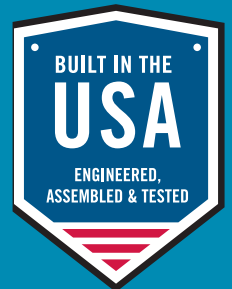




Shown with optional Technologic IPC
variable frequency drive and
Technologic PPS controller

Series e-80

IN-LINE MOUNTED CENTRIFUGAL PUMP



The Series e-80 pump provides best-in-class hydraulic performance and optimized efficiency.

The Series e-80 in-line mounted centrifugal pump is a highly efficient, heavy-duty, close-coupled pump that lowers operating and maintenance costs. Available in sizes 1.5" through 8", it delivers a broad efficiency range for fixed or variable speed operation. The Series e-80 pump integrates with an optional variable frequency drive, and has sensed or sensorless control capabilities, further increasing its potential for performance and efficiency. Designed for horizontal and vertical in-line mounting, it's ideal for hydronic heating and cooling systems, light industrial processes and general service.

Applications

- Hydronic heating & cooling systems
- Light industrial process
- General service

Advantages

- Best-in-class hydraulic performance
- Low operating and maintenance cost
- Optional flange mounting supports
- Low maintenance
- Horizontal or vertical installation
- Several seal options
- Integrated variable speed drive (optional)
- Sensed or sensorless control capability (optional)

Premium Efficient Motors

The Series e-80 pump features a standard NEMA Premium JM vertical solid shaft motor in a drip-proof enclosure when the standard mechanical seal is selected, and a NEMA Premium JP motor when a stuff box configuration is preferred. Premium efficient motors with TEFC enclosures are available options. Motors range from .75 to 50 hp at 1750 rpm, and 5 to 60 hp at 3500 rpm. A precisely machined cast iron motor bracket allows the motor to be rotated at 90° intervals to allow convenient positioning of the junction box.

Motor Bracket

Precisely machined rigid cast iron motor bracket ensures positive concentric alignment between motor and pump components. This helps promote maintenance free operation and contributes to pump longevity.



Series e-80 pumps installed with Technologic IPC variable frequency drive and Technologic PPS controller

Stainless Steel Impellers

The Series e-80 pump incorporates stainless steel impellers to improve sustainable hydraulic performance, resist chemicals and reduce corrosion. They're balanced to ANSI Grade G6.3, to provide years of quiet performance and trouble-free service.

Internally Flushed Mechanical Seal

The built-in mechanical seal chamber has anti-vortex baffles and a flexible stainless steel braided hose from discharge, to assure seal cooling and lubrication. The Series e-80 pump includes a standard seal with a maximum working pressure of 175 psi for use on open or closed clear water systems. An optional stuffing box style seal is available for use on closed or open systems where the temperature or pressure requirements exceed the limitations of the standard seal. It's available in 175 psi, 250 psi or 300 psi working pressures.

Easy Installation, Service and Maintenance

The bottom of the volute is tapped with four bolt holes to accept an ANSI/ASME flange, which provides temporary support while installing the pump. The back pull-out design allows the Series e-80 pump to be serviced without disturbing the piping, which means repairs can be made quickly and easily, and downtime is kept to a minimum. Flush-line filters and sediment separators are available on special request.

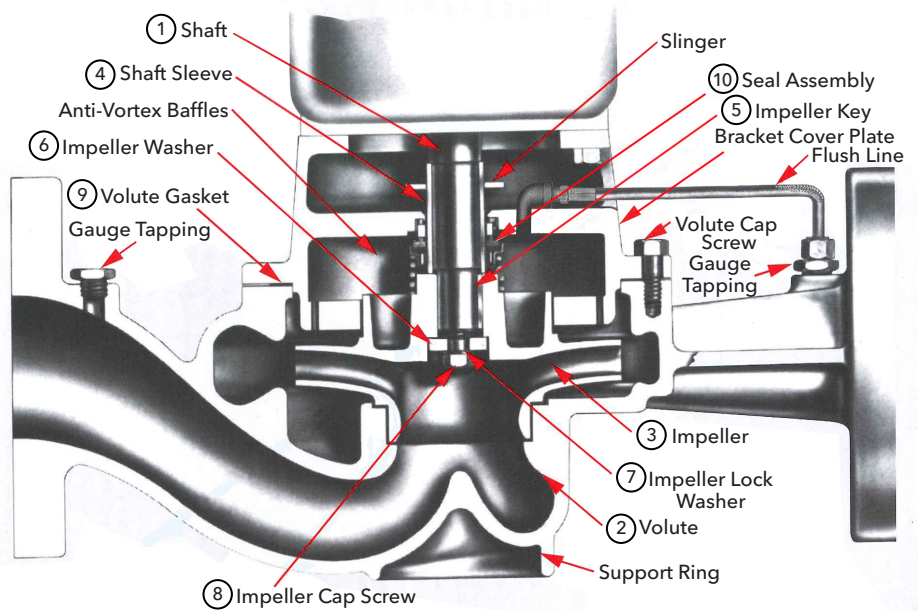
Construction Materials - diagram and table

Integrated Variable Speed Drives

Provide variable flow pumping for the broadest range of applications with optional Bell & Gossett variable speed drives. The Integrated Technologic Sensorless Control drive (ITSC) combines the energy savings of variable flow with sensorless curve control to provide turn down at low flow while eliminating the cost and time of using wired transducers and sensors. The Integrated Technologic drive (IT) is another variable speed option designed for building automation system control. It provides an energy efficient and economical alternative for applications that don't require sensorless control.

PPS Controller

Integrate up to eight Series e-80 pumps in parallel operation for sensed or sensorless control using an optional, Technologic sensorless or sensed controller. It features a large display screen that shows actual system performance via real-time graphical displays of the hydraulic pump curve, system curve and control curve. As pumps are added to the parallel pumping system, efficiency increases because each pump works less. Plus, individual pumps can be staged ON/OFF more effectively, thanks to the controller's wide hydraulic efficiency range.



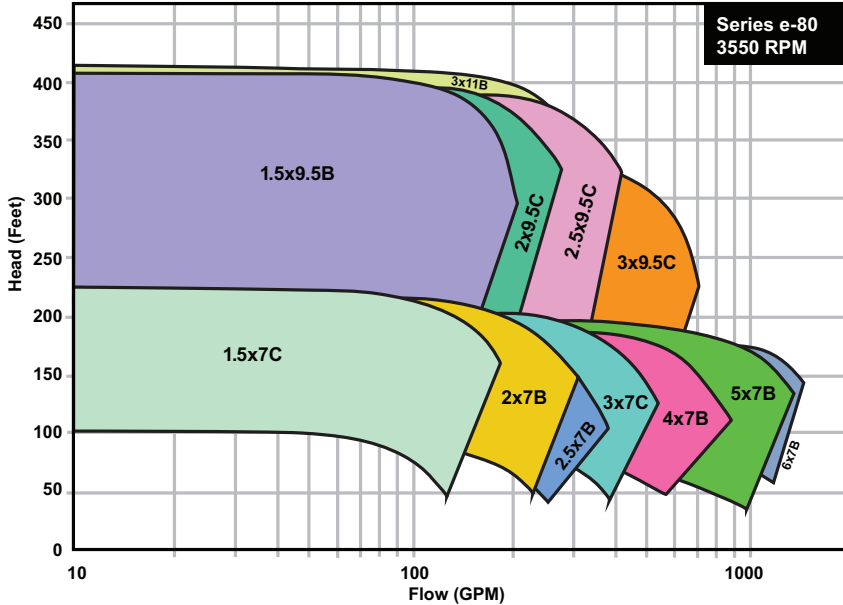
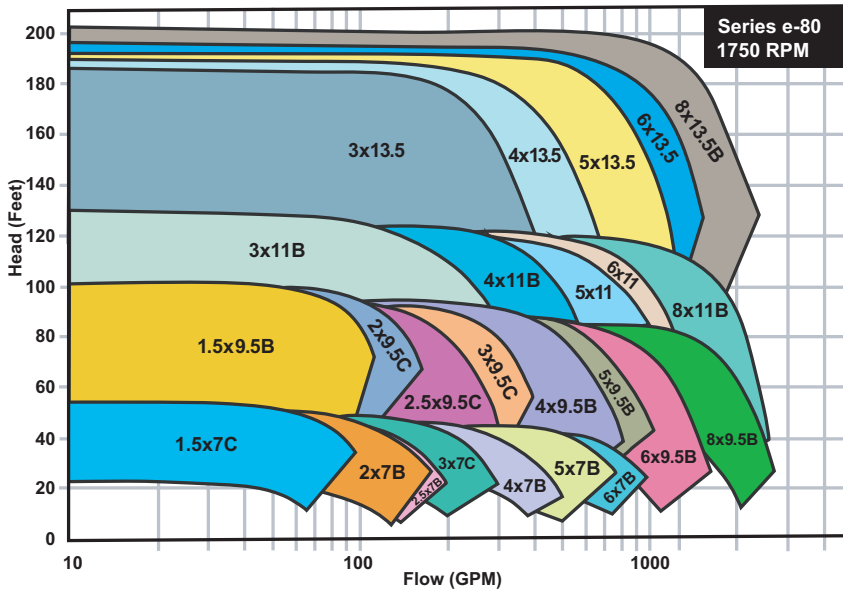
Standard Mechanical Seal

Construction Materials

(For parts in contact with fluid pumped)

Description	Stainless Steel Fitted Pump
1. Shaft	Carbon Steel
2. Volute	Cast Iron ASTM A48 Class B
3. Impeller	ASTM A743 Grade CF8 (304SS)
4. Shaft Sleeve	Stainless Steel
5. Impeller Key	#304 Stainless Steel
6. Impeller Washer	Carbon Steel
7. Impeller Lock Washer	#304 Stainless Steel
8. Impeller Capscrew	#304 Stainless Steel
9. Volute Gasket	Cellulose Fiber
10. Seal Assemblies	
Standard Seal	
Bellows	Buna-N
Faces	Carbon-Ceramic
Metal Parts	Brass or Stainless Steel
Spring	Stainless Steel
For Stuffing Box Design - Single Seal	
O-Rings	EPR
Faces	Carbon-Tungsten Carbide
Metal Parts	Stainless Steel
Spring	Stainless Steel

Standard Performance Curves



Engineering Specifications

Each pump is furnished and installed with capacities as shown on the plans. It has an in-line type, close-coupled single-stage design, for installation in vertical or horizontal position, and is capable of being serviced without disturbing piping connections.

The pump casing is Class 30 cast iron. The impeller is stainless steel, closed type, balanced to ANSI/HI Grade G6.3, keyed to the shaft and secured by a locking cap screw.

The liquid cavity is sealed off at the motor shaft by an internally-flushed mechanical seal with a ceramic seal seat and a carbon seal ring, suitable for continuous operation at 225°F.

A stainless steel shaft sleeve completely covers the wetted area under the seal.

The pump is rated for a minimum of 175 psi working pressure (with optional 250 psi and 300 psi working pressures). The pump case has gauge tapings at the suction and discharge nozzles, and includes drain ports.

The motor meets NEMA specifications, size, voltage and enclosure called for on the plans. It has heavy-duty, grease-lubricated ball bearings, completely adequate for the maximum load for which the pump is designed.

Each pump is factory pressure tested per Hydraulic Institute standards. It is thoroughly cleaned and painted with at least one coat of high-grade machinery enamel prior to shipment.

Series e-80 pumps are manufactured by Bell & Gossett, a Xylem, Inc. brand.

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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