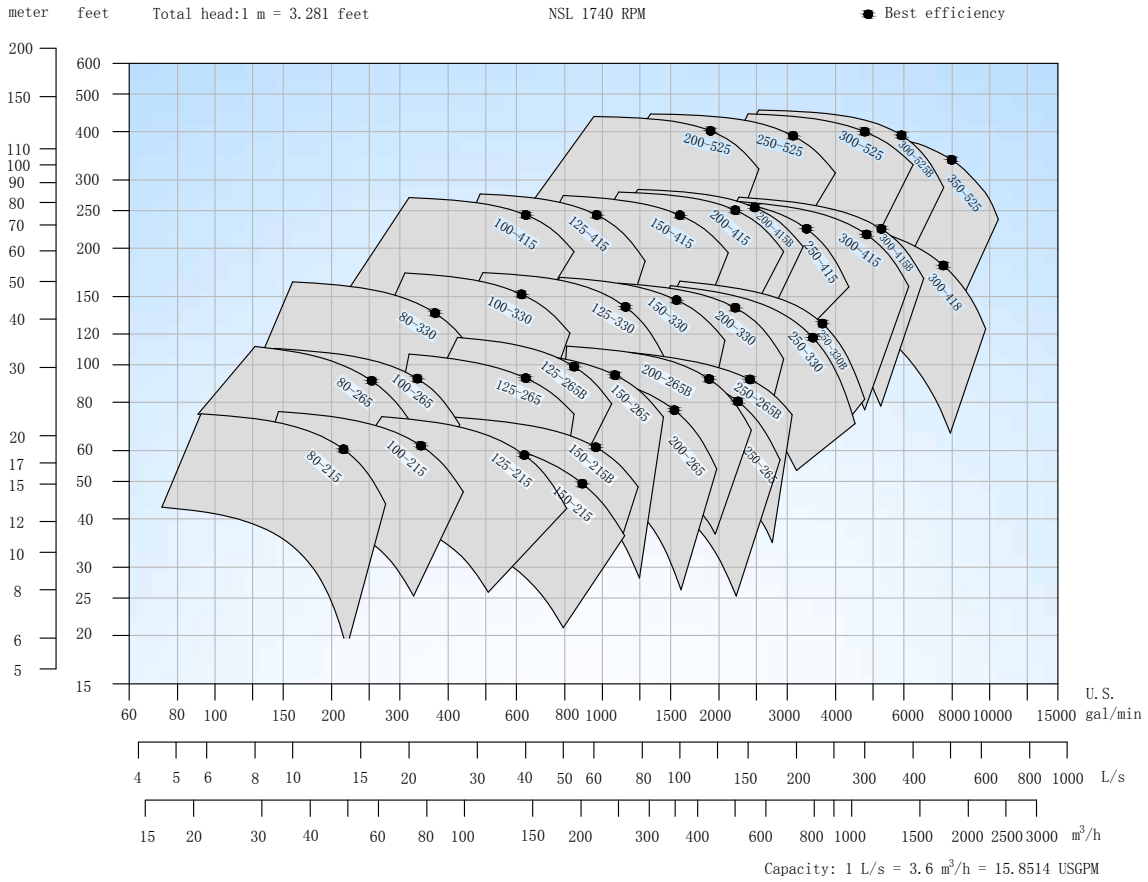


NSL Centrifugal Pump, 1152 rpm, **60 HZ**

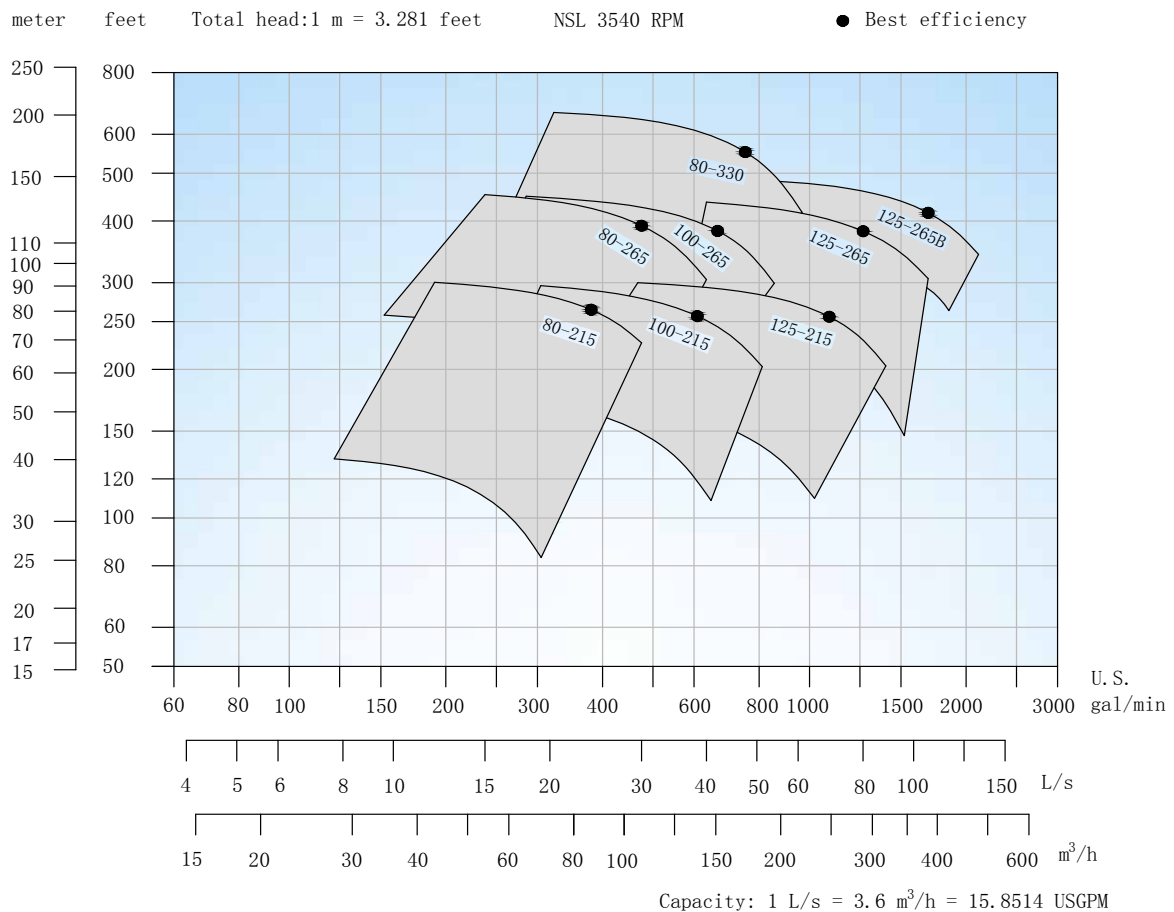




## NSL Centrifugal Pump, 1740 rpm, 60 HZ



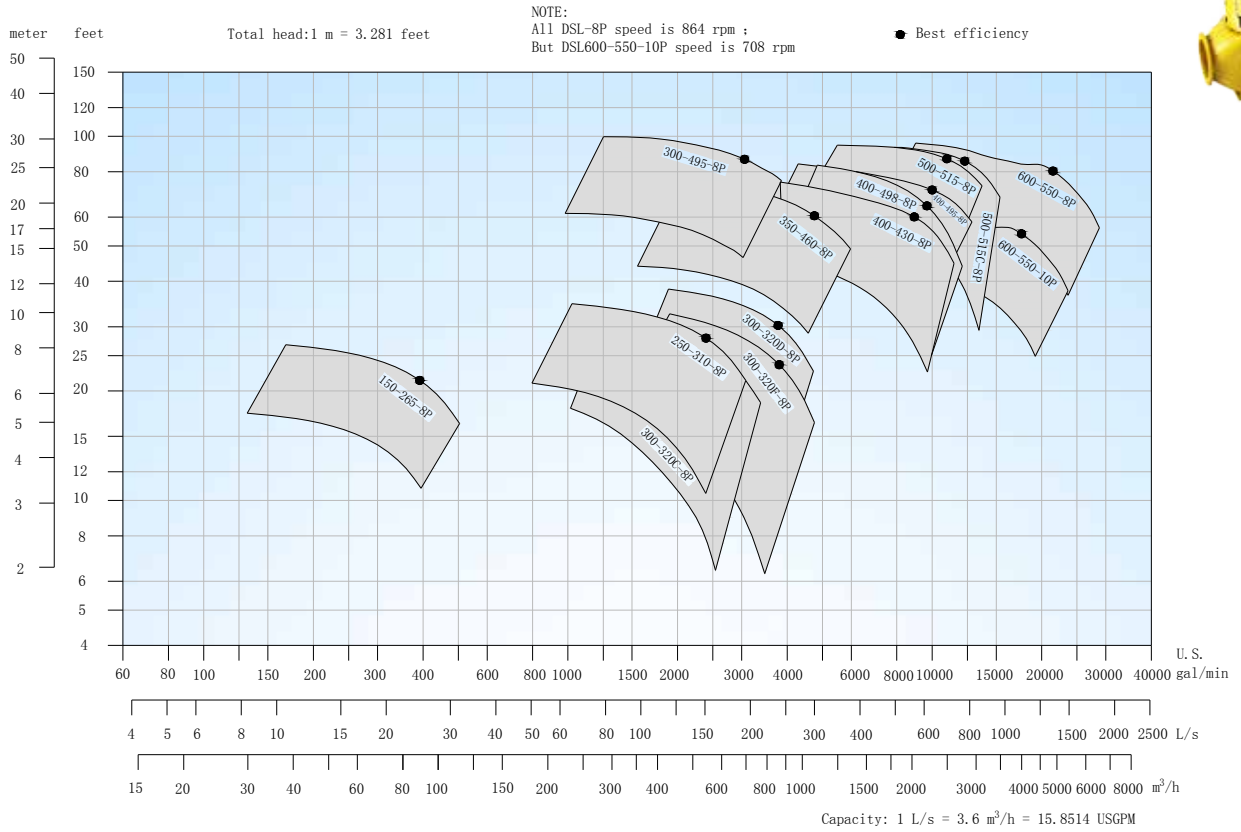
## NSL Centrifugal Pump, 3450 rpm, 60 HZ



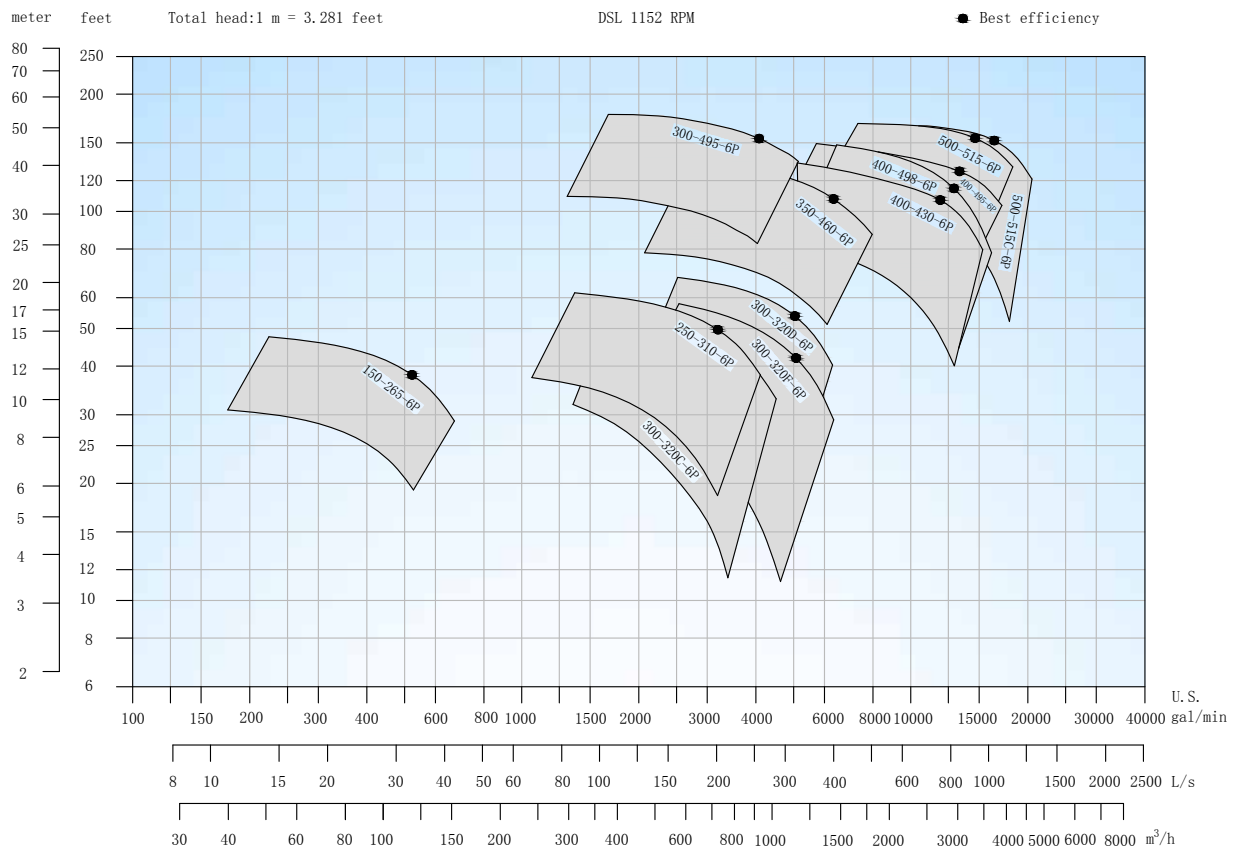
# DESMI Centrifugal Pumps - DSL



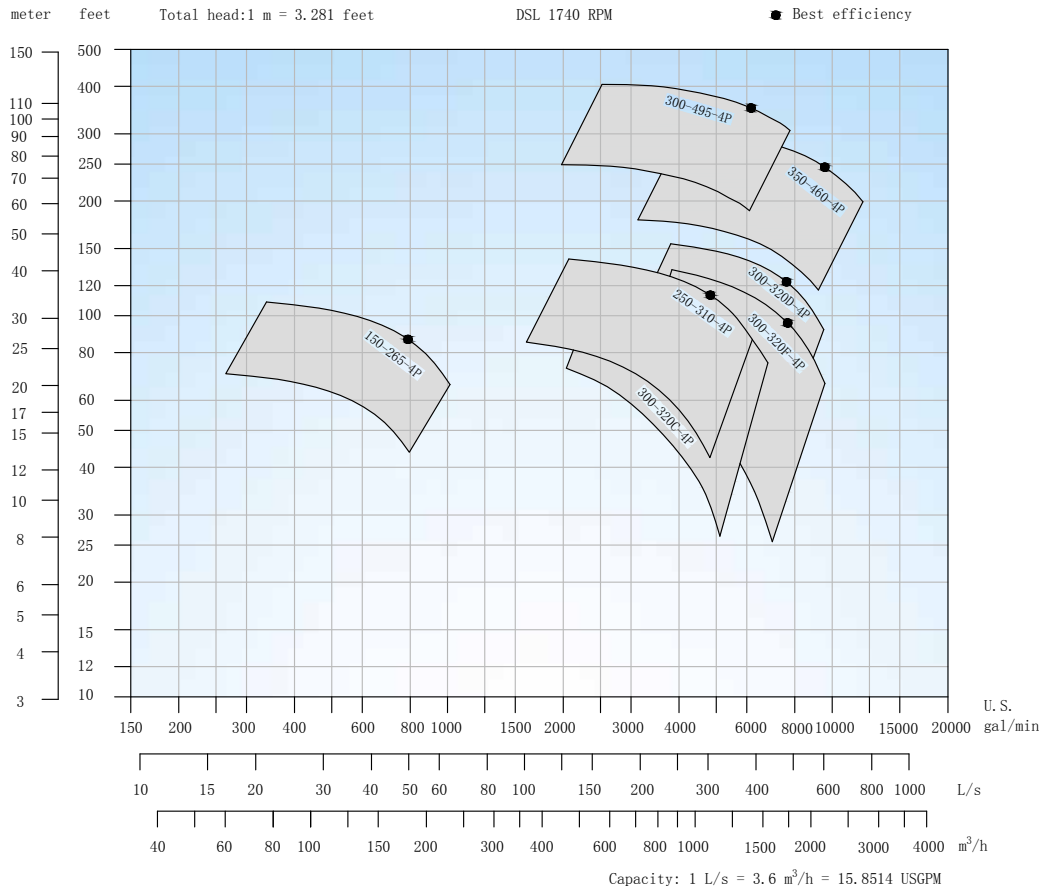
## DSL Centrifugal Pump, 864 rpm, 60 HZ



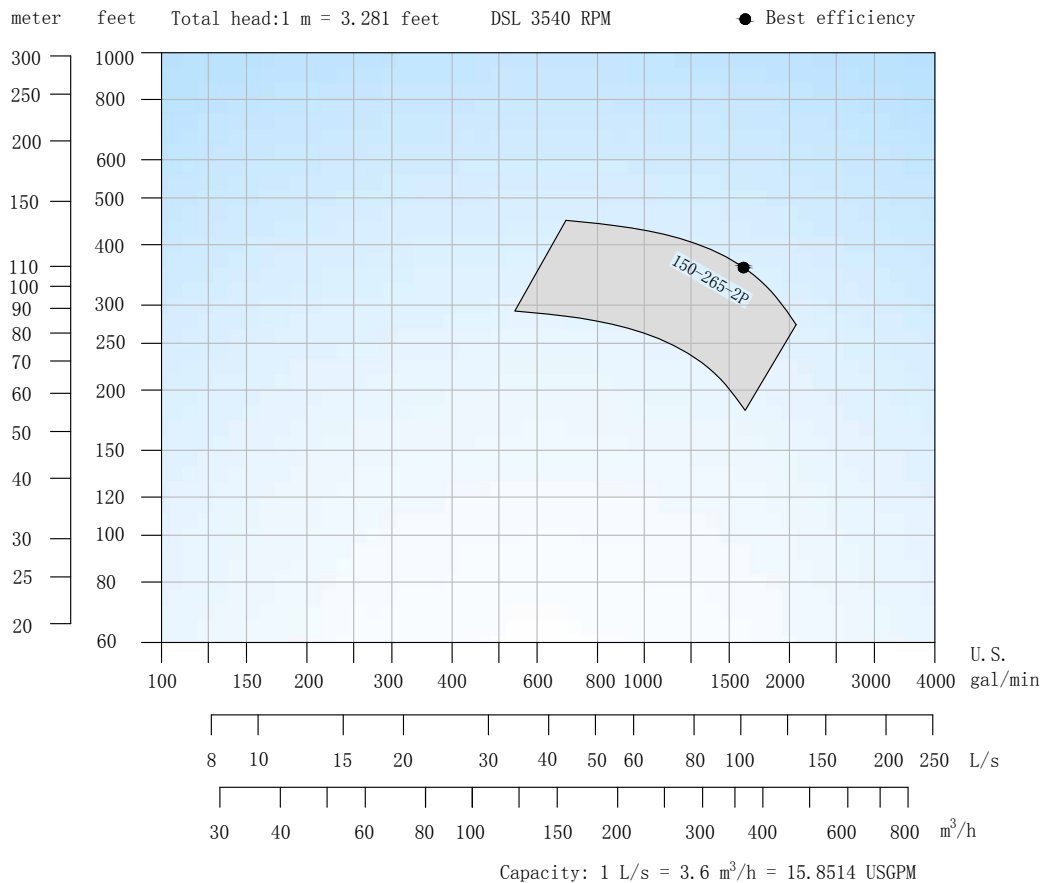
## DSL Centrifugal Pump, 1152 rpm, 60 HZ



## DSL Centrifugal Pump, 1740 rpm, 60 HZ

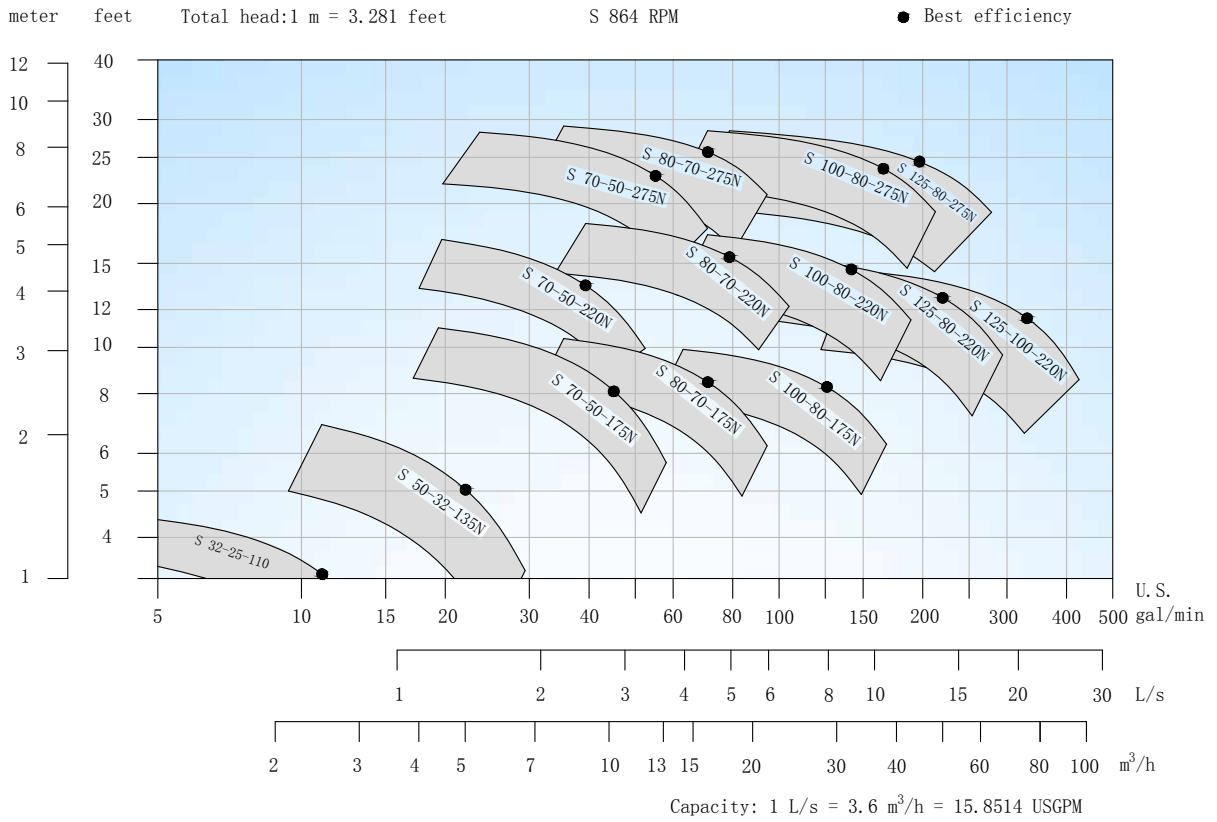


## DSL Centrifugal Pump, 3450 rpm, 60 HZ

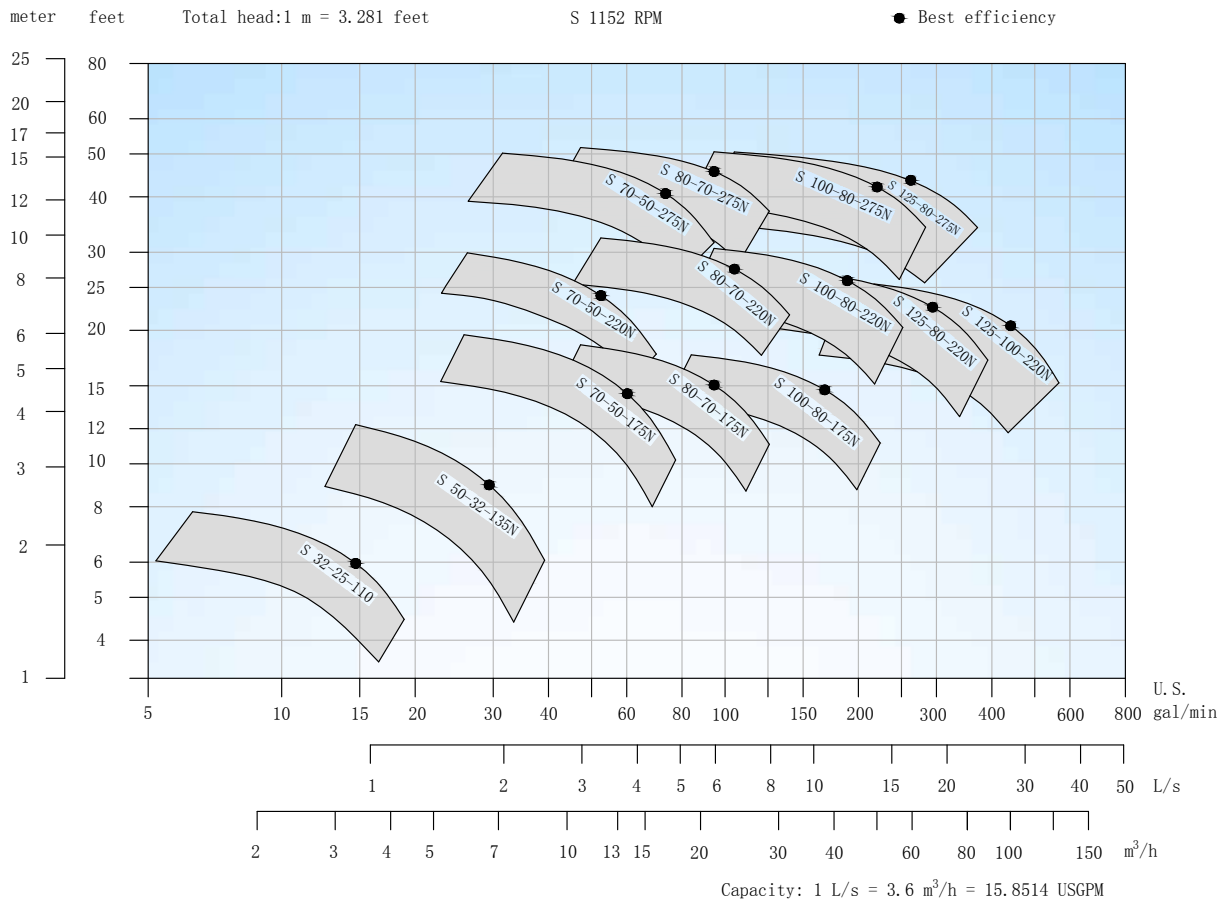




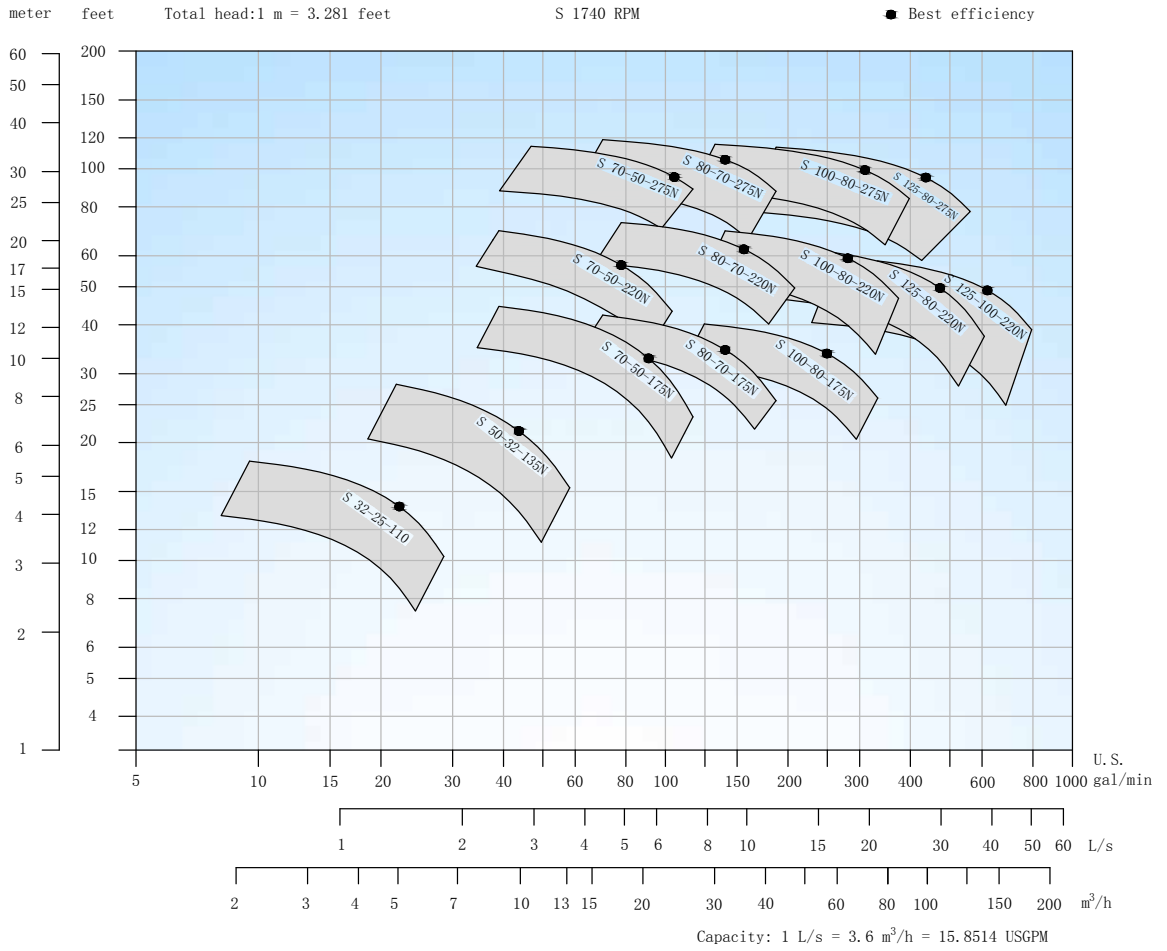
S Centrifugal Pump, 864 rpm, **60 HZ**



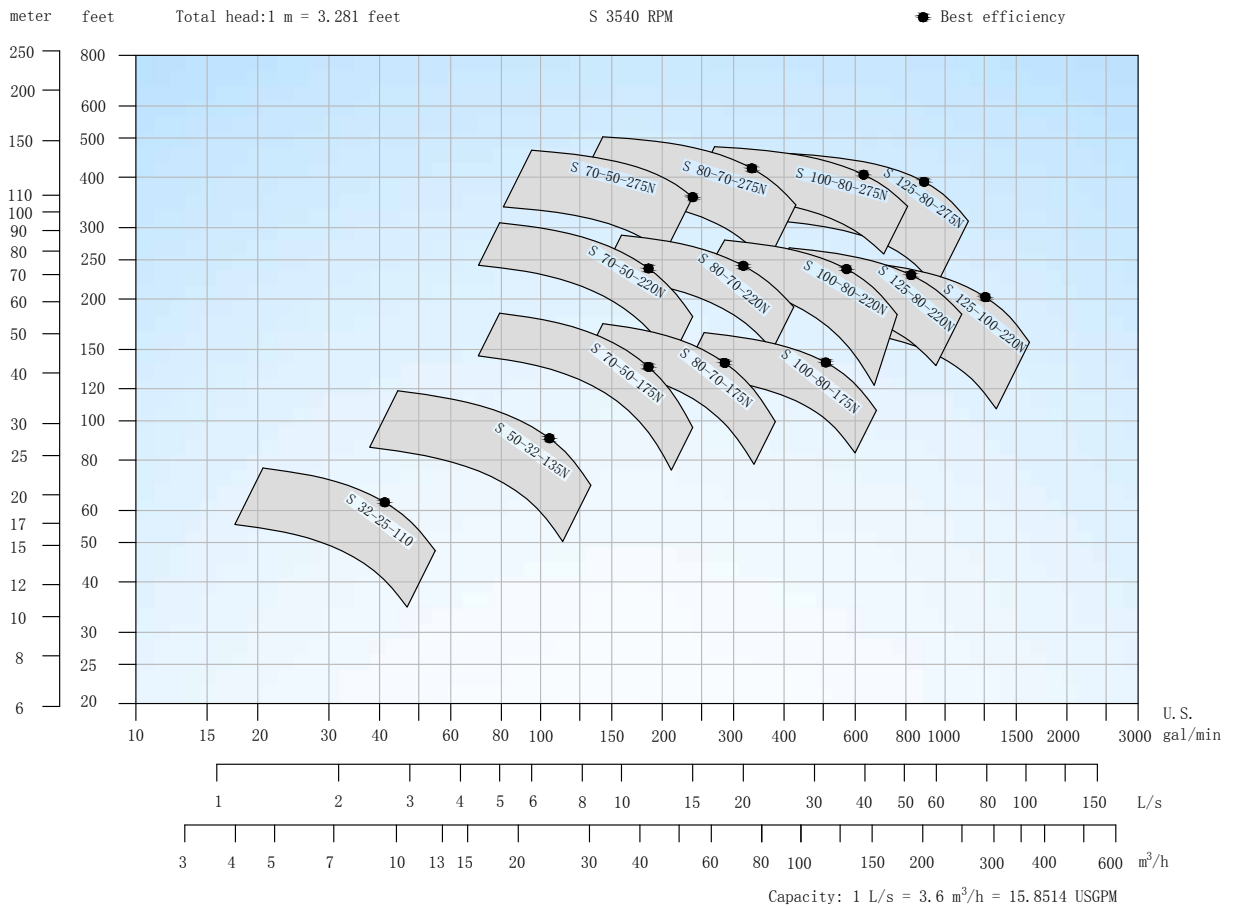
S Centrifugal Pump, 1152 rpm, **60 HZ**



## S Centrifugal Pump, 1740 rpm, 60 Hz



## S Centrifugal Pump, 3450 rpm, 60 Hz

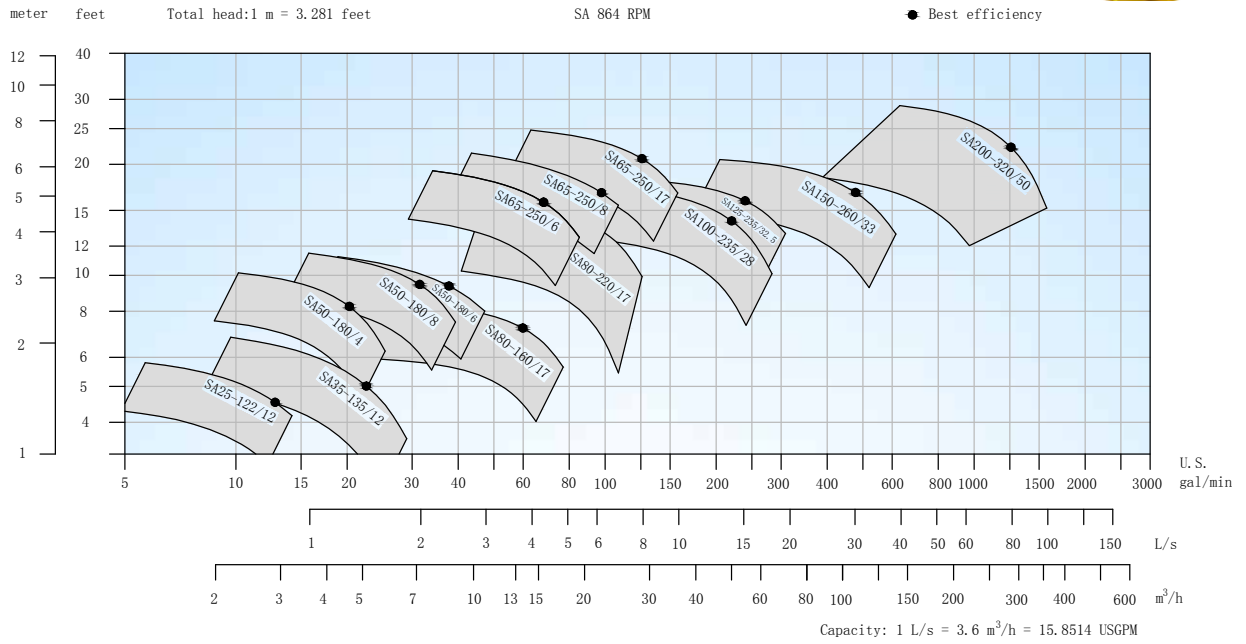




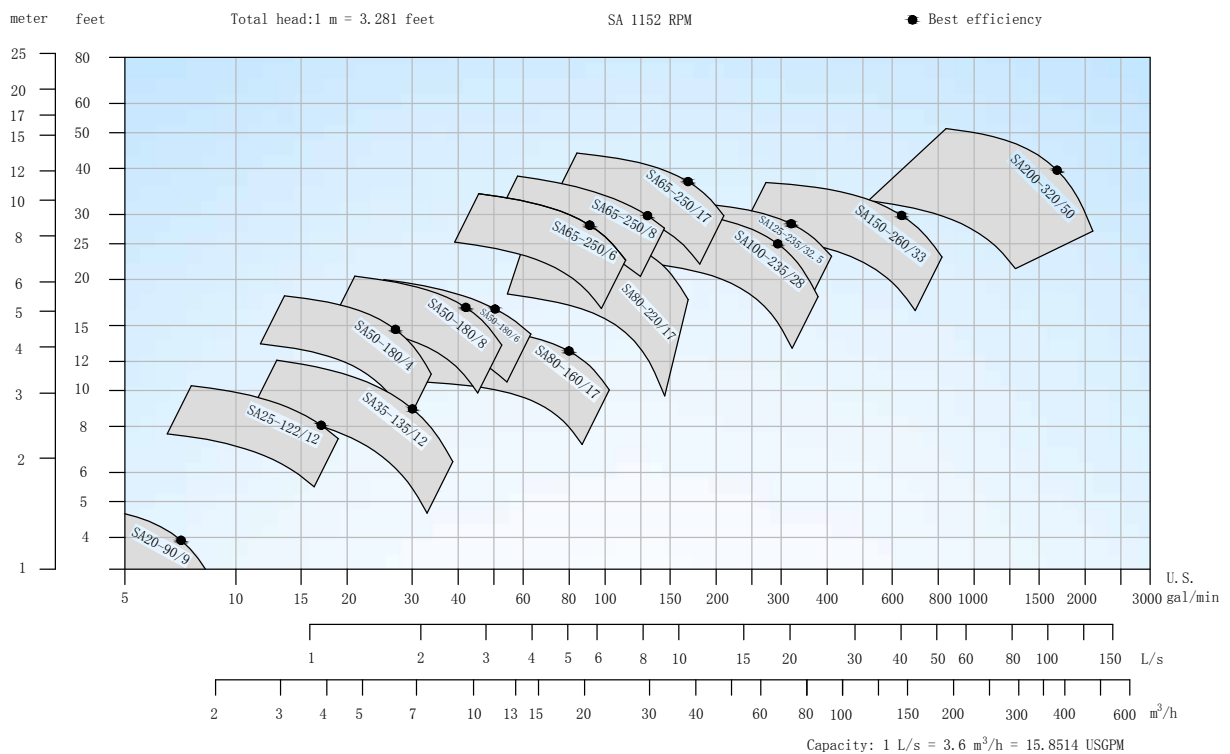
# DESMI Centrifugal Pumps - SA



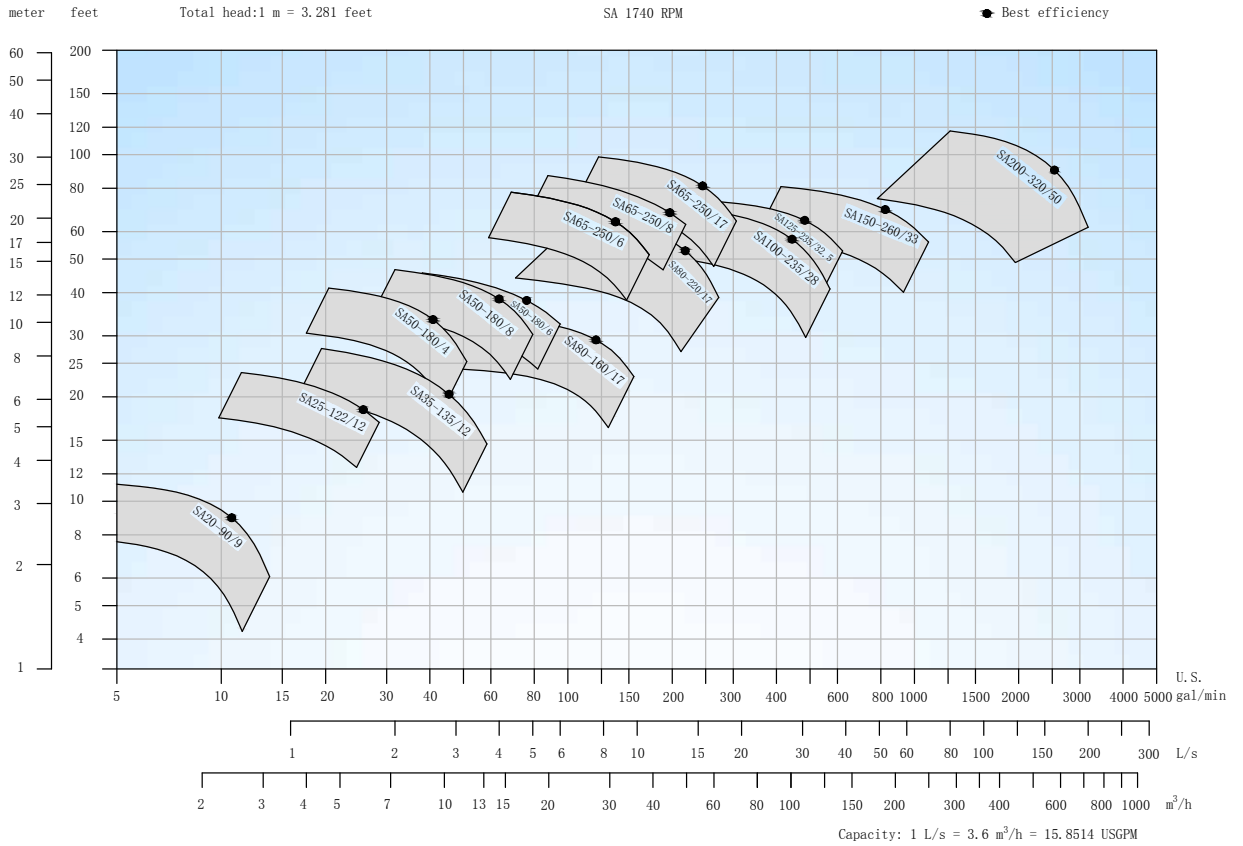
SA Centrifugal Pump, 864 rpm, **60 HZ**



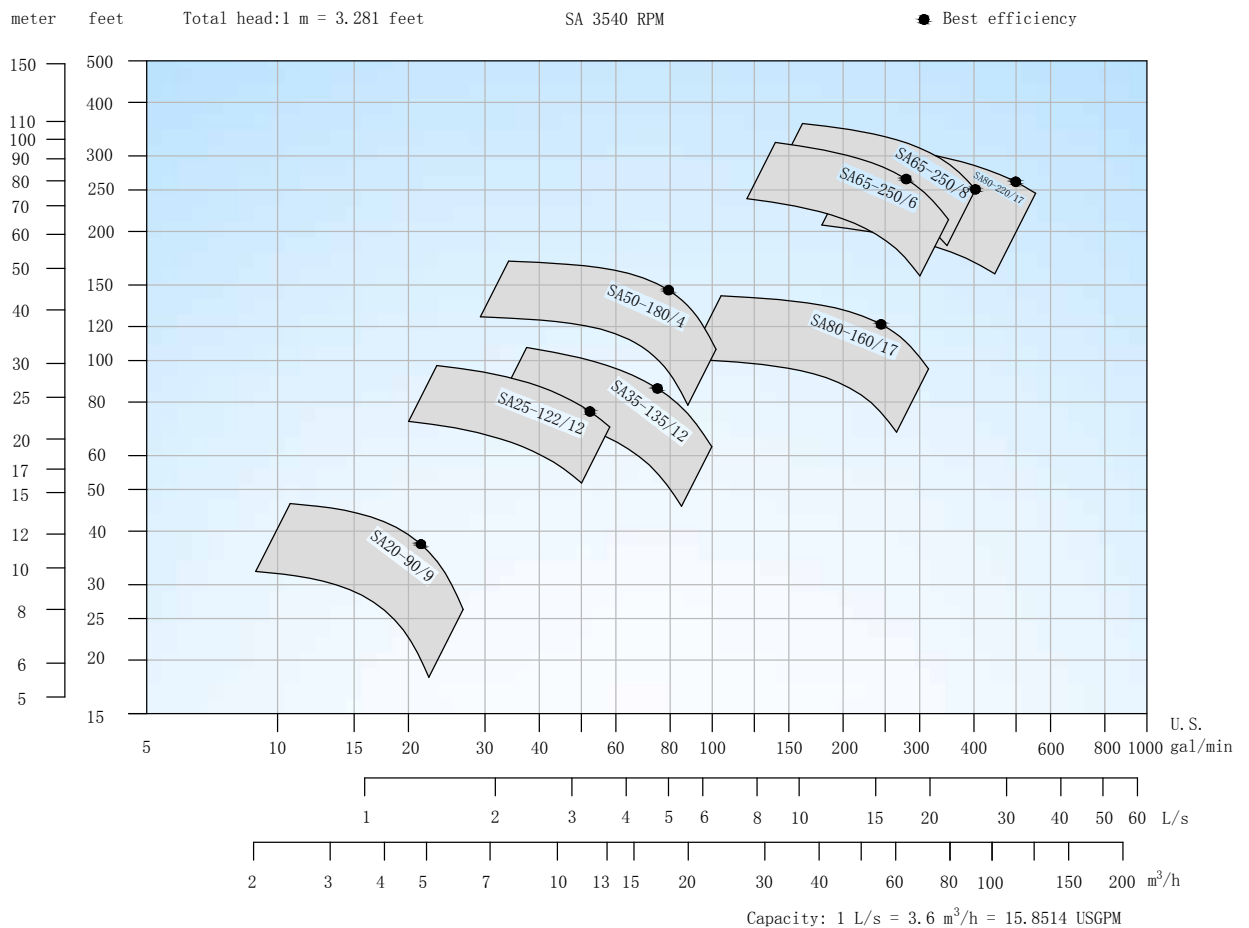
SA Centrifugal Pump, 1152 rpm, **60 HZ**



## SA Centrifugal Pump, 1740 rpm, 60 Hz



## SA Centrifugal Pump, 3450 rpm, 60 Hz



# ROTAN® - Internal Gear Pumps for Marine

All the ROTAN® models have a differential pressure up to 16 bar/232 psi and a suction lift up to 0.8 bar/11.6 psi vacuum while pumping.

## ROTAN® GP

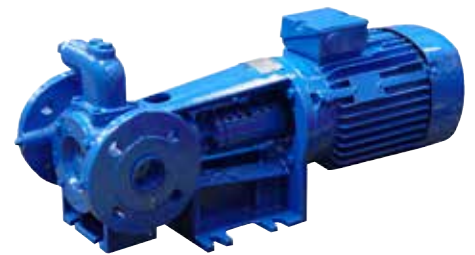
ROTAN® GP - General Purpose	
Capacity range	Up to 50 m <sup>3</sup> /h / 220 gpm
Speed	Up to 1750 rpm
Differential pressure	Up to 16 bar / 232 psi
Suction lift	Up to 0.5 / 7.25 psi bar vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping
Viscosity range	Up to 7,500 cSt
Temperature	Up to 150°C / 302°F
Pump medium	For clean, non abrasive liquids and clean oil. Fuel, diesel, gas, and lube oil.

### ROTAN® GP

General purpose pumps in cast iron. The simple and compact construction makes it a competitive pump suitable for most applications.

#### GP pump benefits:

- Easy installation
- Low maintenance costs
- Small footprint
- Low noise and vibration



ROTAN® GP

## ROTAN® HD

ROTAN® GP - Heavy Duty	
Capacity range	Up to 250 m <sup>3</sup> /h / 1100 gpm
Speed	Up to 1750 rpm
Differential Pressure	Up to 16 bar / 232 psi
Suction lift	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping
Viscosity range	Up to 250,000 cSt
Temperature	Up to 250°C / 482°F
Pump medium	For viscous, non-corrosive liquids. Fuel, diesel, gas and lube oil.

### ROTAN® HD

Heavy duty pumps in cast iron for a wide range of viscous, non-corrosive liquids. Designed for difficult applications and those involving high-viscosity oils.

#### HD pump benefits:

- Heavy duty
- High reliability
- Low maintenance costs
- Low noise and vibration



ROTAN® HD

## ROTAN® ED

ROTAN® ED - Environmental Duty	
Capacity range	Up to 90 m <sup>3</sup> /h / 396 gpm
Speed	Up to 1750 rpm
Differential pressure	Up to 16 bar / 232 psi
Suction lift	Up to 0.5 bar / 7.25 psi vacuum while priming Up to 0.8 bar / 11.6 psi vacuum while pumping
Viscosity range	Up to 10,000 cSt
Temperature	Up to 250°C / 482°F
Pump medium	Where no leakage, liquid or gaseous, is allowed. Fuel, diesel, gas, and lube oil.

### ROTAN® ED

Environmental duty - Magnetically coupled pumps in cast iron, carbon or stainless steel for ultimate protection against leakage.

#### ED pump benefits:

- Magnetically coupled pumps for ultimate protection against leakage.
- Easy reversible direction of flow.



ROTAN® ED

The art of transporting water is finding the right solution, with maximum efficiency, for each situation. The DPV series of vertical, multistage, centrifugal pumps is the result of 55 years of experience and the pumps can be used for numerous applications.

The new DPV pump series is revolutionary in terms of energy-savings and efficiency. Corrosion-free materials, advanced production methods and an optimised hydraulic assembly all contribute towards providing a unique example of craftsmanship.

The modular construction of the product enables you to modify the pump according to your specifications.



Modular construction  
Quality materials

50 Hz					
Model	DPV 2	DPV 4	DPV 6	DPV 10 2P	DPV 10 4P
<b>Capacity</b>					
Capacity range (m <sup>3</sup> /h)	0.2-3.3/0.9-15	0.4-6.5/1.8-29	0.6-9/2.6-40	1.0-13.2/4-58	0.5-6.6/2-29
Nominal capacity at Qopt. (m <sup>3</sup> /h)/(gpm)	1.9/8.4	4/18	6.3/28	10/44	5/22
<b>Pressure</b>					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	229/751	234/768	256/840	239/784	58/190
Maximum pressure at Qopt. (m)/(ft)	187/614	193/633	200/654	179/587	43/141
NPSH at Qopt. (m)/(ft)	2.2/7.2	1.2/4	1.2/4	1.2/4	0.9/3
<b>Hydraulic assembly</b>					
Temperature range medium	-20 - +140° C / -4 - 284° F				

### DP pump application

- ME pre-heating pump
- Hot water circulation pump
- Refrigeration water circulation pump
- HVAC water circulation pump
- Technical water pump
- Hydrophore pump
- Boiler water transfer pump
- Chemical clean pump

50 Hz					
Model	DPV 15 2P	DPV 15 4P	DPV 25 2P	DPV 25 4P	DPV 85
<b>Capacity</b>					
Capacity range (m <sup>3</sup> /h)/(gpm)	1.8-22.5/8-99	0.98-11.3/4.3-50	2.8-35/12-154	1.4 - 17.5	8.5 - 112.8
Nominal capacity at Qopt. (m <sup>3</sup> /h)/(gpm)	18/79	9.8/43	28/123	14	85.7
<b>Pressure</b>					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	248/814	59/194	246/807		176/577
Maximum pressure at Qopt. (m)/(ft)	193/633	44/144	185/607	45/148	132/433
NPSH at Qopt. (m)/(ft)	1.2/4	0.6/2	3.0/10	0.8/3	2.2/7
<b>Hydraulic assembly</b>					
Temperature range medium	-20 up to + 140° C / -4 - 284° F				

### Low NPSH

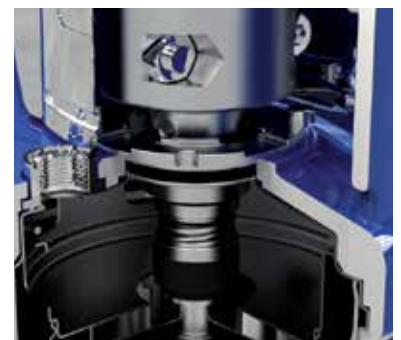
- Extended life span as a result of favourable suction conditions
- NPSH-level 0.6 up to 3.8 (Qopt)

### Modular construction

- Wide range of options
- All specials are standard
- Short delivery times

60 Hz					
Model	DPV 2	DPV 4	DPV 6	DPV 10 2P	DPV 10 4P
<b>Capacity</b>					
Capacity range (m <sup>3</sup> /h)/(gpm)	0.24-4/1-18	0.48 - 7.8	0.72 - 10.8	1.3 -15.8	0.6 - 7.9
Nominal capacity at Qopt. (m <sup>3</sup> /h)/(gpm)	2.3/10	4.8	7.6	13.3	6.3
<b>Pressure</b>					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(gpm)	246/807	238/781	255/837	246/807	61/200
Maximum pressure at Qopt. (m)/(gpm)	201/659	195/640	199/653	173/568	44/144
NPSH at Qopt. (m)/(ft)	3/10	1.8/6	2/7	2/7	1.3/4
<b>Hydraulic assembly</b>					
Temperature range medium	-20 - +140° C / -4 - 284° F				

60 Hz					
Model	DPV 15 2P	DPV 15 4P	DPV 25 2P	DPV 25 4P	DPV 85
<b>Capacity</b>					
Capacity range (m <sup>3</sup> /h)/(gpm)	2.2-27/10-119	1.1-13.8/5-41	3.4-42/15-185	1.3 -15.8	10-132/44-551
Nominal capacity at Qopt. (m <sup>3</sup> /h)/(gpm)	21.7/96	10.9/48	34/150	34/150	100/440
<b>Pressure</b>					
Norm pressure	PN16-25-40				
Maximum pump pressure (m)/(ft)	233/764	57/187	210/689	87/285	151/495
Maximum pressure at Qopt. (m)/(ft)	177/551	43/141	157/515	65/213	108/354
NPSH at Qopt. (m)/(ft)	1.5/6	1.3/4	4.6/15	1.1/3.6	3.8/12
<b>Hydraulic assembly</b>					
Temperature range medium	-20 up to + 140° C / -4 - 284° F				



Wide range of shaft seals.  
Replace without dismantling the pump.





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