

# Centrifugal Pumps & Accessories



# **Bell & Gossett Centrifugal Pumps**

Bell & Gossett's complete line of in-line and base-mounted centrifugal pumps can handle virtually any HVAC and plumbing requirement. The pumps are engineered for exceptional performance and rugged durability. They are designed for easy maintenance and to be highly efficient. The pumps provide reliable operation in a variety of applications, including hydronic heating and cooling systems, industrial, refrigeration, cooling towers and irrigation. All B&G pumps are manufactured at an ISO 9001-approved facility.

The Bell & Gossett name has always stood for uncompromising quality and dependability. That's evident in the way every one of our centrifugal pumps is built and backed by our outstanding customer service and support teams.





#### ecocirc® XL

A high efficiency, variable speed, wet rotor pump with an integrated drive that is maintenance free. The ecocirc XL is available in flange sizes from 3/4" to 3" and motor sizes from 1/12 to 3 HP. Available in cast iron or lead-free bronze or stainless steel with flows to 375 GPM and heads to 110 feet. Operating temperatures ranging from 14 - 230°F.

One pump is suitable for either heating or cooling applications. The ecocirc XL is designed utilizing highly efficient ECM motor technology. Couple that with multiple built-in operating modes, advanced communication capabilities, intelligent controls, a user friendly interface and you have a pump designed for a broad range of HVAC and plumbing applications. Premium Efficiency Product.

#### **APPLICATIONS:**

HYDRONIC HEATING AND COOLING SYSTEMS, POTABLE WATER, INDUSTRIAL AND GENERAL SERVICE



#### Series e-60

Maintenance-free, in-line pump available with discharge sizes from 1" to 3", and motor sizes from ¼ to 3 HP at 1750 RPM. Available in bronze-fitted and all-bronze construction. Flows to 200 GPM and heads to 55 feet.

The Series e-60 is a close-coupled, in-line pump suitable for horizontal mounting only. The precision-crafted XL-11® permanently lubricated bearing system, together with permanently lubricated motor, make this

pump a worry-free, install-and-forget solution. Bell & Gossett's internally flushed EPDM/ Carbon/Silicon Carbide seal makes the Series e-60 a truly worry-free pump. Premium Efficiency Product.

#### APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, POTABLE WATER, INDUSTRIAL AND GENERAL SERVICE



#### Series e-90

Close-coupled in-line mounted pump available in 1" through 3" sizes. 1/4 HP through 3 HP at 1725 RPM and 1 through 5 HP at 3450 RPM. Available in bronze-fitted and all-bronze construction with flows to 300 GPM, heads to 115 feet. Six standard Series e-90E Smart Pump models also available featuring Xylem's ultra-premium, IE5 permanent magnet Smart Motor.

The Series e-90 is an excellent all-purpose pump designed for vertical and horizontal

in-line mounting. Close-coupled design; grease-lubricated motor. Bell & Gossett's internally flushed EPDM/Carbon/Silicon Carbide seal makes the Series e-90 a truly worry-free pump. Premium Efficiency Product.

#### APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS. GENERAL SERVICE, REFRIGERATION AND COOLING TOWERS



#### Series e-80

Close-coupled in-line mounted pump available in 1-1/2" through 8" sizes. 1/4 to 50 HP at 1750 RPM and 5 to 60 HP at 3500 RPM. Available in stainless steel fitted construction. Flows to 2500 GPM, heads to 380 feet. The Series e-80 is an efficient, heavy-duty, close-coupled pump designed for horizontal and vertical in-line mounting. Internally flushed Buna/Carbon-Ceramic mechanical seals are standard. The internal flushed seal provides five times the flushing flow of pumps designed

with externally flushed seals. Available in 175#, 250# and 300# working pressure. Factory installed variable speed drives for sensored or sensorless variable flow pumping. Premium Efficiency Product.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, GENERAL SERVICE AND LIGHT INDUSTRIAL PROCESS





A split-coupled vertical in-line pump available in 1-1/2" through 14" discharge sizes. Motors range from 1 to 300 HP at 1750 RPM with flows to 8500 GPM and heads to 202 feet. Available in stainless steel fitted construction, with working pressures up to 250 psig.

Standard features include a unitized EPR/ Carbon-Ceramic mechanical seal, ANSI/OSHA compliant guard, stainless steel pump shaft and a shaft jacking coupling to simplify maintenance. Designed for space savings and easy servicing, the e-80SC allows mechanical seal maintenance without disturbing the pump, motor or piping. The wide access motor bracket will accept TC, TSC, and IEC motors. Factory installed variable speed drives for sensored or sensorless variable flow pumping. Premium Efficiency Product.

**APPLICATIONS:** 

HYDRONIC HEATING & COOLING SYSTEMS, LIGHT INDUSTRIAL PROCESS, GENERAL SERVICE, PRESSURE BOOSTING



#### Series e-80SCXL

A split-coupled vertical in-line pump available in 8" through 18" discharge sizes. Motors range from 80 to 800 HP at 1780 RPM with flows to 13000 GPM and heads to 330 feet. Available in stainless steel fitted construction, with working pressures up to 250 psig.

Standard features include a unitized EPR/Carbon-Ceramic mechanical seal, ANSI/ OSHA compliant guard, stainless

steel pump shaft and a shaft jacking coupling to simplify maintenance. Designed for high pressures and high flows, the e-80SCXL can offer great performance without special seals or materials.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, LIGHT INDUSTRIAL PROCESS, GENERAL SERVICE

#### Series e-82 and e-82SC



The e-82 and e-82SC twin vertical in-line centrifugal pumps are an ideal solution for parallel staging or back-up capacity. The expanded line of energy efficient in-line pumps include 11 new close coupled and 11 new split coupled models. The pumps are stainless steel fitted, matching the hydraulics and the flange-to-flange dimensions of the current pumps, with double the power in a compact footprint. Parallel pumping provides redundant capacity and the capability to meet duty requirements with smaller horsepower motors and drives and improved pump efficiency at reduced flow.

As system load is reduced, pumps can be de-staged to achieve higher motor and drives efficiencies. Premium Efficiency Product.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, LIGHT INDUSTRIAL PROCESS, GENERAL SERVICE, PRESSURE BOOSTING AND OEM.



#### **Series VTP**

Multi-stage Vertical Turbine Pumps with bronze or stainless steel impellers and cast iron bowls. The lineshaft turbine pumps have above-ground discharge with water-lubricated lineshaft bearings. The column pipe coupling has bronze centering spiders with fluted-rubber lineshaft bearings. The bowls are vitra-glass coated in the waterways for improved efficiencies. Capacities up to 10,000 GPM with heads to 150 feet per stage.

APPLICATIONS: COOLING TOWERS, PRESSURE BOOSTING AND GENERAL WATER SERVICE



#### Series e-SV

The Goulds Water Technology Series e-SV Vertical Multi-stage Pump distributed, applied, and warranted by your local Bell & Gossett representative. Available in eleven models with motors ranging from 1/2 -75 HP in both 3600 and 1800 RPM with flows to 725 GPM and head to 1200 feet. The e-SV design has industry leading pump efficiencies and a design that allows for mechanical seal replacement without

removing the motor to minimize downtime.
Premium Efficiency Product.

APPLICATIONS:

HYDRONIC HEATING & COOLING, BOILER FEED, CONDENSER WATER, WATER TREATMENT, PRESSURE BOOSTING



#### **Impact Submersible Wastewater Pumps**

Our unique, self-cleaning impeller and casing are specifically configured to process solids more easily and reduce clogging. This reduces costly maintenance and minimizes downtime. The air-filled motor, dual-mechanical seal and specifically designed seal chamber improve pump efficiency and durability.

APPLICATIONS:

COMMERCIAL BUILDING SEWAGE SYSTEMS, DEWATERING/EFFLUENT HANDLING, WATER TRANSFER



#### Series e-1531

End suction, close-coupled pump available in 1-1/4" through 6" sizes. Motor size 3/4 to 50 HP at 1750 RPM, 2 to 60 HP at 3500 RPM. Available with stainless steel shaft sleeve and impeller as standard with flows to 2300 GPM, heads to 400 feet.

Close-coupled, space-saving economy plus rugged construction make the Series e-1531 an ideal selection for a variety of horizontal and vertical mount (with impeller modification)

applications. Available with the Bell & Gossett standard self-flushing Carbon/Ceramic mechanical seal in 175# working pressure design. Premium Efficiency Product.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, GENERAL SERVICE, COOLING TOWERS AND INDUSTRIAL USES



#### Series e-1532

End suction, close-coupled, foot-mounted pump available in 1-1/4" through 8" sizes. Motor size 3/4 to 50 HP at 3500 RPM. Available with stainless steel shaft sleeve and Impeller as standard, with flows to 2500 GPM, heads to 400 feet. Space-saving economy and back pull-out design, plus a rugged construction make the Series e-1532 an ideal choice when footed volutes are required. Available with the

Bell & Gossett standard self-flushing Carbon/ Ceramic mechanical seal in 175# working pressure design. Premium Efficiency Product.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, GENERAL SERVICE, COOLING TOWERS AND INDUSTRIAL USES



#### Series e-1535

Motor mounted, end-suction, close-coupled pump kit available in 1" through 1-1/2" sizes. Available in bronze-fitted construction with flows to 240 GPM at 115 feet. This back-pullout pump offers ease of service in a close-coupled design. The pump kit can be mounted vertically or horizontally to provide maximum flexibility. Ball bearing design and standard internally flushed mechanical seal provide long, dependable service.

Premium Efficiency Product.

APPLICATIONS:

COOLING TOWERS, REFRIGERATION, GENERAL SERVICE AND INDUSTRIAL

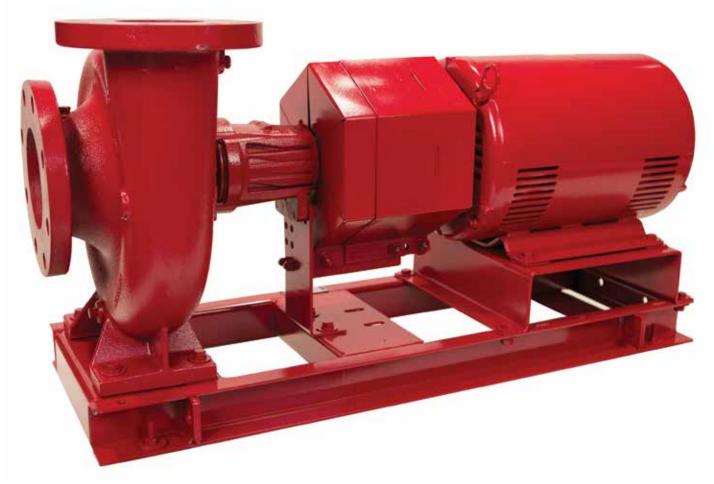
# Series e-1510

#### Single-Stage End Suction Centrifugal Pumps

Base-mounted, end-suction Series e-1510 pumps are available in 1-1/4" through 8" sizes, 1/2 HP to 150 HP at 1750 RPM and 2 HP through 150 HP at 3500 RPM. Stainless steel fitted configuration with flows to 4000 GPM, heads to 500 feet. Premium Efficiency Product.

- True back pullout design for fast, simple, and cost effective seal maintenance without moving the motor.
- Integrally cast volute foot provides rigid, stationary support to maintain pump alignment even during maintenance.
- Center drop out spacer coupling supplied as standard. Provides for bearing frame removal without pump or motor movement. Original alignment is maintained.
- Fabricated heavy-duty base plate supplied as standard.
   Includes closed ends and open top to provide ease of access for complete grouting.







#### Series e-3530

The new standard in close-coupled general service pumps. The all new stainless steel Series e-3530 pump is available in 1", 1-1/4" and 1-1/2" sizes. 1/2 HP through 5 HP at 3500 RPM. Flows to 170 GPM and heads to 155 feet.

The Series e-3530 is an excellent all-purpose pump. Close-coupled 316L stainless steel wet end, diffuser design for increased bearing and mechanical seal life, permanently greased, jet pump motor

and Bell & Gossett's internally flushed Viton/carbon-silicon carbide seal provide an optimum worry-free pump design to 225°F. Optional EPR/carbon-silicon carbide is rated to 250°F. Maximum pressure is 125 psig.

APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, GENERAL SERVICE, REFRIGERATION AND COOLING TOWERS



#### **Series VSX**

A robust, base-mounted, double-suction pump with a vertically split casing. Three different suction and discharge flange orientations provide identical hydraulic performance while enhancing equipment room layout flexibility. Premium Efficiency Product.

**Model VSX-VSC** vertical suction and discharge flanges create an extremely compact space-saving design that allows up to 8,000 lbs. static loading per nozzle.



**Model VSX-VSCS** combines a vertical discharge flange with a side suction flange while maintaining a small footprint design.



VSX discharge sizes range from 4" to 18", with flows to 25,000 GPM, heads to 530 feet and motors to 3,000 HP. Standard features include a groutless, heavy gauge base plate, alignment friendly coupling and an ANSI/OSHA compliant coupling guard. Service is simplified with maintenance-free bearings and an internally flushed one-piece unitized mechanical seal. Both the bearings and mechanical seals can be replaced without removal of the rotating assembly, reducing the down time for servicing the pump. The VSX is available in bronze-fitted construction with working

APPLICATIONS:

pressures up to 300 psig.

**VSCS** 

HYDRONIC HEATING AND COOLING SYSTEMS, CONDENSER WATER, COOLING TOWERS, REFRIGERATION AND GENERAL SERVICE

#### Series e-HSC

Designed and manufactured by the global leader in hydronic pump technology, the Series e-HSC double suction pump provides engineers, contractors, and building owners a more powerful, serviceable, and efficient solution for a wide range of critical HVAC applications. Thanks to a shorter shaft that reduces vibrations, this pump can run up to 3x as long (100,000 hours within the preferred operating range) before the bearings need to be changed. With a flow rate of up to 26,600 GPM, the e-HSC can easily handle large capacity systems and higher head. Each model has been optimized to balance efficiency and suction head requirements, and the completeness of the range means that there is a pump for every flow requirement within 10% of BEP.

#### APPLICATIONS:

CHILLERS, COOLING TOWERS, DISTRIBUTIVE PUMPING, DISTRICT COOLING & HEATING APPLICATIONS, PRIMARY & SECONDARY PUMPING FOR HVAC AND PROCESS APPLICATION IN HVAC MARKETS.



# Pump Accessories/Drives

# **Triple Duty® Valves**



A combination shut-off, center-guided non-slam check valve and calibrated balance valve in one device. The combination of three valves in one minimizes cost and reduces installation time. Available in angle or straight pattern in 1" through 16" sizes; in flanged, grooved or NPT connections. The Triple Duty Valve has a cast iron body, brass seat, cast bronze disc and SS stem. A calibrated

nameplate and memory button allow return of the valve to the balanced position after shut-off. The backseating valve stem allows repacking under full-line pressure.

#### **APPLICATIONS:**

HYDRONIC HEATING & COOLING SYSTEMS, GENERAL SERVICE AND INDUSTRIAL



### **Suction Diffuser Plus**

An angle-pattern flow-straightening fitting that features our patent pending Flow Cone and combines a diffuser-strainer orifice cylinder and full-length straightening vanes to provide ideal flow conditions for the pump suction, maximizing pump efficiency retention. Sizes from 1-1/2" to 10" in NPT and flanged connections. Maximum pressure is 175 psig. Cast iron body, steel straightening vanes and orifice cylinder are standard. SS straightening vanes and orifice cylinder are optional. A

bronze start-up strainer is standard. Optional PT ports. All internal components are replaceable. Premium Efficiency Product.

#### **APPLICATIONS:**

HYDRONIC HEATING & COOLING SYSTEMS, GENERAL SERVICE AND INDUSTRIAL



## Rolairtrol® Air Separator

A full-flow separator to remove or eliminate entrained system air. Standard models from 2" to 24." Custom units in sizes 26" and larger. Flow rates to 17,000 GPM at 125 psi and 350°F. All units are ASME coded. Flanged or grooved connections on 3" and larger. The Rolairtrol is available with a

strainer as the R model, or without a strainer as the RL model, for a lower pressure drop.

#### **APPLICATIONS:**

HYDRONIC HEATING & COOLING SYSTEMS, GENERAL SERVICE AND INDUSTRIAL



#### **TECHNOLOGIC® Variable Frequency Drive**

The **TECHNOLOGIC** Intelligent Pump Controller from Bell & Gossett combines a market-leading variable speed drive with over 100 years of experience in designing and installing high performance pumping systems in commercial buildings. The **TECHNOLOGIC** provides variable speed pumping to control speed, pressure, flow and level over a wide range of hydronic system applications.

Variable speed ensures your HVAC pumps operate efficiently and reliably. Programming with the setup Genie simplifies the setup process and ensures proper system configuration and protection. The **TECHNOLOGIC** is available with a NEMA 1, 12, 3R or 4X enclosure rating.

Premium Efficiency Product.

- Sensorless or Sensored Control
- Built-in BACnet, Modbus RTU, N2 Metasys
- 2 analog inputs, 1 analog output
- 4 digital inputs, 2 digital outputs
- 2 programmable relays
- Mains disconnect with optional fuses
- Optional Bypass

#### APPLICATIONS:

HYDRONIC HEATING AND COOLING SYSTEMS, GENERAL SERVICE, COOLING TOWERS AND INDUSTRIAL USES



#### optimyze®

The optimyze® modular condition monitoring solution provides health guidance and predictive maintenance advice for rotating and fixed assets such as pumps and motors. It periodically monitors system vibration and temperature allowing everyday users to access simple-to-use monitoring tools from iOS or Android mobile devices. Using predictive analysis, optimyze identifies potential problems

with your equipment before they occur, to help you manage system reliability and maintenance. And, with optimyze Gateway you now have true remote connectivity and mobile device access without having to be within Bluetooth® range. You can access data anytime, anywhere...24/7.

# Service and support from the most trusted name in the industry - Bell & Gossett.

The Bell & Gossett name has always stood for uncompromising quality and dependability. That's evident in the way every one of our centrifugal pumps is built and backed by our outstanding customer service and support team.

Your local Bell & Gossett representative is available any time and is an experienced professional with a wealth of technical expertise. In addition to expert system and product application assistance and a wide product inventory warehoused locally, we offer ESP-Systemwize software selection program.



ESP-Systemwize is a Bell & Gossett web-based software that helps you design HVAC systems accurately, effectively and very quickly. You get fast, precise equipment selection, pump performance curves and equipment schedules, submittals, specifications and more.

ESP-Systemwize includes:

- Centrifugal Pumps
- Air/Dirt Separators
- Heat Exchangers
- Pump Suction Diffuser and Triple Duty Valve
- Expansion Tanks
- PIC Valves

# The Little Red Schoolhouse® - Training the Industry



Seminars currently offered are:

- Modern Hydronic System Design Basic\*
- Design & Application of Water Based HVAC Systems
- Large Chilled Water System Design\*
- Pump Service & Maintenance School
- Steam Systems Design & Applications
- Steam System Operation & Maintenance
- Plumbing Systems Design

Bell & Gossett has long been known for its dedication to training. The "Little Red Schoolhouse" has graduated over 60,000 students since it was founded in 1954.

Graduates from the "Little Red Schoolhouse" may be found throughout North America, Europe, Africa, Asia and Australia.

For applications to attend these seminars, please contact a Bell & Gossett Representative in your area. They will have the schedule dates for all seminars and will make all the arrangements for you. As a service and a continuing educational source to the HVAC industry, these seminars are offered free of charge. IACET certified CEU credits are awarded for each seminar.

\* The USGBC has approved the technical and instructional quality of the Modern Hydronic Heating Systems - Basic Seminar (15 GBCI CE Hours) and the Large Chilled Water Design Seminar (11 GBCI CE Hours). These courses are approved for GBCI Continuing Education Hours towards LEED Credential Maintenance Programs.

We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.



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