



NB-530 Series Circulation Pumps

Industry-leading flooded suction design

Technical Brochure

Neptune Benson
xylem

Our pumps...your peace of mind



Neptune Benson 530 Series Circulation Pumps are engineered for high-quality performance as well as exceptional durability and versatility. Designed to deliver consistent and efficient flow control, these pumps are the perfect solution for optimizing your circulation system.

- NSF-50 certified to meet health and safety standards
- Constructed from durable materials for a long service life
- In-stock and ready to ship pumps and replacement parts to minimize pool downtime
- Fit a wide range of applications, including indoor, outdoor, horizontal, or vertical installations
- Strong support network for fast response times

Standard design features

Epoxy Coated Volute is designed for longevity as well as meets industry-leading standards for toxicity and safety.

TEFC Motor is made from durable materials and will have a long service life. It provides installation versatility including indoor and outdoor capabilities.

Internally Flushed Mechanical Seals ensure maximum seal face lubrication, heat dissipation and debris removal. As much as 25 percent of the total pump flow continuously flushes the seal faces.

ISO G6.3 Balanced Impeller for quiet, vibration free performance. Impellers are precision fitted to the shaft and positively locked with a shaft key.

Heavy Duty Cast Iron or Ductile Iron Volute construction, rated for 175 PSI working pressure.

Hydrostatic Testing of each pump is standard.

Vertical or Horizontal Mounting and Adjustable Discharge Orientation provide design and installation flexibility.

Stainless Steel Shaft Sleeve construction is standard. Special sealing between the sleeve and shaft prevents corrosion of the shaft by the pumped fluid.

Stainless Steel Volute Wear Ring maximizes operating life of impeller and volute.

External Flush Line flushes waterborne particulates and increases seal life for vertical-mount installations.

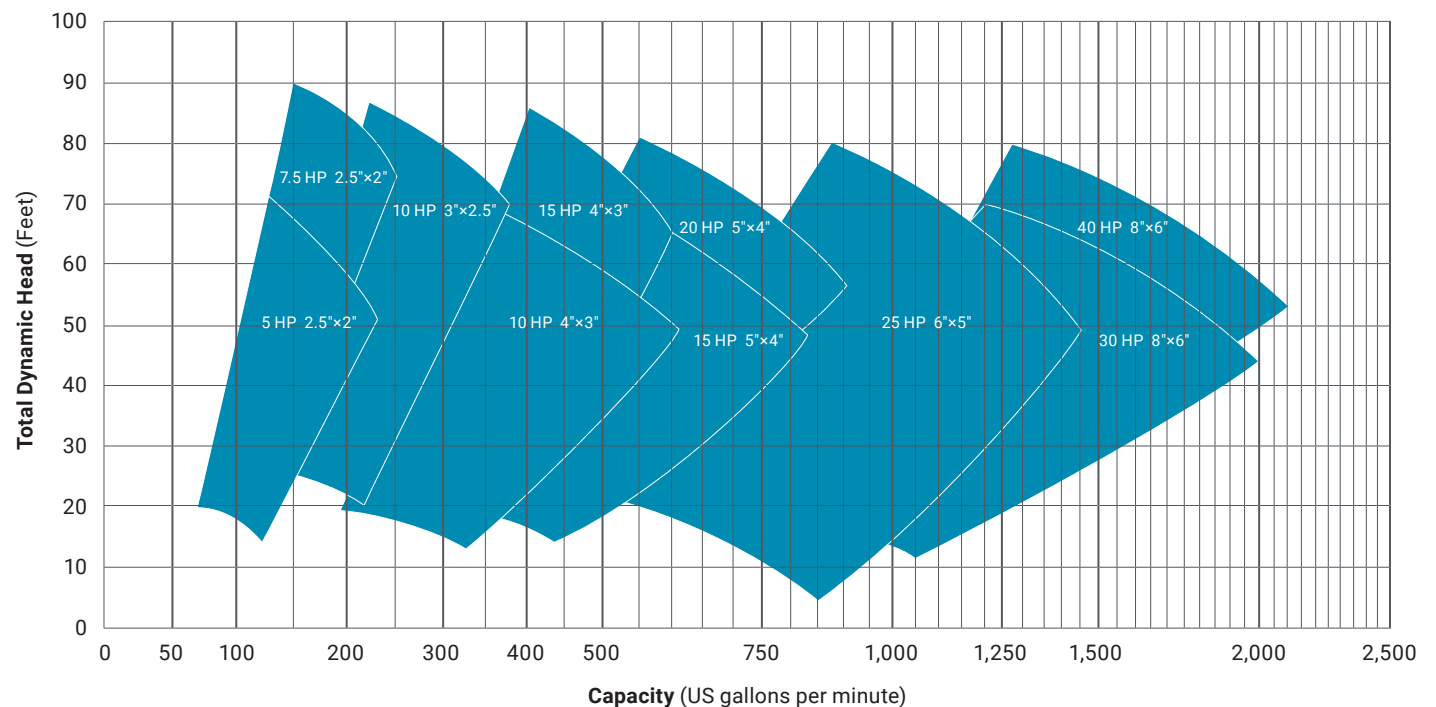
Jacking Bolts and Back Pull-out provide ease of service and maintenance.

Gauge Taps on the suction and discharge flanges along with volute vent and drain tapplings are standard.

Product Line

Pump	Electrical		Best Efficiency Point at 60 Hz		Pipe Size	
Part Number	Horsepower	VAC	Flowrate (gpm)	Ft Head	Suction (in)	Discharge (in)
1003-8647	5	230/460	180	63	2.5	2
1003-8648	7.5	230/460	200	85	2.5	2
1003-8649	10	230/460	285	82	3	2.5
1004-2714	10	230/460	475	60	4	3
1003-8650	15	230/460	530	78	4	3
1004-2715	15	230/460	665	62	5	4
1003-8651	20	230/460	725	70	5	4
1003-8652	25	230/460	1150	70	6	5
1003-8653	30	230/460	1,600	60	8	6
1003-8654	40	230/460	1,700	70	8	6
1003-8655	5	575	180	63	2.5	2
1003-8656	7.5	575	200	85	2.5	2
1003-8658	10	575	285	82	3	2.5
1004-2716	10	575	475	60	4	3
1003-8660	15	575	530	78	4	3
1004-2717	15	575	665	62	5	4
1003-8661	20	575	725	70	5	4
1003-8663	25	575	1,150	70	6	5
1003-8665	30	575	1,600	60	8	6
1003-8666	40	575	1,700	70	8	6

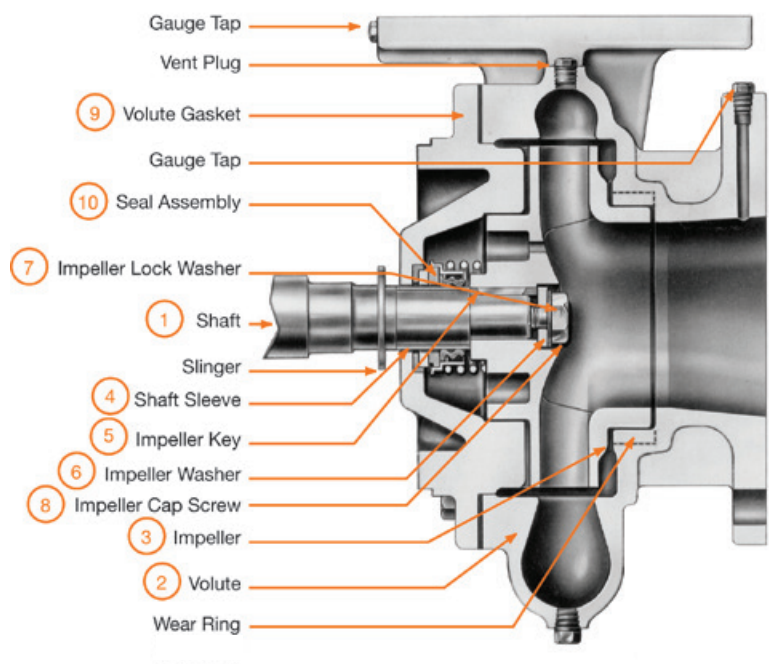
Performance Curves



Above curves show operation approximately 1,000-1,750 rpm. Refer to Engineering Submittal curves for final pump selection.

Materials of Construction

Description		Stainless Steel Fitted
1	Shaft	Carbon Steel Grade per Motor Manufacturer
2	Volute	Cast Iron ASTM A48 Class 30B or Ductile Iron
3	Impeller	ASTM A743 Grade CF8 - Stainless Steel
4	Shaft Sleeve	ASTM A312 Grade TP304 - Stainless Steel
5	Impeller Key	Stainless Steel
6	Impeller Washer	Steel
7	Impeller Lock Washer	Stainless Steel
8	Impeller Cap Screw	Stainless Steel
9	Volute Gasket	Cellulose Fiber
10	Seal Assembly	Reference Tables Below



Standard Mechanical Seal

Temperature Range	-20 to 225°F
Maximum Pressure	175 PSI
pH Limitations	7.0–9.0
Elastomer	Buna
Rotating Face	Carbon
Stationary Face	Ceramic
Hardware	Stainless Steel/Brass

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